

IEA

International Ergonomics Association

2005/2006



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The IEA Press
International Ergonomics Association

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1. About IEA INTERNATIONAL ERGONOMICS ASSOCIATION

The International Ergonomics Association (IEA) is the association of ergonomics and human factors societies around the world. Ergonomics, also known as human factors, is the scientific discipline concerned with the interaction between humans and technology. Ergonomics integrates knowledge derived from the human sciences to match jobs, systems, products and environments to the physical and mental abilities and limitations of people.

Goals And Objectives

The goal of the IEA is to promote the knowledge and practice of ergonomics by initiating and supporting international activities and cooperation. The objectives include the advancement of knowledge, information exchange and technology transfer. To meet these objectives, IEA establishes international contacts among those active in the field, cooperates with international organizations to facilitate the practical application of ergonomics in industry and other areas, and encourages scientific research by qualified persons in the field of study and practice.

Organization

The IEA was organized pursuant to Article 60 et seq of the Swiss Civil Code. The registered headquarters of the IEA is in Zurich with a business office in the U.S.A. At present, there are 34 member societies representing about 17,000 ergonomists worldwide.

The IEA is governed by a Council comprised of delegates from the member societies and by the Executive Committee of the Council. The IEA Executive Committee comprises of the elected Officers, Chairs of the Standing Committees, Past President (non-voting), Newsletter Editor (non-voting), and the IEA Triennial Congress Chairperson (non voting).

The IEA maintains liaison with the United Nations, the World Health Organization (WHO), the International Labour Office (ILO) and the International Standards Organization (ISO).

Short History

Ergonomics emerged as a modern discipline during World War II when the human operator became increasingly the weakest link in modern sophisticated military systems. After the war, the discipline continued to grow to meet the challenge of civilian applications.

The IEA was officially founded in 1959 in response to the growing need for international cooperation, principally in Europe. The emphasis in the early days was on human productivity and work physiology. As the discipline matured, other fundamental objectives were recognized, such as the provision for safer and healthier working environments and the improvement of the quality of working life.

Today the discipline encompasses a diversity of interests including cognitive science, human-computer interaction, organizational design and management. The potential of ergonomics is becoming widely recognized by industry, government, labour and the general public.

Ergonomics has contributed to the development of industrial workplaces, transportation, aerospace systems, office design, computer hardware and software and consumer products. It is testament to the importance as well as the success of ergonomics that its scope of application is expanding at an accelerated rate to encompass virtually all aspects of human activity at work, at home and at play.

2. IEA Executive Committee

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3. IEA Council Meeting Operating Procedures

Policies and Operating Procedures

The IEA Council is the governing body of the Association. The Council representative is expected to express the views of his/her society and exercise his/her right to vote on matters requiring decision by Council.

The IEA has improved operational procedures to allow societies more time to consider voting items and will seek ways to make even further improvements. However, there may always be matters that arise at the last moment that cannot be communicated to societies in time. The IEA's policy on this issue is that Council representatives should act in accordance with the views/instructions of their society but should retain the discretion, if circumstances warrant, to vote their conscience.

Order of the IEA Council meeting

4. Report of Officers
5. Voting Items
6. Information Items (Standing Committee reports, requests, and other items)

Voting

"All major decisions concerning the Association, including rule changes, will be taken by Council ..."

Major items include:

1. Changes to Rules
2. Election of officers
3. Significant financial matters
4. Admission of new members
5. Formation or dissolution of standing committees
6. Any other item deemed by Council as major

Basic Documents of the IEA consists of two parts

1. Rules: official bylaws of the Association (changes require Council vote)
2. Procedures: operating practices, policy on committees, support of conferences (including IEA Congress)

Robert's Rules of Order: Motions, Rules, and Procedures

(Summary, using the IEA terminology)

Conducting Business

1. All business is brought before the Council by a motion of a representative or a report from the Executive Committee.
2. Before a member can make a motion or address Council, he/she must obtain the floor (i.e., be recognized by the President).
3. Before any subject is open to debate, it is necessary that a member who has the floor, that the motion be seconded and then read by the Secretary-General make a motion.
4. Only one principal motion (i.e., on a particular subject) can be debated at any one time. A principal motion, however, yields to all secondary motions which are (in order); lay on the table, the previous question, postpone to a certain day, commit, refer, re-commit, amend, and postpone indefinitely.
5. There are five ways to amend a principal motion:
 - Inserting words
 - Striking out words
 - Striking out and inserting
 - Substituting (i.e., can involve complete substitution)
 - Dividing (i.e., a complex motion can be divided into parts and voted separately)Amendments must be friendly to the motion. No more than two amendments are allowed at any one time.

Order of Precedence of Motions

Undebatable

- To fix the time to adjourn
- To adjourn the meeting*
- To lay on the table* (i.e., to end debate and proceed with voting)
- To re-open a previous question (requires a 2/3 vote)*

Debatable

- To postpone the vote to a certain time
- To commit or refer
- To amend the motion
- To postpone the vote indefinitely

Motions are ranked, any one can be made while one of lower order is pending (except amend), none can supercede one of higher order. All motions can be amended except as indicated with *.

4. Agenda of the meeting

IEA 2006 Council Meeting
Maastricht, Netherlands
July 8-9, 2006

Day 1	Time	Duration	Item
	8.30	0.30	Introduction, acknowledgements, practical arrangements
	9.00	2.00	Roundtable presentation by delegates of Federated Societies and IEA Networks + Meeting schedule and organization
	11.00	0.30	Coffee break
	11.30	0.10	Voting procedures eligibility and roll call
	11.40	1.00	Introductory statement and report by President
	12.40	0.20	IEA'2006 report
	13.00	1.30	Lunch
	14.30	0.20	SG Report
	14.50	0.40	Treasurer report + Voting item : auditor's' report and new auditors
	15.30	1.00	Discussion on IEA Dues : introduction by Pdt and Treasurer
	16.30	0.30	Coffee break
	17.00	0.30	Development report
	17.30	0.30	International development report
	18.00	0.30	Professional standards and education report
	18.30		End of day 1
			Dinner

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Day 2	Time	Duration	Item
	9.00	1.00	Science, technology and practice report + voting item: Policy on conferences
	10.00	0.30	EQUID report
	10.30	0.30	Coffee break
	11.00	0.30	Communication and public relations report
	11.30	0.30	Awards + Voting item : Policy on IEA Awards
	12.00	0.20	IEA'2009 report
	12.20	0.40	IEA'2012 : proposal presentation
	13.00	1.30	Lunch
	14.30	2.00	Elections of Officers
	16.30	0.30	Coffe break
	17.00	0.30	Location of IEA'2007 Council meeting
	17.30	0.10	Conclusion
	17.40		End of day
			Dinner offered by IEA

5. Minutes of San Diego IEA Council

IEA Council Meeting 2005

San Diego, USA, Lowes Coronado Bay Resort

Saturday, July 16, 9.00 am – 7:00 pm

Sunday, July 17, 8:30 am – 7:00 pm

Attendance

Officers

President: Pierre Falzon (PF)

Secretary-General: Sebastiano Bagnara (SB)

Treasurer: Ken Laughery (KL)

Standing Committee Chairs

Awards, Past IEA President: Waldemar Karwowski (WK)

Communication & Public Relations: Andy Marshall (AM)

Development: Jan Dul (JD)

EQUID: Pascale Carayon (PC)

International Development: David Caple (DC)

Professional Practice & Education: Stephen Legg (SL)

Science, Technology & Practice: Pascale Carayon (PC)

Chair of IEA'2006 Congress: Ernst Koningsveld (ex-officio) (EK)

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Federated Societies	Representatives	Votes
Associação Brasileira de Ergonomia	Soares	1
Associação Portuguesa de Ergonomia	Ferreira (observer Simoes)	1
Belgian Ergonomics Society	Hermans	1
Ergonomics Society (UK)	Marshall, Wilson	3
Ergonomics Society of Korea	Chung	2
Ergonomics Society of Taiwan	Yung-Hui	1
Gesellschaft für Arbeitswissenschaft	Luczak	2
Human Factors and Ergonomics Society of Australia	Caple	2
Human Factors & Ergonomics Society	Post, Robertson, Wogalter	3
Irish Ergonomics Society	Fallon	1
Japan Ergonomics Society	Akita, Horie, Tsuchiya (observer: Tomita)	3
Nederlandse Vereniging voor Ergonomie	Dul, Koningsveld	2
New Zealand Ergonomics Society	Vitalis	1
Nordic Ergonomics Society	Nyggard, Olsen	3
Philippines Society of Ergonomics	Khalid (proxy)	1
Polish Ergonomics Society	Hankiewicz	1
Sociedad Colombiana de Ergonomia	Arevalo	1
Sociedad Chilena de Ergonomia	Kohan	1
Società Italiana di Ergonomia	Bonapace	1
Société d'Ergonomie de Langue Francaise	Beguín	2
South-East Asian Ergonomics Society	Khalid (observer Helander)	1

IEA Networks

FEES Federation of European Ergonomics Societies: Nyggard (non voting)

ULAERGO Union of Latin-American Ergonomics Societies: Acevedo (non voting)

Meeting started at 9:00 am

1. Welcome, Acknowledgments, Housekeeping and Logistics of the meeting

Pierre Falzon, IEA President, welcomed Council members and acknowledged Bradley Chase, the Chair of HAAMAH Conference, for the help in organizing the Council Meeting, and the, previous, Officers' and Executive Council meetings. PF explained the logistics and housekeeping.

2. Introduction

PF introduced the meeting by noting that all major decisions concerning the Association are taken by the Council, including changes of IEA rules, significant financial matters, admission of new members, formation and dissolution of standing committees. The Council meets every year and is composed of the delegates of the Federated Societies. Council elects the IEA officers (President, Secretary General, and Treasurer) every third year.

PF recalled that the Officers and the Chairs of Standing Committee compose the Executive Committee of IEA. They are all volunteers. The operations of the Executive Committee and of IEA Council, including voting eligibility and Robert's Rules of Order, were briefly explained.

The Council documents were presented, distinguishing the basic documents (rules, operating procedures, and reference documents) and the archives. Aims of IEA were also remembered: To contribute to the development of federated societies, to advance the science and the practice of ergonomics at the international level, and to enhance the contribution of the ergonomics discipline to global society.

PF then presented the general goals and plans for the meeting: to better use of the Council members' expertise; to leave more time for discussion, interaction and advice; and to spend less time on voting items (of which there are very few). PF described the agenda as divided in three main activities:

- a) presentation by the President of a synthesis of 200-45 IEA activities;
- b) presentation of the reports by the Chairs of the Standing Committees; and
- c) discussion sessions (two long plenary sessions on best practice initiative and IEA dues, and three short parallel sessions on award evolution, ILO checkpoints, and technical committees).

3. Roundtable presentations by Council members

Council members made short presentations concerning the main characteristics, major activities, main achievements, difficulties, and future plans of their societies.

4. Debating, voting procedures, eligibility, and roll call

PF explained the voting rules and procedures.

Roll Call: A quorum for voting was established (a total of 32 eligible votes were present).

5. Approval of Minutes

The Minutes of the 2004 Council meeting (Funchal, Madeira, 2004) have been approved by electronic ballot, following the procedure approved at that Council Meeting.

6. IEA Report

The President introduced a new reporting policy that provides a general overview of IEA activities.

Context

2006 will be the 50th birthday of IEA. The 2006 IEA Triennial Congress should be seen an opportunity to reflect on the evolution of the discipline, the changing and diverse needs of the federated societies, and the role of IEA. The initial development of IEA was centred on societies from developed countries in a context of post-war economic growth and of major changes in the technology of production systems and the nature of work activities. Today, IEA comprises very diverse societies from differently developed countries. The societies reflect various national issues, specificities in culture, and organisational choices. The needs of the 42 Federated Societies from five continents are changing and diversifying, and so consequently is the role of IEA.

Role of IEA

The changing role of the IEA became apparent in 2004 when a communication problem emerged, indicating there was limited awareness of IEA activities among the Federated Societies. However, there was considerable interest and satisfaction when information was provided. It was realized that there was a gap between IEA actions and societies' needs. It became apparent that there was a need to improve communication within IEA, including increased involvement of member societies in IEA actions and greater awareness of Societies' needs by IEA officers and standing committee chairs (the EC). Actions of general interest were discussed including the education and accreditation standards, liaison with international bodies, and EQUID. One challenge is carrying out these activities while maintaining contact with and support of member societies.

Internal democracy

There is a need to revitalize internal communication through website development, the best practice initiative, encouraging networking and problem-sharing, and direct links with Societies' Presidents. Also, there is a need to improve attendance to Council meetings. Many societies cannot send their delegates to the Council meeting due to financial limitations. Better use Council expertise was discussed, including the notion that Council should spend less time on administrative matters and more time discussing issues).

IEA efficiency

There is a need to improve operational efficiency. EC and Council meeting costs can be reduced, although they are partly unavoidable because IEA is a worldwide organization and face-to-face meetings are required. The Council is encouraged to think about how to reorganize the structure of IEA.

IEA should revise dues: Rules for the dues are unfair to young, small societies and to societies from developing countries. These rules can be a barrier to IEA affiliation: IEA dues, including the under 20% rule, constitute a large portion of many societies' budgets, while representing a very small part of the IEA budget.

IEA should increase available resources: Developing new activities means more resources need to be found, either by searching for external funding, e.g. ILO funding for revision of the IEA/ILO Ergonomics checkpoints, or by developing resources through IEA promoted initiatives such as IEA Conferences.

IEA should assess activities against its three strategic goals for better controlling its actions, as was also recommended by the IEA auditors.

The activities of IEA are mainly the actions of Standing Committees. Some effort has been made to match the activities of each SC to the strategic goals. The STP SC is committed to having the Technical Committees strongly involved in IEA'2006, in developing new IEA conferences, and in the Ergonomics Compendium. The EQUID SC has begun developing various options for the program to enable the IEA 2006 Council meeting to assess and reach a decision. The PSE SC should prepare the final version of the Masters' Program Guidelines and the Code of Ethics. The activities of ID SC should be aimed at revitalizing the links with ILO, through the revision of the Ergonomic Checkpoints, the final edition of Ergonomics in Agriculture, and planning future collaborations. The Development SC should concentrate on the best practice initiative. The Awards SC has two major objectives: acknowledging the contribution of individuals and providing visibility to the discipline. The Awards SC also has to solve the problem that many societies do not propose any candidates for awards. As for the CPR SC, the goals are the continuous website maintenance, hosting of new IEA activities, and developing a communication policy.

7. President's report

PF reported that there was a change in the composition of the Executive Committee. Eui Jung (STP Chair) resigned due to health problems, and Pascale Carayon was appointed and chairs now both the STP and EQUID Committees.

The President reminded of the guidelines for EC action 2003-06 include increasing the involvement of IEA Federated Societies in IEA activities and establishing better two-way communication between the EC and IEA Federated Societies.

In pursuing these aims, PF visited several federated societies: Association of Canadian Ergonomists during its Congress at Windsor, October 2004; ULAERGO during the 1st ULAERGO Conference at Santiago, Chile, November 2004, Italian Ergonomics Society during the HEPS Conference, Florence, Italy, April 2005; SEAES at the Congress in Bali, Indonesia, May 2005. PF also took part in the 2nd Tunisian Ergonomics Workshop, Monastir, Tunisia, May 2005. All of the visits were very useful. Other invitations in 2005 are : NES Congress in Oslo, Norway, October 2005; and the Indian Ergonomics Society at the HWWWE Congress, Guwahati, India, December 2005

PF reported about the state of affairs of Ergonomics, the official journal of the IEA. There have been many complaints related with the slow reaction of the Journal to submissions and the long delays before publication.

A new person is now in charge of the journal at Taylor & Francis.

8. Secretary General's report

SB recalled the duties of the Secretary General, which include keeping close connections to President to receive advice and to formulate the policy of IEA, looking after the correspondence and requests and routing the correspondence to the appropriate officers for response or action, preparation of council meeting, and taking care of archives.

Meetings

Soon after 2004 Council meeting, a number of delegates expressed the opinion that Council Meetings should favor new Societies events. It was then decided to ask the delegates to reconsider the location of 2005 Council Meeting. An email ballot was launched, requesting the delegates to choose between Bali (where the Council would be held in conjunction with the SEAS Congress) and San Diego (the location chosen in Madeira, where the IEA Council would be held prior to the HAAMAHA Conference). Along the period allowed for voting, it was found out that it would be difficult for some delegates to get the visa to enter Indonesia. Anyhow, by the deadline, set

by the end of September, the majority of delegates favored again San Diego.

In the 2004 Council meeting, it was decided the electronic approval of the minutes. The process of approval was completed by the end of October.

The collection of reports of Standing Committee and of the President's general synthesis for the San Diego Council meeting was completed in May, and the IEA Annual Report was prepared in June. The preparation of the present Council meeting was greatly favored by the efficient and kind help of Bradley Chase, the Chair of HAAMAHA conference.

Several other meetings were organized. An Officers' meeting was held in Paris, January 21-22, 2005. The agenda included reviews of PSE, IDC and STP activities. Special attention was dedicated to the situation of STP SC. Due to the health problems of the Chair, some of the SPT activities had to be carried out by the officers. A Sub-EC Meeting was held in Florence, Italy, April 2, 2005, where attendance included the Officers, and the Chairs of SC Awards, STP, EQUID, CPR, and Development. The Florence meeting was dedicated to reviewing the Standing Committee's activities and preparation for the San Diego Council meeting. Also, a discussion of IEA dues revision was initiated. At that meeting, P. Carayon was appointed to Chair of STP.

Contacts with Federated Societies

There has been a continuous exchange of information mostly related to updating on the website the list of Federated Societies' Presidents, Officers and Delegates. In pursuing the goal of substantive democracy within IEA, a letter was sent to the Presidents of Federated Societies the delegates of which had not attended the last three Council Meetings.

The letter inquired about the reasons for not attending and offered assistance. Unfortunately, replies were few. A letter was sent to Societies' secretaries to remind of IEA journal benefits for their membership. The benefit permits reduced subscription rate for the following IEA endorsed journals: Ergonomics, Applied Ergonomics, International Journal of Occupational Safety and Ergonomics, International Journal of Industrial Ergonomics, Human Factors and Ergonomics in Manufacturing, Theoretical Issues in Ergonomic Science, International Journal of Human-Computer Interaction, Ergonomia, Cognition, Technology & Work (CTW).

Following the 2004 Council meeting, Asociación de Ergonomía Argentina (ADEA), and Philippine Ergonomics Society (PhilErgo) were informed that IEA Council accepted them as a Federated Member of the IEA, upon the payment of IEA dues.

Archives

Since the Seoul Council meeting, all IEA documents have been collected and ordered. They will be stored in Paris, according to an agreement with CNAM. The basic and reference documents have been updated, after the decisions taken in Madeira, and revised in June by the President and the Secretary.

Correspondence

A substantial number of email requests from information seekers was daily handled. Many inquired how to get papers published in the Proceedings of IEA Triennial Congresses or of IEA endorsed Conferences. It should be considered to put Proceedings in the IEA website. Please note that due to a change in the location of the ISTC CNR, the new address, the phone and fax numbers, and email of the IEA Secretariat is:

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9. Treasurer's report

Ken Laughery, IEA Treasurer, presented an overview of IEA funds in Scotiabank in Ottawa, Canada. Funds are held in one cash account, from which payments are made and deposits are entered. There are also two interest bearing accounts. Transfers are made between accounts as necessary to carry out IEA business.

A description was also provided of five IEA Special Funds. Four of these funds have been established for supporting ergonomics development in underdeveloped areas.

The fifth special fund is for the Liberty Mutual Prize and Medal.

Since revenues and expenditures are significantly higher in years of a Triennial Congress, such as 2003, it has become customary to present an analysis of operations for a three-year cycle. For the period 2002-2004, the total revenue was \$236,777. Expenditures for this period totalled \$241,131.

Thus, during this three-year period there was an operating deficit of \$4,354.

The revenue numbers indicated that income from Federated Societies varied, but not substantially across the three years. Income from Sustaining Members has also varied.

In 2004 it was \$2,565 more than in the previous year. An analysis of "core" revenue and expenditures for 2004 was also presented. Core revenue sources include federated society dues, capitation fees and bank interest. Core expenditures include expenses for office and officer activities, standing committee activities, meeting costs and bank fees. This analysis indicated that core expenditures (\$60,974) exceeded core revenue (\$38,728). When sustaining membership and contributions are included, the total revenue was \$55,863.

Revenues

Year	2004	2003	2002
Dues			
Federated Societies	31,076	27,308	31,435
Sustaining Members	14,565	12,000	20,200
Capitation Fee	500	17,056	850
Interest + Exchange	7,152	2,785	3,446
Contributions	2,570	1,654	2,323
Liberty Mutual	15,000	15,000	15,000
Miscellaneous	1,422	15,000	435
Total	72,285	90,803	73,689

Expenditures

Year	2004	2003	2002
Officers	14,624	20,931	13,717
Office Administration	6,193	11,039	9,335
Dev. (ex-Pol. & Pl.)	918	3,704	2,374
STP	2,506	5,930	3,451
PSE	5,354	4,157	1,563
IDC	5,896	7,140	3,402
WHO	7,505		
CPR	2,041	12,142	3,121
Newsletter	3,319	3,434	2,034
EQUID	2,814	1,382	
AWARDS	1,428	3,109	5,652
Liberty Mutual	9,579	23,109	7,101
Meetings	6,756	9,482	2,749
Council Dinner	1,436		
Fees, Bank Chg	184	337	521
Grants	355	7,000	
Miscellaneous	955		
Business Cards	336		
Archives	1,016		
Total	72,260	113,851	55,020
Operating Surplus	25	-23,048	18,669

10. Voting item: Auditors' report

The auditors, Michelle Robertson and Betty Sanders, approved the Treasurer's Report and made the following suggestions:

1. Add the IEA President as an authorizing signature for expenditures over a specified amount (\$5,000 is suggested).
2. Insure that all officers that receive and distribute funds are bonded.
3. Create an electronic voucher form with a unique code/number for all expenditures. The form should identify, explain, and approve all of the individual costs covered in the expenditure.
4. Formalize and publish IEA guidelines for the reimbursement (and advance payment) of travel and other expenses.
5. Develop for IEA Council approval an annual budget based on anticipated income and expenses. Income sources and expenditures categories, such as those identified in the Equity section of the 2004 Treasurer's Report, would be appropriate line items in this budget.
6. The budget should be tied to the IEA strategic goals and objectives and compared with actual expenditures at the end of each budgetary cycle.

Motion The Council approved the IEA auditors' report. Motion carried (Y: 32, N: 0, A: 0)

11. Development Committee

Jan Dul reported about the activities performed during the period June 2004-May 2005: a workshop during IEA council meeting, the start of the "IEA Best-Practices" project, and the establishment of a preliminary DC.

In the workshop during IEA council meeting in Madeira (2004), there was the involvement of council members in discussions about possible future activities of the IEA and its societies. The IEA Executive reviewed the suggestions and the possibilities to integrate the actions into the IEA action plan.

The start of the "IEA Best-Practices" project was consequential to the fact that IEA has realized that societies experience similar problems and can benefit from solutions that have been developed by other societies. For this purpose, the DC started the project aimed at exploring and discussing topics of common interest, which will climax towards IEA Workshops on selected topics, to be held during the IEA2006 Congress in Maastricht. The "IEA Best Practices" project includes both the explorations and discussions before the workshops, as well as the workshops themselves. After preparation, the "IEA Best Practices" project started in March 2005. Now, twelve IEA Federated Societies have appointed twenty-four representatives (usually a senior and a junior member) that contribute to the project. A first long list of topics of common interest has been defined.

At the council meeting in Madeira (2004), the following council-members volunteered to be member of the preliminary DC: Alexander Burov (Ukraine), Lina Bonapace (Italy), David Caple (Australia), Jan Dul (chair, Netherlands), Kirsten Olsen (Denmark), John Wilson (UK), Michelle Robertson (USA), Maria Eugenia Figueroa (Chile). Later, Maurice Aarts (Netherlands) was added as secretary. The group evaluated and structured the results of the Council workshop, and was involved in setting up the "IEA Best Practices" project.

In the coming period, until IEA'2006, the "IEA Best-Practices" project will be the major activity of the Development Committee. Working groups, with representatives of societies and lead by members of the DC, will have discussions by e-mail on selected topics. These working groups will prepare documents for the IEA'2006 workshops, and will organize the workshops. A special section in the IEA website will be dedicated to the "IEA Best-Practices" project, in order to inform non participating IEA societies and other interested parties about the developments of the discussions. The Development Committee will be established, and it will primarily consist of active members of the "IEA Best Practices" project, including leaders of working groups. The goal is to have an internationally balanced DC, with representation from all over the world.

12. Voting item: Approval of the mission of the Development Committee

Jan Dul explained the definition, objectives, policy and procedures of the Development Standing Committee to be approved by the council. The mission is to contribute to the development of individual societies, by strengthening the interactions between IEA societies, by stimulating more dynamic interactions, and open discussions. The mission is directly related to principal goal A of the IEA: to develop more effective communication and collaboration with federated societies. Within this goal, the D SC contributes to objective A1 (support the work of Member Societies), in particular "to show best practices in order to stimulate the growth of ergonomics". Also, the D SC contributes to objective A2 (improve IEA operational effectiveness), in particular "to develop mechanisms for effectively involving member societies in IEA activities", "to improve communication with member societies", and "to facilitate the exchange of views and experiences among the leaders of member".

Motion

The IEA Council approves the following definition, objective, policies, and procedures of the Development Committee as stated below. (This replaces the part of Basic Documents named Operating Bodies. Numbers of Titles and Articles are kept).

Title 5

Article 4. Development

This committee contributes to the development of ergonomics societies, to encourage and support interactions and open discussions between IEA member societies and to explore needs of societies and networks. This committee aims at developing more effective communication and collaboration with federated societies.

Title 11

Article 1. Objectives

The objectives of the Development Committee are:

- To contribute to the development of ergonomics societies
- To encourage and support interactions and open discussions between IEA member societies
- To explore needs of societies and networks.

The objectives and activities of the Development Committee would be directly related to Strategic Goal A of the IEA: to develop more effective communication and collaboration with federated societies.

Article 2. Committee policies

The Development Committee is to work in close contact with IEA member societies and maintain a network of correspondents within the societies. The Committee is to develop a proactive activity directed towards societies, anticipating and deciphering needs and proposing actions.

The Committee may conduct studies on IEA member societies on relevant issues (such as evolution of membership, problems met, issues of interest, relations with government agencies, etc.).

The Committee should be attentive to newly formed societies. When no IEA Federated society existed in a given area, it should provide assistance to the creation of the young society.

Article 3. Procedures

The Committee includes a non-limited number of members of IEA Societies, appointed by the Committee Chair in order to help Committee operations. Subcommittees on specific issues can also be created as needed.

The Committee shall respond to the direction of the Executive Committee to study specific issues and formulate recommendation for policy changes, especially regarding IEA membership. The Committee shall assemble all relevant information, develop alternative options, identify critical information needs, develop estimates and predictions based on available data and document these to justify its recommendations.

In the following discussion, related to more visionary and future-oriented tasks of the DC for IEA in terms of strategic thinking, Luczak asked to postpone the decision and proposed the following motion:

The IEA Council decides to postpone the approval of the Definition, Objectives, Policies, and Procedures of the Development Committee.

John Wilson seconded the motion

Motion was not carried (Y: 2, A: 3, N: 27)

PF proposed the motion:

The IEA council approves of the above reported Definition, Objective, Policies, and Procedures of the Development Committee.

Jan Dul seconded the motion.

The motion was carried (Y: 27, A: 3, N: 2)

13. Discussion Session on Best Practice Initiative

Jan Dul briefly summarized the Best Practice initiative and presented the relevant documents. Then he explained that the Council was to be split in four working groups. The groups were asked to collect ideas from the delegates, to summarize, add and prioritize ideas, to formulate the definition of the sub-group topics, and to give suggestion for stimulating and organizing international discussion. They were also asked to suggest outputs and deliverables for the workshop during IEA 2006.

The groups worked, for about two hours, on the following issues: Development of the discipline, internal communication, external networks, and anticipating the future. Pascale Carayon, Martin Helander, Michelle Robertson, and John Wilson presented the outputs to the Council. The reports showed that the groups elaborated many ideas, e.g., on how to develop inter- and intra-professional collaboration and training, how to promote ergonomics among students, and the social communities. Many ideas were suggested on how to encourage Federated Societies to be involved in new emerging issues. It was suggested also why and how to interact with and influence national governments, build networks with business, and to establish relationships with related non-ergonomics societies. Many ideas were offered on how to improve the internal communication. The most relevant issues were also ranked, having how "to increase the demand for good ergonomics" and "to enhance good ergonomics globally" in the highest positions. JD commented positively the work done by the groups and their outputs, and announced that all the suggestions will be considered in the development of best practice initiative.

14. International Development Committee

David Caple, Chair of International Development SC, organised the presentation of his report along main topics: Joint ILO/EA projects, relationship with WHO, support to developing countries, distance learning project, twinning between Societies, joint projects with other professional associations, and emerging Issues in developing countries.

Joint ILO/EA projects

The "Ergonomic Checkpoints" are almost completed. They were discussed at the very successful workshop in Bali. The new edition with very nice illustrations will be launched at 2006 IEA Congress. They will be tested in advance for usability. The "Ergonomic Checkpoints in Agriculture" are under development, thank to ILO funding and the leadership of Kazu Kogi. They will be presented in a workshop in India, in December 2005. There is the possibility to undertake a number of other checkpoints, namely: health care and patient handling, office, hospital-ity, construction, forestry, and informal sector. The draft ILO guidelines on "Ergonomics and MSD prevention" are ready; they utilize much IEA research materials.

Relationship with WHO

IEA is registered as an NGO, and listed among the developing countries initiatives. WHO recognizes the IEA/ILO projects.

Support to developing countries

CDs and proceedings of IEA endorsed conferences continue to be distributed to libraries in developing countries. Also library donations will continue under the assistance of IDC. The support conference attendance will also continue, thanks to IEA Societies and individual members.

Distance learning project

This is a Portuguese/British initiative, targeted to Africa countries, e. g. Mozambique. There are some problems with copyrights, but the contract should be signed shortly, thanks to the efforts of Anabela Simoes, who will translate the materials, and John Wilson, who provided them. There are also SELF programs for Northern Africa. Twinning between Societies. There is an ongoing interest from IEA Societies, e.g. ABERGO, and IEA networks, e.g. ULAERGO, and individuals for offering services. Students have showed much interest.

Joint projects with other professional associations

Pat Scott, Barbara McPhee and Kazu Kogi are developing a joint IEA/ICOH "Ergonomics" resource. With IOHA, collaboration is on going on control banding, and a joint session at IEA'2006 has been proposed thanks to Barbara Silverstein.

Emerging Issue in developing countries

The issue of women and children in work is emerging, thanks to Cheryl Bennett and Lena Karlqvist. Others issues are to be tackled, such as gender, migrant workers, OSH management systems, forklift operation, vehicle cabins, cold work environment, cultural factors, air-conditioning, confined spaces, labeling of containers and substances, fire prevention and fighting, and recycling of waste

The challenges for the next year are, as for the joint ILO/IEA projects, to finalize and launch "Ergonomic Checkpoints" at IEA'2006, to edit "Ergonomic Checkpoints in Agriculture", to commence "Ergonomic Checkpoints in Health Care", and to draft ILO "Ergonomics and MSD" guidelines, as for distance learning, to complete translation of course materials to Portuguese, as for IEA Congress, to support attendance and participation by developing countries, as for twinning, to extend participation, as for Professional Associations, to release ICOH/IEA draft resource, and to meet IOHA Control Banding project and develop strategy. As for the emerging issues, IDC will try to link them to WHO programs.

15. Science, Technology, and Practice

Pascale Carayon, Chair of the STP SC since March 2005, started out by recalling the objectives of the Committee: to promote and coordinate the exchange of scientific and technical information at the international level through the Technical Committees, the Ergonomics Compendium, and various types of Conferences.

Currently, the STP Committee comprises eighteen technical committee: Activity theories for work analysis and design, aging, agriculture, auditory ergonomics, building and architecture, building and construction, ergonomics for children and educational environments, healthcare ergonomics, human aspects of advanced manufacturing, human-computer interaction, human reliability, musculoskeletal disorders, organizational design and management, process control, psychophysiology in ergonomics, quality management, safety & health, and standards. Some of them are very active (for instance ODAM, that very recently held a very successful conference, with participants from seventeen countries), some others are dormant. IEA should explore if more TCs are needed.

With the Ergonomics Compendium, the IEA pursue the goals of disseminating information on ergonomics and publicizing the discipline through short easy readable texts on various ergonomics topics. Pierre Falzon (in January 2005) and Pascale Carayon (in July 2005) have requested TCs for topics and texts. Some of them have already positively replied: Ergonomics for Children and Educational Environments, Healthcare Ergonomics,

Organizational Design and Management, and Psychophysiology in Ergonomics. The steering committee is to be formed, but there are some proposals. Besides the cultural and scientific aspects, Conferences are important because they can bring resources to IEA. Some new conferences are hypothesized, e. g., Ergonomics in design, and Training in ergonomics, besides to build up a series from the new and very successful one, HEPS. Proposals will be presented at IEA Council, 2006.

16. EQUID (Ergonomics QUALity In Design)

Pascale Carayon, Chair of the EQUID Standing Committee, recalled the mission of the Committee: to develop and increase the use of ergonomics knowledge and methods in the design process of products, work systems and services. The Committee has been formed, and comprises Pascale Carayon (chair), Pierre Falzon, Olle Bobjer and Waldemar Karwowski. They already met in Florence, Italy on March 2005. Also the Subcommittee on accreditation criteria & process has been formed: it is chaired by Waldemar Karwowski (US), and comprises Lina Bonapace (Italy), Pierre-Henri Dejean (France), Wolfgang Friesdorf (Germany), Sung Han (Korea), Francisco Rebelo (Portugal), Peter Vink (NL) and Toshiki Yamaoka, (Japan). The Subcommittee on ergonomics process in design has been also formed. It is chaired by Olle Bobjer (Sweden), and comprises Michel Naël (France), Yusakau Okada (Japan), and Daniel Podgorski (Poland), John Rosencrance (USA), and Yvonne Toft (Australia). The user groups on accreditation and on ergonomics process in design are to be formed shortly.

The Subcommittee on accreditation criteria & process has to revise the text on the "IEA Certification for Ergonomics Quality in the Design Process – Part I. Integration of ergonomics requirements in the design process for products". It met in Florence, Italy (April 2005), Berlin, Germany (June 2005), and San Diego, USA (July 2005). It will meet again in Europe, in the Fall 2005. In 2005-2006, it will continue to revise and update the text on ergonomic design of products, in order to present it to IEA Council in 2006.

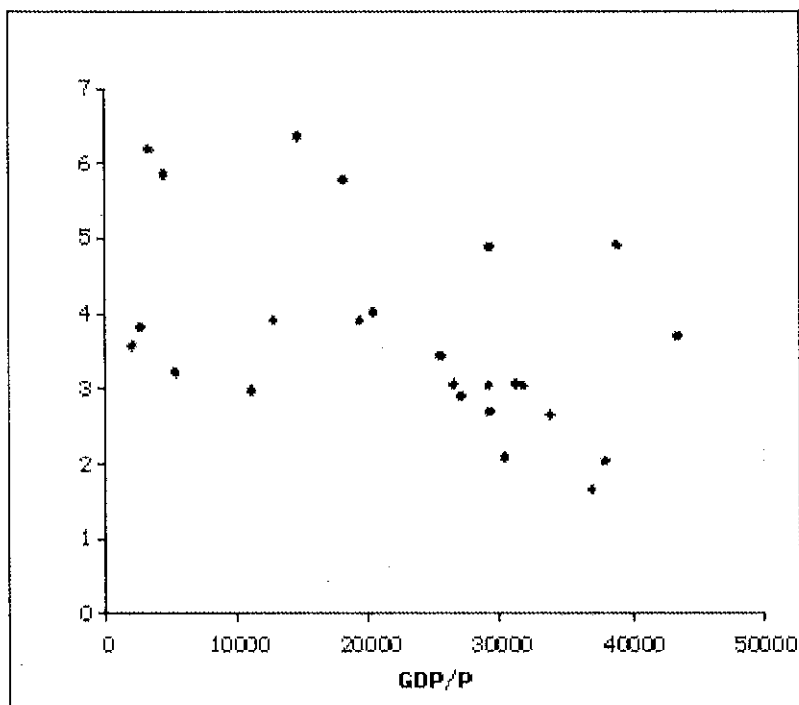
The Subcommittee on ergonomics process in design is engaged in the analysis of various accreditation and certification systems in various countries (e.g., ISO, TCO, JCAHO...). During 2005-2006, the Subcommittee will continue the evaluation of scenarios for implementation of EQUID, and the revision and the update of the text on accreditation criteria and processes in order to present a proposal to IEA Council in 2006.

The Committee is planning to hold an EQUID forum in 2007, to organize two sessions on EQUID at IEA '2006, to apply for trademarks for EQUID program, and to continue to communicate on EQUID with members from Asia and South America for the two EQUID sub-committees. The Committee asked the Council for help in finding participants in the two user groups, in communicating about EQUID, through newsletters, conferences, and other communication means of the national ergonomic societies.

17. Discussion session on dues

Ken Laughery introduced the discussion by reminding that the dues can actually follow two rules: The 20% rule, that means that a society has to pay the 20% of the Society's revenues, and the Base fee rule, which states that a society has to pay a base fee of \$122.50 and a per capita of \$2,80 up to 500 members, and \$1.40 beyond.

KL noticed that this situation may hinder affiliations, as is in the Thailand case, and the worrying consequence that, per member, the rich pays little, the poor pays much, as is clearly shown in the figure, where the actual data are reported.



Three working groups were formed that discussed for one hour. Pascale Carayon, David Post, and Michael Wogalter reported the suggestions by the groups. The reports indicated that the dues are really felt as a hot issue by Council members.

Many Council members shared the opinion that it is worth an adhoc committee, prepared by a letter of the President of IEA to the Presidents of Federated Societies, because of the psychological and economical aspects.

However, some thought that the claim that some new smaller societies do not join IEA because of high dues is dubious, someone believed rather they are more concerned with their

own survival and internal issues, and view IEA participation as added overhead they can live without right now. Their concern may be countered by simply waiving their dues entirely for the first years: these societies are small, IEA will not be losing significant income and, hopefully, in the meantime, they'll see the value of membership.

It was also advanced the idea the dues should be linked to GNP: the lower the GNP of the country of a society belongs to, the lower the dues. This idea was generally accepted, but some were uncertain about its feasibility (it sounded like a lot of added work for the secretary, who has to do all the calculations), and its outcome (if one looks at the dues each society is paying under the current structure, it probably wouldn't make much difference anyway).

Some suggested that if the fee structure would be altered, then whole structure should be revisited: for example, introducing 'pay for performance'.

Allmost everybody maintained that this issue as difficult to be brought up back to societies: there is a psychology of dues, by which a reduction is always better than an increase. Different options might be simulated, for instance, lowering the base dues might bring about a positive psychological effect. It was also suggested to have a dues structure with a base contribution and then contribution to specific projects. This implies to make projects visible to all the membership.

Summing up: dues are an important issue. The suggestions were many and various (even to keep the situation as is), but there was a quasi general consensus that the issue was worth to be discussed, and further developed to come up with structured proposals in 2006 Council.

18. Professional Standards and Education

Stephen Legg, the Chair, reported about the activities of PSE SC. He started out by recalling that PSE has three active subcommittees: The Directory of Ergonomics and Educational Programmes (DEEP), the Professional Standards (PS), and Ergonomics Education (EE) Subcommittees. He observed that there is a need (possibly linked to a simplification of all SCs' definition) to revise the PSE definition in order to reflect current subcommittees' structure.

Directory of Ergonomics Educational Programmes (DEEP) Subcommittee

It is chaired by Tina Worthy and comprises Stephen Legg, Andy Marshall. In the Directory, the course are listed by country, with the name of school and University/Institute, the contact name and the address for enquiries, the program title, the degrees/diplomas on offer, the prerequisites for admission, and the description of the character of the program. Unfortunately, in the last year, Tina Worthy resigned, and progress was limited to the maintenance function.

As for 2006, a volunteer is to be searched for chairing the SB, meanwhile activity will continue as maintenance of the Directory.

Professional Standards (PS) Subcommittee

Dr. Carol Slappendel chaired it, until recently, when she resigned. A volunteer is searched for substituting her. The PS Subcommittee has two goals. The first goal is the Endorsement of Certifying Bodies, chaired by Carol Slappendel, and comprising Stephen Legg (ex officio), Francois Daniellou, Jerry Duncan, and Harvey Cohen. In 2004-5, application form and IEA website were updated, and a survey was conducted among the Federated Societies for information about certification programs. Brazil, Korea, Hong Kong, Nordic Countries, BCPE (USA), South Africa, New Zealand, China, Germany, Italy and South East Asia replied. No application for endorsement was received. An enquiry was received from Japan. For 2005-6, the plan is to actively promote IEA endorsement to existing certification schemes, e. g., to CREE, and provide advice and guidance to Federated Societies in developing certification schemes, e. g., to Latin America.

The second goal consists in reviewing the IEA Code of Ethics. The chair is Carol Slappendel and the members are Stephen Legg (ex officio), Shrawan Kumar and Ian Randle. In 2004-5, the existing Code of Ethics and John Wilson's initial suggestions for changes were distributed to all Subcommittee members by 30 Jan 2005. Members submitted independent comments to the Chair by 30 March 2004. The Chair prepared the first draft revision and distributed it to Subcommittee members by 30 May 2005. It was convened to rename it as Code of Conduct.

Members' comments to the Chair were expected by 30 July 2005. The final draft will be prepared by chair and submitted to EC by 30 Sept 2005, and the EC is to respond by 30 October 2005. It will send by 15 November 2005 to the IEA Presidents and IEA Representatives in order to solicit comments. Responses are required within January 31, 2006. The Chair will collate comments and prepare a final version for presentation to EC by March 15, 2006, and the IEA Council at its 2006 meeting.

Ergonomics Education (EE) Subcommittee

Stephen Legg chairs it. Its members are Robin Hooper (deceased), Tom Smith, and Robin Burgess-Limerick. Its goal is to prepare an IEA document: "Guidelines on the minimum specifications for a Masters degree in Ergonomics/Human Factors (including guidance about distance learning)". In 2004-5, several workshops had been held: The joint IEA/APERGO workshop (July 2004), the joint IEA/ES workshop at ES Conference (April 2005),

and the joint IEA/SEAES workshop at SEAS conference (25 May 2005). A first draft version of the Guidelines was ready on February 2005, and a second draft prepared in July 2005. There has been a good progress towards international consensus. For 2005-6, EC Comments are expected on the latest version for September 2005, and two workshops are planned: the joint IEA/HFES workshop (September 2005), and the joint IEA/NES/FEES/CREE workshop (October 2005).

Comments are solicited and waited for from national Ergonomics Masters Program directors on latest version by November 2005, from Federated Societies on near final version by December 2005. Guidelines will be submitted to EC and Council for approval at Maastricht meeting in July 2006.

19. Communication and Public Relations

Andy stated that the mission of the committee is to facilitate communications with and within Federated and Affiliated societies (and others) by communicating what the IEA is doing, encouraging interactions with and between the "council" members, and heavily relying on communication via IEA Council Members. There are four main media that can be used: meetings, print, email, including list server, IEA website.

As for the IEA newsletter, Ergonomics International, whose Editor, Dave Moore, recently resigned, it has well-established links with other editors, and receives copies of federated societies' newsletters. It is distributed also via the council list server. Presently, the newsletter is suspended, while the EC develops a comprehensive communications policy.

The Council list server is hosted by Louisville University. It comprises the IEA Executive Council, Council members (and the alternatives), Presidents, and Secretaries of Federated Societies. All Council list server members can send messages to all others on the list. The use of the list is encouraged!

The website (www.iea.co) focuses the home page on achievements and activities. A world map shows the geographical distribution of the Federated Societies and links to IEA roster information. All IEA roster information is now on one page: It is possible to add photos on the roster. As for web, the ongoing activities are the maintenance of the Ergonomics Programme Directory, and the updating of the IEA roster, and Committees' pages. It is planned to add the Auditory Ergonomics TC's pages (by Ellen Haas), the International Development Committee newsletters (by David Caple), and the lists of ergonomic standards (by Jan Dul), and to develop a more accessible website, by changing fonts to make them adjustable in size, properly marking headings, images, and tables. Changes in look and feel will be made over the next 12 months.

The statistics about the web are promising: the visits per week increased of more than six hundred, and pages view of more than twelve hundred over a year.

The most viewed page is the home, followed by the ergonomic definition, and by the first page of the ergonomics program directory. Position in Google search varied: 9th in April 2004, 8th in July 2004, and 6th in April and May 2005.

AM concluded his report observing that newsletter suspension is a challenge, Council list server utilization is up, and website activities and visits are increasing.

20. Awards Committee

The Chair, Waldemar Karwowski, past President of the IEA, reminded that the IEA mission is to promote recognition of ergonomics discipline. The main objective of the Award Committee is to support the mission of IEA through recognition of outstanding ergonomists/human factors professionals throughout the world.

WK revealed the IEA Fellows 2005: F. Daniellou, SELF, A. Hedge, HFES, V. de Keyser, BES, K. Kogi, JES, H. Krueger, GfA, K. Parsons, ES, and W. Williges, HFES. He insisted on Fellow Award process: nominations should be done early, they must have the endorsement of the federated society. WK reminded that the call for Fellow award nominations is open.

The Review Committee for IEA/Liberty Mutual Prize 2005 was composed by H. Hendrick, HFES, H. Luczak, GfA, P. Nag, IES, M. Soares, Brazil (Chair), and J. Wilson, ES. The Committee decided that no award was to be attributed in 2005. A revision of the submission process for this award is needed.

WK proposed that the K.U. Smith Award will be given for supporting the education of ergonomics students in developing countries.

Possible ideas for the new award, that can be named "Educational Support for Ergonomics Students in Developing Countries", are the development of a library, the purchasing of educational equipment, the supporting student's research project, or the development of a new training program for students. The proposals will be evaluated in cooperation with the International Development Committee.

As for planning the Triennial Awards at 2006 Congress, WK reminded that the awards should be publicized and communicated within and with the societies. He invited the Council members to solicit their societies not to wait for the deadline for proposing nominations. The awards presentation and the 2006 Congress Opening Ceremony should be carefully prepared. WK introduced the workshop to review the structure of the IEA Awards by observing that awards reflect IEA goals, promote the discipline, and are a recognition of the contributions by outstanding individuals from all federated societies.

21. Parallel discussion sessions

Three parallel discussion sessions took place on Technical Committees, Award evolution, and IEA/ILO checkpoints. They lasted less than one hour and were coordinated, respectively, by Pascale Carayon, Waldemar Karwowski, and David Caple, respectively, who also briefly reported the main outcomes to the Council. Many ideas and hints came from the groups, which were much appreciated by the President and the Council.

22. IEA Triennial Congresses

IEA'2006, Maastricht, NL

The chair, Ernst Koningsveld, informed the IEA Council that most things go very well. In the late 2004, the call for abstracts was put on the completely renewed web site (www.iea2006.org). A good series of proposals were received. Many of the IEA TC's have taken initiatives. However, up to now only few proposals have been received from Asia, South America, and Scandinavia.

The facilities have been booked and most of the details agreed upon. The contract with Elsevier for the publication of proceedings was signed. Besides a Cd-rom, a special issue of Applied Ergonomics with all the keynotes and a state of the art book with extended chapters on the best contributions to IEA'2006 will be published.

Over the past months, all IEA Federated Societies, IEA Council- and EC-members and members of the program committees have been invited to make nominations for keynote speakers. Early May 2005, the selection was made and the selected people invited.

The financial aspects become more safe as major sponsors were attracted for a total of than 200,000 euro on a total budget of about 1,2 million euro. The recently updated budget seems stable enough for a safe outcome.

EK concluded that the organizers have no worries, except for the unpredictable number of participants. By the extensive efforts to inform anybody as good as possible, he trusted that the final attendance will be large.

IEA'2009, Beijing, China

The Chair, Kan Zhang, was not present and has not sent a report prior to the Council. Tighter links are to be developed.

23. Next Council Meeting Location

Given that in 2006 the Triennial Congress will take place in Maastricht, NL, the next IEA Council will be held in the same location, prior to the Congress.

24. Synthesis

The president, Pierre Falzon, drew a synthesis of the meeting. PF observed the discussion sessions were a means to make positive use of Council expertise. Perhaps, in this meeting, they were too many. The roundtable presentations, though they took a bit too long, were felt as a need, and useful. The attendance was good. He notices that the Societies which were absent were also absent also on the three previous meetings. They will be sent the annual report and again a letter offering assistance. PF congratulated the IEA'2006 organizers for a very convincing presentation of the preparation of the IEA 2006 Congress, and invited the Council members to join himself with applause. (A long applause came from the Council). PF expressed worries about the 2009 Congress, on which the Council has received no information, and indicated that a quick action is to be undertaken. About IEA dues, an ad hoc committee will be formed and a letter will be sent to Presidents of the Federated Societies. PF observed that remarks about possible deficits in strategic thinking have been heard. He maintained that strategic thinking is a concern of the officers and all standing committees.

As for the actions to be carried out by the Committees, PF indicated that the STP SC should, with the support of the Council:

- develop new IEA conferences and revise basic documents,
- develop the Ergonomics Compendium, by setting up its steering committee, and having first texts ready during the coming year,
- rationalize Technical Committees.

As for the EQUID SC, PF maintained that the next Council meeting should be seen as an assessment step, where scenarios proposals will be presented to the Council and decided upon. It will be considered whether to transform the Subcommittee on ergonomic process in design in a new TC.

AS for the PSE SC, the Council is expected to vote in 2006 the Masters' Program Guidelines, and Code of Conduct. The Committee should also help to develop Latin-American program of certification, re-launch the process and assess the content of the Directory of program.

The IDC SC should continue in the joint actions with ILO, i.e., to finalize the "Ergonomic Checkpoints" and "Ergonomic Checkpoints for Agriculture", prioritize future joint actions with ILO, follow the process of development of the distance-learning program, and possibly develop policy and processes for the involvement of young ergonomists. The Development SC has a clear mandate in preparation of the IEA'2006 Congress and Council meeting. It will

pursue the best practice initiative by setting up the preparatory subgroups.

The Awards SC is to revise definition and criteria for the IEA Fellow award, and institute a new K.U. Smith Award for ID support.

The CPR SC should continue the maintenance and the expansion website, and develop an integrated communication policy.

25. Acknowledgements

The President, Pierre Falzon, thanked the HAAMAHA conference organizers and in particular the Chair, Bradley Chase, for the kind and efficient hosting of the meeting that was very appreciated by all.

The President thanked all the Council members for their very useful inputs and their active and collaborative participation in the meeting and declared the meeting closed.

6. Reports

6.1. President

6.1.1. Report

Pierre Falzon, President of the IEA

Following a practice that begun last year, this report will present a general view of the activity of the IEA during the year 2005-2006. Only the main actions are presented below. Detailed reports on the activity of each Standing Committee of the IEA will be provided and presented at the Council meeting, to be held in Maastricht on July 8-9.

The actions of the IEA follow a Strategic Plan. A revised version of this Plan has been adopted in 2003 and can be found on the IEA website. A summary is presented in table 1 below. I will refer to it in this presentation of IEA activities in year 2005-2006.

Table 1: the IEA Strategic Plan (summary)

Goal A Contribute to the development of Federated Societies

- A1 Develop more effective communication and collaboration between and with Federated Societies
- A2 Develop ergonomics societies throughout the world
- A3 Improve IEA operational effectiveness

Goal B Advance the science and practice of Ergonomics at an international level

- B1 Stimulate development of the Ergonomics discipline
- B2 Enhance the quality of professional practice and education in Ergonomics

Goal C Enhance the contribution of the ergonomics discipline to global society

- C1 Promote recognition of Ergonomics discipline
 - C2 Promote applications of Ergonomics in all aspects of life
-

IEA and Federated Societies

The Best Practice Initiative [Strategic goals A1 & A3]

In the two first years of this three-year term, particular attention has been devoted to the improvement of two-way communication between the IEA Executive Committee and the Federated Societies. The purpose of the IEA is to federate national or regional societies and to undertake, with Societies' approval, actions of general interest for the discipline (e.g. definition of ergonomics), for member Societies (e.g. education or accreditation standards) and for the public as a whole (e.g. liaison with international bodies, EQUID). The challenge is to do this without losing contact with and support of member Societies.

Following a diagnosis of insufficient communication (notably: lack of awareness or visibility of IEA actions in Federated Societies), three directions of improvement have been set : improve communication within the IEA, improve involvement of member societies in IEA actions, improve awareness of Societies' needs. At the two last Council meetings, discussion sessions have been organized by the Chair of the Development Committee, Jan Dul, in order to get a better comprehension of Societies' needs and demands to the IEA. There was general consensus on the usefulness and productivity of these sessions. The consequence of these actions has been the launching of the Best Practice Initiative (BPI), involving a significant number of members of the Council, aiming to prepare sessions to be held during the IEA'2006 Congress under three topics: Promotion of ergonomics in external networks, Communication within the society, Professional development of ergonomists.

The BPI sessions will allow the participants to share experiences and better specify the needs of Federated Societies. They will provide very useful input for the future work of the IEA. Continuation and evolution of the BPI Initiative rests on the future IEA Executive.

Communication [Strategic goals A1 & C1]

The IEA website is developed and updated by the Chair of the Communication and Public relations, Andrew Marshall. The IEA Roster is now maintained directly on the website (it was previously handled by the Secretary General), which has improved homogeneity of information. It very much depends on appropriate input from Federated Societies. We still have communication difficulties with some Societies that do not provide results of elections. This results in messages bouncing back to us with little possibility to correct the situation.

The website has seen a strong increase of visits. The most visited pages (apart from home page) are the IEA definition of ergonomics and the directory of ergonomics programs. Detailed information will be provided at the Council meeting.

Publication of the IEA Newsletter was suspended 18 months ago, since it was felt that it lacked a clear purpose and target. There is a definite need for an IEA policy, or strategy, on communication. The BPI initiative will allow needs to be defined, at least as far as communication towards or between Federated Societies is concerned. But a communication policy should encompass many more targets : public authorities, international bodies, companies and the general public. This is a large effort. The IEA should define priorities, and share the communication efforts with the Federated Societies in a concerted way.

IEA Dues [Strategic goal A2]

During the 2005 IEA Council meeting, the IEA Treasurer, Ken Laughery, and I indicated the need for revising the present rules of computation of IEA dues. The present rules are unfair to small societies and to societies of developing countries. A revision is necessary not only because of unfairness, but also because the development of the IEA nowadays concerns essentially developing countries. Our present dues system makes it difficult for them to join the IEA. This has been stated to us very explicitly when visiting some countries where Ergonomics Societies have been created : these Societies are reluctant to ask for IEA membership because of their limited resources. At the last Council meeting, subgroups discussions were organized to address this issue. Following these discussions, the IEA Treasurer has prepared a first set of potential rules, which have been submitted to the Executive Committee and to a number of Federated Societies. Reactions and suggestions have allowed to define 3 proposals of evolution of the dues system, which take into account two main factors : the number of members of the Federated Society and the GDP per person of the Society's country.

These proposals and their rationale are sent with this report, and will be discussed at the 2006 Council meeting. Societies are requested to pay a close attention to these proposals, which will be a voting item at the meeting.

Ergonomics Science

Technical committees and IEA-related Conferences [Strategic goals B1, B2, C2]

The Executive Committee's opinion is that the IEA should develop a more proactive scientific policy. Following this view, specific attention has been given this year to the development of Technical Committees and to the increase of IEA-sponsored Conferences.

Concerning Technical Committees, a review of existing TCs was conducted in order to assess which would need to be revitalized, or refocused and which new TCs should be created. A full picture will be presented by the Chair of the STP Committee, Pascale Carayon. Newly created committees are:

- Gender and work (Karen Messing)
- Slips, trips and falls (Wen-Ruey Chang)
- Ergonomics in design (Lina Bonapace)
- Off-highway vehicles (R. Montanari, F. Tesauri & S. Marzani)

These committees will hold their first meeting during the 2006 Congress.

Concerning IEA-related conferences, a revision of the IEA Policy on conferences is proposed and will be discussed at the 2006 Council Meeting. The proposition is to suppress the "Joint conference" category (not used in the past ten years) and to rename IEA Conferences "Sponsored Conferences". The Executive Committee feels that the IEA should play an active part in the launching of conferences in strategic domains. Some IEA TCs are already in charge of some conferences, such as ODAM or HAAMAHA, which should become Sponsored Conferences. The goal is to create Sponsored Conferences in the two following domains : Healthcare Ergonomics and Patient Safety, Design ergonomics. A Technical Committee on "Education in Ergonomics", and a related conference, would also be very desirable. Discussion on this point are to take place during the Congress.

Relationships with Taylor and Francis

The IEA has had a close relationships with Taylor and Francis (T&F) for many years, and more precisely since 1961, when the IEA General Assembly decided to consider Ergonomics as the "Official Journal of the IEA". Since then, the journal has carried this mention on its cover. Taylor & Francis is a Sustaining Member of the IEA, at the Diamond level, i.e. the top category of sustaining membership. We have been facing a complicated situation this year. This began with the decision of the IEA'2006 Congress organizers to publish the Congress plenary papers not in Ergonomics, as usually done in the past, but in Applied Ergonomics. This decision resulted from a call for bids which was won by Elsevier, T&F having not responded. The call for bids originally only included the publishing of the proceedings, but was later extended to the plenary papers. T&F was unhappy of the result of this process and inquired about it. I interacted with the IEA'2006 organizers to understand the course of events that led to the situation, and discussed it extensively with Richard Steele, in charge of ergonomics publication at T&F.

During this process, T&F realized that the IEA has been endorsing a number of other journals over the years (the list can be found on the IEA website). T&F then decided that it was no longer needed for Ergonomics to carry the mention "Official journal of the IEA" on its cover and informed us of this decision (see attached document,

"Interactions with T&F"). I have sent a last and long message to T&F to explain the way the IEA was seeing the situation (this message is included in the same document).

Although we cannot be happy on the way this state of affairs has occurred, since T&F has supported the IEA for many years, the end result is that Ergonomics is now in a more normal position. We are no longer in 1961, when Ergonomics was the only Journal in English devoted to ergonomics. Over the years, many other journals have been created, covering areas of ergonomics that were not so much addressed by Ergonomics. The IEA has taken this into account and has endorsed, quite naturally, these other journals, following a review process described in an IEA Policy. Of course, we wish our relationships with T&F to carry on, on this new basis. Further discussions with T&F are scheduled to take place during the Congress.

Education in Ergonomics

Actions related to Education can be summarized as follows :

- establishment of a distance learning program on the web
- Ergonomics Compendium
- establishment of guidelines for Master's programs

At the moment, these different initiatives (and some others, also related to education, not mentioned here) are under the responsibility of different IEA Standing Committees, namely International development (ID), Science, technology and practice (STP) and Professional standards and education (PSE). It might be better, in the future, to allocate these tasks to a single Standing Committee.

Distance learning program [Strategic goals A2, B1, B2]

This action is under the responsibility of the ID Committee. The goal is to translate an existing distance learning program in Portuguese. The course has been developed at the University of Nottingham (John Wilson, ES). Translation is under the responsibility of Anabela Simoes (APERGO). A contact has been signed between the IEA, the University of Nottingham and A. Simoes's University.

3.2 Ergonomics Compendium [Strategic goals A2, B2, C1]

This action is presently under the responsibility of the STP Committee. The original idea was to develop a (potentially very large) set of short texts on ergonomics issues, to be posted on the website. These texts would be useful to ergonomists, to students in ergonomics, and to the general public. This action can be a crucial one for the dissemination of ergonomics knowledge worldwide.

Progress has been slow during the past two years, for two main reasons. The first one is the overload of the STP chair (in charge also of the EQUID Committee). The second reason is that we have begun exploring the idea of establishing the Compendium using a Wikipedia-like development process. It is felt that such a development process would be more in phase with our times. Such a process would however need to be controlled in some ways, if the IEA is to put its name on it.

3.3 Masters' program guidelines [Strategic goals A2, B2]

The Professional Standards and Education (PSE) Committee, chaired by Stephen Legg, has worked on the development of "Guidelines on the minimum specification for a Masters degree in Ergonomics/Human Factors". The idea was to develop these guidelines in an iterative way, successive version of the text being assessed during workshops held in various conferences of IEA Federated Societies. In all 5 workshops there have been (APERGO/AB-ERGO conference 2004, UK ES 2005, NES 2005, SEAES 2005).

This process has allowed the text to be improved. However, it appears that further improvement (according to some, a drastic revision) is still necessary, so that the text will not be proposed to the Council as a voting item in 2006. This issue remains a very important one. Professional certification programs rely on an evaluation of the candidates' training in ergonomics. The criteria used by the CREE (Center of Registration of European Ergonomists) are presently being revised. Input from the IEA thus appears as very much needed.

Ergonomics practice

Code of conduct [Strategic goals B2, C1]

A revision of the IEA "Code of Ethics" has been undertaken by the PSE Committee. The goal of the revision was to produce a "Code of Conduct", and to end with a more concise document, better grounded in fundamental principles of beneficence (doing good), veracity (truthfulness, accuracy, integrity), autonomy (respect for persons), justice (fairness), and more clearly relevant for ergonomists rather than mainly ergonomics researchers.

The Council will be requested to approve the proposed new document.

EQUID (Ergonomics quality in design) [Strategic goals B1, C1, C2]

The objective of the EQUID program is to establish a system of certification of the design process of products. This meant first developing two sets of texts on a/ ergonomics criteria of product design process, and b/ accreditation criteria and processes. A number of different scenarios of implementation of the program have also been investigated.

The EQUID program is related to several IEA goals and could appear under various headings of this report.

Among the benefits for ergonomics, I will emphasize here a crucial one. If the program is successfully implemented and gathers momentum, it will contribute to the development of our profession, by encouraging employment of trained ergonomists in design projects (hence the mention of this program in the "Ergonomics practice" section). It will also contribute to the recognition of the discipline and the profession by the general public. The EQUID program has progressed a lot during the past two years, due to the strong involvement of its contributors, notably Pascale Carayon, chair of the EQUID committee, and Waldemar Karwowski. The next phase will be to move towards actual implementation of the program. The Council will be asked to renew its support this very ambitious program.

International collaboration: the IEA and the ILO [Strategic goals A2, B1, C2]

The IEA has been collaborating with the ILO for a long time. Three important projects have been active this year. They all concern the joint publication of "Checkpoints" documents. Responsibility of these projects have rested on the Chair of the International Development Committee, David Caple. The major contribution of Dr. Kazutaka Kogi is to be acknowledged.

IEA/ILO Ergonomics Checkpoints

The first edition of the IEA/ILO Ergonomics Checkpoints, originally published in 1996, is being revised for a second edition. The ILO has accepted to provide funding for this revision. This money has been used in two main ways. First, a workshop was held in Bali, Indonesia (in conjunction with the meeting of the SEAES) in May 2005. The workshop was convened. The purpose of the workshop was to review the checkpoints (CPs) one by one and to provide all necessary inputs (deletions of CPs, additions of new CPs, merging of CPs). This included also checking the illustrations for consistency, clarity and comprehensibility. The workshop gathered 16 attendees, among whom some of the original contributors to the first edition.

Following the workshop, year 2005-2006 has been devoted to a rewriting of all CPs along the lines previously defined. Illustrations have been redrawn entirely. It is hoped that the revised edition will be published in 2006. This new edition may have a new title, such as "IEA/ILO Ergonomics Checkpoints on the Shopfloor", for reasons explained below.

IEA/ILO Checkpoints in Agriculture

The first edition of the IEA/ILO Checkpoints on Agriculture is its final stage of preparation. A full version of the text is already completed. Illustrations are being drawn in Vietnam. The ILO funded a workshop, which was held in conjunction with the Indian Society for Ergonomics in December 2006. The purpose of the workshop was to assess the Checkpoints in consideration of the Indian agricultural/cultural context (the CPs have been developed mostly in the context of Vietnam, Cambodia, Laos and Japan). 23 persons participated to the workshop (plus 11 students). The workshop used the methodology developed by ILO for training people to use the documents.

The output of the workshop were of two different kinds. On one hand, it has allowed a number of improvements to be specified (e.g. lack or insufficient development of some topics like animal husbandry or women's work, need to take into account different climate zones). On another hand, it has demonstrated the need for assessing the CPs in an African context. Contacts have been taken in that respect with African colleagues. A workshop is scheduled to take place in early 2007. The publication of the Checkpoints on Agriculture could occur in 2007.

More IEA/ILO Checkpoints?

The recent developments have been judged very satisfactory by both the IEA and the ILO. The two organizations have discussed the possibility of developing a series of Ergonomics Checkpoints on a variety of subjects, such as Office work, Forestry, HCI, Tourism, Healthcare, etc. It is to be emphasized that developing the two existing Checkpoints has been possible only because of the dedication of the IDC Chair and of K. Kogi, who have devoted a lot of time and effort to them. Developing new Checkpoints, certainly a very worthwhile goal, would similarly require much involvement of dedicated individuals. It would also necessitate active participation of the IEA Technical Committees.

IEA Congresses [Strategic goals B1, B2]

6.1 IEA' 2006

IEA'2006 is in its final stage before launching ! 1000 papers and 250 posters are to be presented at this triennial world event. This Congress will be an opportunity to celebrate the 50th birthday of the IEA, in the country in which the decision to found an association occurred. I know that there are debates on the precise year of foundation of the association, since there was of course a delay between this decision and the actual taking-off of the IEA, but it seems however adequate to celebrate this anniversary at this Congress.

A number of actions have been programmed in this perspective. A 50th anniversary booklet will be published, including elements of history, statements from past Presidents and other documents. The Triennial Forum will be devoted to the discussion of three topics of interest for the discipline and the profession, looking forward to the future : Research issues for the future, Ergonomics as a practice, and Ergonomics in a global world : economic and social issues. For each topic, 2 or 3 very short statements will be presented. These statements will be dis-

cussed by past Presidents of the IEA.

IEA' 2009

Last year, we have expressed concerns for not having enough input from our Chinese colleagues in charge of the IEA'2009 Congress. Following email discussions with them, the IEA Treasurer, Ken Laughery, and I will visit Beijing at the invitation of the Chinese Ergonomics Society in mid-June.

IEA' 2012

Following the call for bids that was issued, a single, but very detailed and well thought out proposal was received, from our Brazilian colleagues (ABERGO). The proposal will be presented at the Council meeting by ABERGO's President, Marcelo Soares. This will be a voting item.

IEA Awards [Strategic goals A2, B1, B2]

The Triennial Congress is of course the appropriate time to honor Award recipients. A ceremony will take place at the Congress to present the Awards .

Several paths of evolution of awards have been suggested by the Chair of the Awards Committee, Waldemar Karwowski (Past President of the IEA) and will be discussed at the Council meeting :

- expansion of the IEA/K.U. Smith Student Award, in order to support the education of ergonomics students in developing countries;
- expansion of the qualification criteria for the IEA Fellow Award : the question is whether or not the criteria should allow to distinguish people who have played a major role in the development of ergonomics in a given area, but not necessarily worldwide;
- revision of the process of submissions / nominations of papers for the IEA/Liberty Mutual Prize in Ergonomics and Occupational Safety.

Elections

The election of Officers will take place at the end of the Council meeting. At mid-May, the following nominations have been received, together with candidates' statements:

for President

David Caple (nominated by HFESA)

Ken Laughery (nominated by HFES)

for Secretary General

Pascale Carayon (nominated by HFES and SELF)

Shrawan Kumar (nominated by ACE)

For Treasurer

Marcelo Soares (nominated by ABERGO)

Nominations can be received until the time of the ballot.

6.1.2. Interaction with Taylor & Francis

Date: Mon, 13 Mar 2006 14:23:33 -0000
From: <Richard.Steele@tandf.co.uk>
To: <falzon@cnam.fr>
Cc: lea.secr@istc.cnr.it

Confidential
Pierre Falzon
falzon@cnam.fr lea.secr@istc.cnr.it
International Ergonomics Association

Monday, 13 March 2006

Dear Pierre,

I have now been able to consult with the Ergonomics Society, who in turn have consulted John Wilson, the ES representative to the IEA, who has responded so as to clarify his understanding of the situation (attached).

I am with everyone's consent sharing our correspondence with you, as it is directly relevant to the future of the relationship between the IEA and Taylor & Francis as it relates to Ergonomics.

The key to the problem appears to be that, despite our own understanding and despite previous statements by the IEA, Ergonomics is not considered to be the IEA's Official Journal, but is simply one amongst many 'Endorsed Journals'. (This position is not reflected publicly – see, e.g., www.iea.cc/events/journals.cfm)

Thus, as noted in my email to the ES of 9 March, it is with regret that Taylor & Francis has decided that it is not therefore appropriate for Ergonomics to carry the accreditation 'Official Journal of the International Ergonomics Association'.

It would seem sensible if we can then arrange to explore with you ways in which a relationship of mutual synergy between the IEA and the Journal might be restored.

With all good wishes,

*Richard
Richard Steele
Editorial Director, Taylor & Francis*

To: Richard.Steele@tandf.co.uk
From: Pierre Falzon <falzon@cnam.fr>
Subject: T&F and IEA : past and future
Cc: IEA Executive Committee:Sebastiano Bagnara <bagnara@unisi.it>, Ken Laughery <laugher@ruf.rice.edu>, Pascale Carayon <Carayon@le.engr.wisc.edu>, Waldemar Karwowski <karwowski@louisville.edu>, Stephen Legg <S.J.Legg@massey.ac.nz>, Jan Dul <jdul@rsm.nl>, Andy Marshall <andy@ergs.org>, David Caple <davidcaple@pacific.net.au>

Dear Richard,

I am acknowledging by this mail your decision to stop mentioning "Official Journal of the IEA" on the cover of *Ergonomics*.

I also would like to do two things. On one hand, state the way the IEA sees the situation that prevailed up to now. On another hand, begin the discussion you propose about the future of the relationship between the IEA and T&F. I am sharing this message with the members of the IEA Executive. I am not copying this mail to John Wilson, David Whittfield and Anne Ferguson, since they were not copied yours, but I would be glad if you forwarded this mail to them, at your convenience.

Let us consider first the past. *Ergonomics* became the Official journal of the IEA in 1961 (cf. minutes of the 1961 IEA General Assembly, item 5), that is in the first years of existence of the IEA. No journals (apart from *Le Travail Humain*, created in 1933) in ergonomics existed then, and it is certainly to the credit of T&F to have recognized that an emerging discipline, ergonomics, was in need of a scientific publication. At that time, ergonomics was very much oriented towards physiology. Quite naturally, this was reflected in the journal content. This is still true today, in the views of many, although of course other topics are addressed by the journal.

This "Official journal of the IEA" status was more a gentleman's agreement than a formal contract with clear duties on each side. The actual consequences of this agreement were the publication of *Ergonomics International* (the IEA newsletter) in *Ergonomics* (but that began much later), and -I believe- the participation of an IEA representative to meetings of the journal's editorial board. Additionally, the custom was gradually established to publish the plenary papers of IEA Triennial Congresses in the journal. I will come back on these points below.

With time, many other journals were born, and it was felt that it would be profitable to both these journals, their readership and the IEA to find a way to recognize their relevance to the discipline. This led to the policy of endorsing journals. Here again, I do not know the precise date of creation of this policy, but it is nothing new (it began in the 80s) and nothing secret. Today, the IEA website mentions the list of endorsed journals. The first of them is *Ergonomics*, of course, and the first line states that "Ergonomics is the Official journal of the Ergonomics Society and the International Ergonomics Association". Due to its specific status, *Ergonomics* was of course never submitted to the review process the other journals had to undergo before being endorsed.

While there has been indeed discussions within the IEA executive about the operations of *Ergonomics*, there has never been, to my knowledge, any discussions on putting an end to the journal's specific status. This was felt as a trace of history.

What about the more recent events? First, there were growing concerns about the way submissions to *Ergonomics* were handled. The IEA Executive (and notably the Secretary General and I) were receiving more and more bitter complaints from authors. That was quite embarrassing, when the journal carries the "Official journal" label. This led to some email exchanges between IEA and the journal in 2004, and to my coming at the editorial board meeting the same year. At that time, I also raised the issue of the 50th anniversary of the IEA and the role *Ergonomics* could, or should, play, at the time of the Congress and in the future. In my view, the "official journal" status had to mean something in terms of the journal's policies and ambition. The editors have not reacted to this encouragement since then.

Then came the IEA'2006 plenary papers issue. We already have had interactions on this subject. I do not have anything to add. I just want to state very firmly that what happened does not reflect in any way a deliberate policy of the IEA. The IEA has not deliberately chosen to have the plenary papers published in another journal. That was a decision from the Congress organizers, and we know the course of events that led to it. I note that your message makes no link between this event and your decision, and I thank you for this. Let me propose this summary, hoping to close the issue: the decision not to publish the plenaries in *Ergonomics* was unfortunate, it was not desired on both sides, and it resulted from errors on both sides.

Now, let us look at the future.

Ergonomics (the discipline) is half a century old. *Ergonomics* was born in western countries, i.e. countries with an industrial history, and in a post-war context of reconstruction, search for productivity and economic growth. The next 50 years have seen major changes. Technological changes: automation, computerization, internet and the digital society. Changes of production systems too: new methods of industrial production, quality manage-

ment, lean production, etc. And today globalization, with its effects in terms of technology transfer and migration of jobs. These changes have had consequences both on work activities and on the demands addressed to ergonomics. Distance work, interaction work, community-based distributed work have grown. Systems reliability and safety have become crucial issues, following some major industrial accidents. Some world event like the publication by the Club of Rome of "The limits to growth", in 1972, the oil crisis in 1974, the growing concerns on environmental issues and sustained development during the past 15 years, all have led to reconsider what we mean by "progress" for the society, for organizations, and for the individual.

The world has changed, but that does not mean that ergonomics is no longer needed. But its challenges have expanded, and ergonomics needs to encompass a much wider variety of issues. Organizational and cognitive issues have increased, tasks demands of tasks are more and more mental and emotional, ergonomics contributions to design and task analysis take many different forms, etc.

Ergonomics has also grown to be not only a discipline, but also a profession, as the IEA definition of the term quite rightly states now. The concept of ergonomics is widely accepted by people at large (albeit not always understood in the way we would like) and the idea of "ergonomics design" has become a marketing argument. Societies, organizations, administrations recognize the benefits of ergonomics interventions and the involvement of trained ergonomists is more and more often stated as a requirement for designing products or workplaces.

In this context, quality books and journals are very much needed, and the IEA has a role to play in encouraging such publications and facilitating their access to as many interested readers as possible. Thus, developing close contacts with major publishers is indeed a goal we wish to pursue. In this goal, the IEA needs to set up a general policy, to be proposed to all publishers that are interested in establishing lasting relationships with the association. Such a policy does not exist at the moment, and it will be the task in the next months for the IEA Executive.

In the last sentence of your message, you indicate your willingness to explore ways of restoring a relationship of mutual synergy between the IEA and the Journal. I absolutely agree with such an objective and hope we will have opportunities to discuss it in the near future.

With my very best regards,
Pierre Falzon
President of the IEA

6.2 Secretary General

6.2.1. Report

Sebastiano Bagnara, Secretary General of the IEA

Duties

The duties of the General Secretary of IEA are:

- Keeping close connection to the President to receive advice, and to formulate the policy of the Association in routine questions
- Looking after the correspondence and requests and routing of the correspondence to the appropriate officers for response or action
- Preparation of the Council meetings
- Taking care of archives.

Connection to the President

Besides, two meetings (in Paris and Florence), there has been an almost daily exchange of e-mail messages with the President. Intense communication has occurred also with the Treasurer and the Chair of Communications and Public Relations, and the other members of EC.

Connections with the IEA Council

The draft minutes of the Madeira Council Meeting were ready by the end of August. Soon after, the process of approval was initiated. Minor modifications were requested.

The final approval was reached by the end of November, when the minutes were distributed to Council members, Federated Societies' and Networks' Presidents.

In preparation of the Maastricht Council meeting, the Council members were asked to prepare a short presentation of their society at the Council, suggesting the format and the items to focus on. The delegates were also asked for suggesting the location of the next (2007) Council Meeting.

The documents (Agenda, Reports, voting and discussion items) for the Council were sent at the beginning of June.

Meeting Organization

By end of January, the Standing Committee Chairs were solicited to prepare the reports for the Sub-EC to be held in Hoofddorp. The reports were collected in time for the meeting.

The President and Secretary General met in Paris, February 3-4, 2006, to prepare the sub-EC meeting. The agenda, and the progresses made in implementing the planned actions were considered. Special attention was dedicated to the IEA 2009, given the experienced difficulties in communication with CES. The relations with T&F, and its consequences, were discussed at length. The Triennial report was outlined, and was put forward the idea to have a special publication for the IEA 50th Anniversary. It was also conceived the idea of modifying the IEA logo.

Proposals of new IEA logos were solicited to an Italian designer (Giuseppe Benenti) and were presented at the sub-EC meeting. Also, proposals for the cover of the Triennial Report were collected from another designer (Francesco Ranzani).

The Sub-EC (that was preceded by a summit among the officers) took place in Hoofddorp (The Netherlands), February 21-22, 2006, at TNO headquarters. It was attended by the officers, the Chairs of Awards, Development, CPR, EQUID, and STP Standing Committees, and by the Chair of the 2006 IEA Congress.

Ernst Koningsvelt introduced Ruud Pikar (Chair of Scientific Program of IEA 2006 Congress), Paul Settels (Chair of Finance Matters of IEA 2006 Congress), Peter Rookmaker (Responsible for the relationships with IEA), Johan Molenbrock (President of Dutch Ergonomics Society), and Danielle van der Veer, Niels Klinkhamer (managers of the operational activity). Ruud Pikaar reported about program development: 1100 oral presentations, 50 interactive & panel sessions, and 320 posters. The most popular topics were healthcare ergonomics, vehicle ergonomics, and ergonomics in design. Paul Settels reported about expenses and revenues (the breakdown is expected to be reached around 1500 attendees), facilities offered by the Congress Center, social events, sponsors, etc. Niels Klinkhamer reported about administration and logistics. The EC congratulated with the organizers.

It was proposed that the 50th IEA birthday will consist of stream of dedicated events: the President's address, the involvement of past, the Triennial forum, a booklet. Within this stream of events, it was also planned the contest for new IEA logo.

As for the content of the booklet, it was decided that it will contain an historical note by President, short notes by Past Presidents on the major events for the IEA and ergonomics which took place during term, and major challenges for ergonomics in the future. It will consider the main lessons from the past for the future by considering

the evolution of topics.

The major achievements of the IDC, PSE, SCs were reminded: renewal and revitalization of IEA-ILO collaboration, the Master's program guidelines, the Code of conduct of ergonomists.

It was proposed to restructure TCs: some are to be renamed, some to be merged, some others cancelled, others to be founded. It was decided also to start the Ergonomics compendium initiative. It was also convened to introduce a new type of conferences on ergonomics.

The EQUID initiative was discussed at length, and a phased approach to development and implementation of EQUID was proposed.

As for the web, there was a marked increase in the number of visits over the last 12 months compared to the previous year.

It was stressed the need to introduce a further criterion for assigning awards, that is the local contribution, and to modify the definition and procedure, accordingly.

The finances were reported to be in good shape and, in the last year, slightly improved: Both the fees from the Federated Societies, and capitation fees increased.

It was convened that the general philosophy of the Triennial report should consider the audience (ergonomists worldwide, potential sustaining members, other organizations (ILO, etc.), potential contractors, etc.), the focus (on ergonomics, not only the IEA).

The situation of IEA 2009 was considered given the very slow reactions from CES and the report, very unsatisfactory, sent to EC. It was maintained that the situation is such that there is the need for going to Beijing before IEA' 2006.

A proposal for IEA 2012 was announced by ABERGO. It will be a joint effort between ABERGO, ULAERGO, Colombian ES, ADEA, MES. The host city will be Recife (Pernambuco State)

As for the dues, it was observed that formula, by which dues are currently calculated, is obscure and very old. No one remember its rationale and origin. It does consider inflation. Moreover, it was established in homogenous economical area, quite different by the present situation, Nowadays, it turns out to be unfair. The poor countries pay more than the wealthier ones: a simulation based on a possible alternative formula based on GDP/P shows the largest, more affluent societies pay per member much less than the poorer new societies. KL advanced several proposals of change that were discussed in depth.

PF explained that the relations with Taylor & Francis as a multi-faceted issue, since it involves the relations with the sustaining membership, the coordination and distinctive responsibilities of Congress organizers and of EC, Ergonomics as the "official journal of the IEA". It was convened that, there is a need to reconsider IEA relations with T&F and other publishers, and that Ergonomics cannot keep its present status.

It was decided that the next Council Meeting will be held in Maastricht, July 8-9, 2006.

A further meeting between the President and the General Secretary took place in Florence, Italy, May 18-20. It was dedicated to setting the agenda of the Council and to check the implementation of planned activities.

Contacts with federated societies

There was a continuous exchange information related renewal of presidents, and delegates by many Federated Societies. The roster is currently updated by the Chair of CPR, Andy Marshall, in the website and by the General Secretary for IEA files.

Contacts with new societies

A preliminary contact was established with Nigerian Ergonomics Society.

Contacts with IEA Networks

The minutes of IEA Council had been sent to the President of FEES and ULAERGO.

Archives

All IEA documents, from the Seoul Council up to now, have been collected and ordered. They will be stored with those coming out from Maastricht in CNAM premises in early September.

Basic and Reference documents

Basic and reference documents had been updated after the decisions taken in San Diego.

Correspondence

Much correspondence (thought the more informative has reduced greatly the flow) about information providing was handled.

6.3. Treasurer

6.3.1. Report

Kenneth R. Laughery, Treasurer of the IEA

Summary of Financial Performance (January – December 2005)

Accounting and Banking Procedures

As in the past, IEA carried out its financial operations in 2005 in U.S. Dollars (US\$). The IEA fiscal year coincides with the calendar year, January 1 through December 31. A cash basis of accounting was employed. Revenues were noted and recorded when received, and expenses were noted and recorded when paid.

We continued to maintain and carry out our financial activities with Scotiabank in Ottawa, Canada. Three separate accounts were maintained: the Active Cash Account (ACA) into which income was deposited and from which payments were made; and two Guaranteed Investment Certificates (GICs) that are interest bearing accounts. Because the IEA Congress is held every third year, and because there are significantly greater expenses during years of the Congress, it is customary for the annual Treasurer's report to show revenue and expenditures for the past three years. This additional information provides the basis for better understanding expenditures as well as a longer-term picture of IEA's financial status.

Overview of 2005 Financial Performance

a. Total Revenue - The total revenues for the 2005 fiscal year was \$81,486. This revenue included all funds that were deposited into the active cash account (\$75,779) plus the interest earned in the GIC accounts (\$5,707). There are eight categories into which the sources of revenue can be grouped: federated society dues, affiliated society dues, sustaining member dues, capitation fees, interest, contributions to special funds, awards, and miscellaneous. The amounts of revenue received in each of these categories are presented in the tables that follow.

b. Total Expenditures - The total expenditures during 2005 was \$66,933. The expenditures can be grouped into eight categories: officers' expenses, standing committee expenses, office/clerical, meetings costs, awards, grants/seed, bank fees, and miscellaneous. The amounts spent in each of these categories are presented in the tables that follow.

c. Assets - IEA's assets at the end of 2005 totaled \$202,740. The funds in each of the Scotiabank accounts are shown in Table 1 below. Also, IEA has seed funds receivable from one outstanding loan.

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Table 1. Scotiabank Accounts and Seed Fund Receivable

Active Cash Account (ACA)	\$33,149
Guaranteed Investment Certificate (GIC) (180 days maturity)	57,856
Guaranteed Investment Certificate (GIC) (one-year maturity)	91,735
Seed Fund Receivable - 2006 Congress	20,000
Total	\$202,740

d. Equity - While IEA's funds are held in the Scotiabank accounts indicated above, the money is actually earmarked for certain categories of expenditures. Two general categories are annual operations and special reserves. The annual operations include revenues from membership dues, capitation fees, interest, and other receipts. Expenditures in this category include the administrative work of the officers and office support, the work of the standing committees, meeting costs, and other recurring activities.

The special reserves category includes a loans fund of \$35,000 that was established several years ago to ensure a supply of seed funds for conferences. There are four special funds in this category whose purpose generally is to promote and support ergonomics in developing countries (IDCs). The Liberty Mutual Prize and Medal Fund is also in this category. Following are statements of the purposes of the four special funds.

ESA Fund - This fund is to promote ergonomics in IDCs, primarily in Southeast Asia.

HFES Fund - This fund is to promote ergonomics in IDCs.

SELF Fund - This fund is intended to support conferences, seminars and meetings in ergonomically less developed areas such as Africa and South America.

JES Fund - This fund is to provide grants and seed money for ergonomics research and organizing conferences in IDCs.

Assets and Equity

Table 2 presents IEA's assets and equity for 2005 and for the previous two years.

Table 2. Balance Sheet for Year Ended December 31, 2005 (in US Dollars)

Year	2005	2004	2003
ASSETS			
Cash Account	33,149	31,435	31,435
Term (GIC) Deposits	149,591	143,884	136,732
Seed Fund Receivable	20,000	20,000	24,035
Total	202,740	188,192	192,202
EQUITY			
ESA Fund (S.E. Asia)	5,426	5,426	5,426
HFES Fund (IDCs)	7,864	7,864	6,669
SELF Fund (Africa, SA)	7,647	7,647	7,647
JES Fund (IDCs)	9,421	7,546	4,671
Liberty Mutual Fund	29,537	16,652	11,231
Loan Reserve	35,000	35,000	35,000
Cash Reserve	107,845	108,057	121,558
Total	202,740	188,192	192,202

Comments on Special Funds and Liberty Mutual Fund

a. Special Funds - One of IEA's goals is to advance the science and practice of ergonomics at an international level. In striving to achieve this goal, significant effort and resources have been focused on ergonomics in developing areas. The four special funds are essentially dedicated to that purpose. During 2005 no grants were made that qualified for support from one or more of these funds. IEA has committed \$10,000 to help support attendance at the 2006 Congress in Maastricht by members of federated societies in developing areas. Income for the JES fund during 2005 came from the Japan Ergonomics Society and was credited to the Fund.

b. Liberty Mutual Fund - This fund provides financial support for the IEA/Liberty Mutual Prize of \$5,000 that is awarded annually and for the IEA/Liberty Mutual Medal plus \$15,000 that is awarded every three years. Funding for the IEA/Liberty Mutual Prize and Medal is provided by Liberty Mutual Insurance Company. The Liberty Mutual Fund contained \$16,652 at the beginning of 2005. This amount was a carryover from previous contributions. During 2005, an additional contribution of \$15,000 was received. During the year expenditures were \$2,115; no prize was awarded. Thus, the balance in the fund at the end of 2005 was \$29,537.

Revenue and Expenditures

Table 3 presents a summary of IEA revenue and expenditures during 2005.

Comments on Revenue

a. Membership - As shown in Table 3, membership income includes two categories: dues from federated and affiliated societies and dues from sustaining members. In 2005 there were 42 federated societies and one affiliated society. Table 4 shows the federated and affiliated societies and the dues paid as of December 31, 2005. The Table also indicates the amount paid and identifies those societies that chose the 20% payment option. Also, the Philippines Society has not paid its dues and its membership was contingent on such payment. Sustaining members paid for 2005 are shown in Table 5.

b. Capitation Fees - Two capitation fees were received. The first was \$412 for the CAES 2005 Conference in Slovakia, and the second was \$802 for the HEPS 2005 Conference in Florence, Italy.

c. Interest, Contributions and Liberty Mutual Fund - These categories of revenue have been discussed. One additional comment concerns the amount of the interest and exchange values in Table 3. From the Table, it can be seen that the amounts vary from year to year. This variation is due in part to the time of year that interest payments are due for the two GIC accounts. It will also vary as a result of changes in the value of the US dollar relative to the Canadian dollar.

d. Miscellaneous - The \$10,000 in this category is ILO support for a workshop in Bali regarding the Agricultural Checkpoints.

Table 3. Statement of Operations for Year Ended December 31, 2005 (in US Dollars)
With Comparisons to Two Previous Years

Year	2005	2004	2003
REVENUE			
Membership Dues			
Fed and Aff Societies	34,913	31,076	27,308
Sustaining Members	12,777	14,565	12,000
Capitation Fees	1,214	500	17,056
Interest and Exchange Value	5,707	7,152	2,785
Contributions (JES)	1,875	2,570	1,654
Liberty Mutual Fund	15,000	15,000	15,000
Misc (ILO - Checkpoints Ball)	10,000	1,422	15,000
Total	81,486	72,285	90,803
EXPENDURES			
Officers and Administrative			
Office-related expenses	2,414	6,193	
Officers - Travel and Expenses	16,224	14,624	11,039
Clerical			20,931
Standing Committees			
Development	3,081	918	
Science, Technology, Practice	1,751	2,506	3,704
Prof Standards and Education	7,456	5,354	5,930
International Development	13,665	5,896	4,157
WHO Project		7,505	7,140
Communication and PR	1,567	2,041	
Newsletter		3,319	12,142
EQUID	11,706	2,814	3,434
Awards		1,428	1,382
Liberty Mutual Prize	2,115	9,579	3,109
Meeting Costs	6,640	6,756	23,109
Council dinner		1,436	9,482
Fees and Bank Charges	314	184	
Grants		355	337
Miscellaneous			7,000
Business cards		336	955
Archives		1,016	
Total	66,933	72,260	113,851
Operating Surplus	14,553	25	(23,048)

Table 4. Dues Payments During 2005 by Federated and Affiliated Societies

	Fed & Aff SOCIETIES	Dues Owed	Dues Paid	Amount	# Members
1	ABERGO Brazil	04, 05	04, 05	\$1925.00	300
2	ACE Canada	05	05	\$1465.10	511
3	ADEA Argentina	05			
4	AEE Spain	05	05	\$ 402.50	100
5	APERGO Portugal	05			
6	AUEA Ukraine	04, 05			
7	BES Belgium	,05	05	\$ 577.70	163
8	ChES China	03,04,05			
9	CrES Croatia	02,03,04,05			
10	CzES Czech	05	05 (20%)	\$ 84.00	34
11	ES UK	05	05	\$2461.90	1171
12	ESFRY Yugoslavia	05			
13	ESK Korea	05	05	\$1564.50	530
14	ESSA South Africa	05	05 (20%)	\$ 228.38	75
15	EST Taiwan	05	05	\$ 410.50	103
16	GfA Germany	05	05	\$1525.30	502
17	HES Greece	04, 05	04,05 (20%)	\$ 150.50	
18	HFES USA	05	05	\$5745.50	3523
19	HFESA Australia	05	05	\$1288.00	416
20	HKES Hong Kong	05			
21	InES Iran	05	05	\$ 350.00	81
22	IREA Russia	05			
23	IrES Ireland	05	05	\$ 245.70	44
24	ISE India	05	05 (20%)	\$ 13.00	
25	IsES Israel	05			
26	JES Japan	05	05	\$3,842.30	2157
27	MES Hungary	04, 05			
28	NES Nordic	05	05	\$2732.10	1364
29	NVVE Netherlands	05	05	\$1,522.50	500
30	NZES New Zealand	05	05	\$ 369.10	88
31	OAE Austria	05			
32	PES Poland	05	05	\$ 626.50	180
33	PhES Philippines	04, 05			
34	SCE Colombia	03, 04, 05			
35	SEA Slovakia	00 - 05			
36	SEAES Southeast Asia	05	05	\$ 122.50	
37	SELF SELF (French)	05	05	\$1,706.00	631
38	SEM Mexico	05			
39	SIE Italy	05	05	\$ 657.50	191
40	SOCHERGO Chile	05	05	\$ 220.50	35
41	SSE Switzerland	05	05	\$ 511.70	139
42	TES Turkey	04, 05			
43	HES-J Japan	03, 04, 05	03, 04	\$1406.00	

Table 5. Sustaining Members Paid in 2005

Sustaining Members	2004	2005
Diamond Members		
Taylor & Francis Ltd.	\$10,000.00	\$10,000.00
Platinum Members		
Ergoweb, Inc.	In Kind	In Kind
Gold Members		
Res Inst of Human Eng for Qual Life (HQL)	\$ 1,000.00	
Central Inst for Labor Protection	\$ 1,000.00	\$ 1,000.00
Ctr for Ind & Mgt Eng Res Resources, (Korea-Min)	\$ 1,000.00	\$ 1,000.00
Conservatoire National des Arts et Metiers (CNAM)	In Kind	In Kind
Hiroshi Udo	\$ 1,000.00	\$ 1,000.00
Individual Sustaining Members		
Waldemar Karwowski	\$ 200.00	\$ 200.00
Kazutaka Kogi	\$ 200.00	\$ 200.00
Kenneth Laughery	\$ 200.00	\$ 200.00
Becky Kinsler	\$ 200.00	\$ 200.00
Martin Hellander	\$ 200.00	\$ 200.00
Jennifer A. Guthierrez		\$ 200.00

Comments on Expenditures

a. Comparisons With the Previous Non-Congress Year (2004) - As shown in Table 3, expenditures for 2005 totaled \$66,933. This total was lower than during 2004 by \$5327. Revenue was greater in 2005 than in 2004 by \$9201. Two factors account for most of these differences: (1) The Liberty Mutual Prize was not awarded resulting in lowering expenditures by \$5000; and (2) the contract with ILO to support the Bali workshop on Checkpoints produced \$10,000 in revenue.

While most of the revenue and expenditures categories experienced small to moderate differences when compared with 2004, one activity for which there was a noteworthy increase in expenditure was the EQUID project. The allocation for work on this project was \$11,706, an increase of \$8892 over 2004.

b. Officers and Standing Committees - A significant portion of IEA functions and activities are carried out by the officers and standing committees. Table 6 below presents the different categories of expenditures, the total for each category, and the percentage of the total represented by each category. From Table 6 it can be seen that the percentages of expenditures for officers and administration continued at the same level, 28%-29%, as in other recent years. The percentage of expenditures for standing committees has been increasing over the past few years primarily due to the increased activities of the International Development Committee and EQUID. The decrease in the percentage allocated to Awards during 2005 was primarily due to the fact that the Liberty Mutual Prize was not awarded, as noted earlier. The higher amount for awards in 2003 was due to the fact that it was a Congress year and the IEA Awards were given.

c. Grants - Table 6 indicates that no grants were provided during 2005. Actually, \$5000 was allocated to the Indian Ergonomics Society to help fund an Agricultural Checkpoints Workshop in India during December, 2005. Due to the nature of the activity, the \$5000 was recorded as an expenditure of the International Development Committee. It should be noted that IEA was awarded a contract of \$5000 by the ILO to support this workshop. The contract payment was not received by December 31, 2005, and thus does not appear as revenue during this budget period.

Table 6. Expenditures by Category (in US Dollars) and Percent of Total

Year	2005		2004		2003	
	Total	%	Total	%	Total	%
Officers and Administrative	18,638	28	20,817	29	31,970	28
Standing Committees	39,226	59	30,353	42	37,889	33
Awards	2,115	3	11,007	15	26,218	23
Meeting Costs	6,640	10	8,192	11	9,482	8
Grants			355	<1	7,000	6
Bank Fees and Charges	314	<1	184	<1	337	<1
Miscellaneous			1352	2	955	<1
Total	66,933	100	72,260	100	113,851	100

Some Comments and Some Plans

Membership in the International Social Science Council (ISSC)

In the past, IEA has been a member of the ISSC and paid annual dues of \$300. In my report for the 2004 Council meeting, I noted that this membership was being reviewed to assess whether IEA should continue. The review indicated that IEA has not been active in ISSC, and it is not clear that IEA benefits from the membership. Thus, a decision was made by the officers to terminate membership, and this item no longer appears as a miscellaneous expenditure.

Federated and Affiliated Society Dues

One of my concerns as IEA Treasurer is membership dues by federated and affiliated societies. More specifically, the concern is one of fairness and ability to pay. This concern is shared by the other officers and members of the Executive Committee. For several years our dues structure has been defined by a formula based on society membership. Specifically, the formula is defined in the following table:

Table for calculating membership fees

Total no. of paying members (n)			
Fixed sum		= US\$	122.50
On first 500 (n up to 500)	X US\$ 2.80	= US\$	
On remaining (n over 500)	X US\$ 1.40	= US\$	
Total payable in US Dollars*		US\$	

Alternatively, the society may elect to pay a sum equal to 20% of the total dues income of the Society.

The specific origin of the formula is unclear. However, it appears that the current formula poses a hardship for some of our societies from developing areas. A proposal for some fundamental changes in the dues structure has been developed. The proposal is in part based on the Gross Domestic Product of the countries in which our Federated Societies are located. GDP can be viewed as a measure of "wealth" or economic strength of the area/country of the society.

The goal of considering alternative formulas for federated society dues is not to justify a dues increase. Rather, the intent is to develop a formula that is fair but yet sensitive to the considerable differences in the various societies' ability to support IEA financially. Such sensitivity is consistent with our goals to promote ergonomics internationally and to support its growth in developing countries. The proposal is contained in a separate document and will be presented for discussion and consideration during the Council meeting in Maastricht.

While as stated above, the goal of considering an alternative dues structure at this time is not to increase dues, it should be recognized that holding the formula constant over a period of time has effectively resulted in a decrease in IEA revenue. This effect is simply a result of inflation. In the near future, consideration should be given to the overall IEA revenue picture, including issues such as:

A dues structure that takes into account acceptable adjustments for inflation:

Developing additional revenue sources such as IEA conferences; Potential developments for the affiliate and sustaining membership categories.

Checkpoint Workshops and ILO Support

Thanks to the efforts of David Caple, Chair of the International Development Committee, IEA has been fortunate to obtain two contracts to support workshops related to the development of the Agricultural Checkpoints. Funds

for the first contract, \$10,000, were received in 2005 to support the workshop in Bali. The \$5000 award for the second contract supported the workshop in India. Payment for the second contract has been received during the 2006 budget period.

Controlling Costs

The Officers and Standing Committee Chairs have been concerned with the need to keep expenditures under control and as low as possible within the context of carrying out the work of IEA. One area in which we have tried to restrain expenditures is travel, particularly for Officer and Executive Committee meetings. Airfares, hotels, meals, etc. are expensive, and getting more so. We have attempted to have fewer meetings and to be more selective in who needs to attend. Also, as individuals we have sought other sources of travel support. We will be continuing to explore methods for cost containment including alternative methods of communication and alternative organizational structures and procedures that can result in greater efficiencies. However, carrying out the work of IEA, like any organization, requires some amount of face-to-face interaction. Team coordination, team spirit team effectiveness are notably enhanced by such interaction. This will be an ongoing matter for the IEA Officers and Executive Committee to take into account in carrying out their work.

6.3.2 Revision of IEA Dues

a. Extract of basic rules about membership fees

Article 1. Federated and Affiliated Societies

Each Federated and Affiliated Society pays an annual fee consisting of:

- either the full amount as prescribed below
- or 20% of its total fee income.

The full amount consists of the sum of:

- a base fee (fixed amount per society)
- a variable fee (total number of paying members in the society (excluding student members) times a fixed individual amount.

Both base fee and individual amount are set by Council for each three-year period.

The following fees are applicable for the three-year period 2001-2003:

- the base fee is 122.5 US Dollars for a Federated Society and 70 US Dollars for an Affiliated Society.
- the fixed individual amount of the variable fee is 2.8 US Dollars per member up to 500 members, and 1.40 US Dollars per member beyond 500 members.

This money is to be used for the payment of the general administrative costs of running the Association, setting up meetings, sponsoring publicity, payment of expenses of officers, and in aiding cooperation with other international organizations.

The IEA does not cover travel expenses of the representatives of member Societies.

Article 2. Sustaining Members

Sustaining Members pay an annual membership fee according to the level and category of membership.

There are four levels of membership fee for Organizational Sustaining Members :

- Gold level (annual fee of US\$ 1.000)
- Platinum level (annual fee of US\$ 5.000)
- Diamond level (annual fee of US\$ 10.000)
- Star level (annual fee of US\$ 25.000)

There is only one level of membership fee for Individual Sustaining Members:

- Individual Sustaining Member (annual fee of US\$ 200)

b. Revision proposals

IEA dues for federated societies

During the past year the IEA Officers and members of the Executive Committee have become concerned about the IEA dues structure for federated societies. Specifically, the issue is one of fairness and ability to pay. The following facts were brought to the attention of the IEA Council at its 2005 meeting:

- IEA dues represent a large part of the budget for some IEA federated societies, a minor part for others;
- societies that are adversely affected by the current dues situation are those newly-created, those with small membership, and those which pertain to countries with low Gross Domestic Product (GDP) per person¹;
- this state of affairs is in contradiction with the IEA goals of developing ergonomics worldwide.

As a result, we have initiated an analysis with the goal of developing and recommending an alternative dues structure. The intent is to try to develop a formula that is fair but yet sensitive to the considerable differences in the various societies ability to support IEA financially. Such sensitivity is consistent with our goals to promote ergonomics internationally and to support its growth in developing countries. The proposals presented below

have thus been developed in order to decrease the burden of IEA dues for societies of developing countries and for small, newly created societies.

One additional point needs to be emphasized. Since the present mode of dues computation does not take inflation into account, IEA revenues have effectively been decreasing over the years. The IEA will have to address this issue in the future, but it is not the goal of the present proposals.

Current Dues Structure

For several years our dues structure has been defined by a formula that includes a fixed "base fee" (of US\$122.50) plus a fee per society member :

- US\$2.80 for each of the first 500 members.
- US\$1.40 for each member beyond the first 500 members.

Alternatively, the Society may elect to pay a sum equal to 20% of the total dues income of the Society.

The specific origin of the formula is unclear. We have consulted with Ian Noy who was Treasurer during the period 1991-1997, and he reported that this formula was in place before his tenure as Treasurer. He did note, as some of us remember, that at one time IEA used Swiss francs as its basic currency. When the switch to US dollars occurred, the amounts in the formula were simply converted from francs to dollars. Similarly, the basis of the 20% rule is unknown, although it is clear that this option was introduced to assist some of the poorer societies.

Some Analyses

It appears that the current formula poses a hardship for some of our societies from developing areas. Several of the societies have opted for the 20% payment, while other societies have experienced difficulties in making any dues payments. Several ideas are being considered. The first is to lower the alternative option from 20% to 10% of total dues. An analysis of dues payments during 2004 indicates that such a change would reduce IEA revenues by approximately \$300 per year. This estimate for 2004 is based on the information presented in Table 1. The societies that paid 20% are indicated in the column labeled "Dues Paid", and the estimated revenue loss is simply one-half the amount paid for the 2004 year. It is recognized, of course, that reducing the alternative rule to 10% could result in additional societies selecting that option, but it is assumed such an effect would be minimal. For societies with limited membership and low annual dues, the change from 20% to 10% would represent meaningful financial relief. Another idea to be considered is possible alternatives to the current formula. One possibility might be to base the formula on some measure of "wealth" or economic strength of the area/country in which the society is located. One such measure is Gross Domestic Product (GDP) or GDP per unit of population (GDP/P). Such data is readily available from the United Nations website. Table 2 presents the GDP and GDP/P for the countries in which current IEA societies exist. For the Nordic and Southeast Asia Societies, the average GDP of the countries that make up the Society was used. The order of societies in Table 2 is sorted on the basis of GDP per unit of population (GDP/P). The numbers in the right-most column labeled "2004 Dues/Member" is the amount paid by the society per member of that society. Missing data in this column is the result of not having a membership count for the society. It is clear that the rules we use to compute dues do not favor small societies, including societies in developing countries. For a majority of societies, the formula defines the dues paid for IEA membership. In 2004, twenty-four societies paid on the basis of the formula, while four paid on the basis of 20% (Greece subsequently paid the 2004 dues based on the 20% rule). The right most column in Table 2 indicates that there is a substantial range in the amount paid per society member across the different societies. This range is from \$1.66 to \$6.37 per member. Table 3 shows some numbers illustrating the cost per federated society member as a function of society size given the current dues formula. It shows that if one takes into account what it costs a society member for his/her society to be federated with IEA, the cost based on the current formula is less as the society is larger. In short, it costs a member of one of our largest societies much less to be a member of IEA than for a small society member.

To synthesize :

- the larger a society's membership, the less a member of the society pays to the IEA;
- the wealthier a country, the less this society gives (per member) to the IEA.

Given some of the above observations and comments about the fee structure and its implications for the various federated societies, a number of alternative dues proposals have been explored.

Specific Proposals for Consideration

A first proposal is to lower the alternative option of 20% of the total dues income of the society to 10%. As already noted, this change would represent meaningful relief for several societies in the lower GDP/P countries, while resulting in only a modest reduction in IEA revenue.

Several proposals for a revised dues structure (formula) have been explored. Three parameters that might be considered relevant have been considered. These parameters are:

- the base fee. This fee is currently \$122.50.
- the amount per society member. This amount is currently variable; \$2.80 per member up to 500 members and \$1.40 per additional member.
- the wealth of the country in which the society is located as reflected by the GDP/P measure.

¹ It is to be noted that societies often cumulate these characteristics: young societies have a small number of members and are in general created in developing countries nowadays.

Three proposals for an alternative dues structure are presented below. Two of the proposals include formulas that take into account the GDP/P for the country in which the society is located. Three categories of GDP/P are defined, with cutoffs at \$10,000 and \$25,000.

Table 4 is a spread sheet containing information reflecting the dues that would be paid by each of the societies based on the various proposals. It is limited to the societies that paid on the basis of the formula in 2004 and the membership counts during that year. It also contains information about dues payments made during 2004. The Table is organized into the three categories of GDP/P. It includes for 2004 the membership count, dues paid, and dues paid per member. Then for each of the three proposals, it contains the dues that would be paid given the proposal, the change in dues represented by the proposal (ratio of new dues to 2004 dues), and the dues per member given the proposal.

Proposal 1

Base fee = \$100.00

Fee per society member based on GDP/P as below:

GDP/P	Fee per Member
< \$10,000	\$1.00 per member
\$10,000 - \$25,000	\$2.00 per member
> \$25,000	\$2.50 per member

Proposal 1 includes a fixed base rate, a greater spread in fee per member than the first two proposals, and no reduction in fee for membership above some given amount.

From Table 4 this proposal results in the following:

- A reduction in dues for the lowest GDP/P category by a factor of about 40-50%.
- A reduction in dues for the middle GDP/P category by a factor of about 25%.
- In the highest GDP/P category, an increase of 23-53% for the four largest societies.
- Somewhat less spread in dues per society member.
- An increase of approximately \$3200 in revenue for IEA.

Proposal 2

Same as Proposal 1 without the \$100 base fee.

From Table 4 this proposal results in the following:

- A reduction in dues for the lowest GDP/P category by a factor of about 70-85%.
- A reduction in dues for the middle GDP/P category by a broad factor of about 35-70%.
- In the highest GDP/P category, an increase of 19-51% for the four largest societies.
- A significant difference in cost per member for the three GDP/P categories as defined by the formula.
- An increase of approximately \$800 in revenue for IEA.

Proposal 3

Amount per society member based on size of society as below:

\$2.50 to 1000 members, \$2.00 > 1000 members

Proposal 3 has no base fee and dues are not a function of GDP/P.

From Table 4 this proposal results in the following:

- A reduction in dues for the lowest GDP/P category by a factor of about 30-60%.
- A reduction in dues for the middle GDP/P category by a broad factor of about 35-60%.
- In the highest GDP/P category, an increase of 15-31% for the four largest societies. The remaining societies in this category will also have meaningful reductions in dues.
- The dues per member is fixed at \$2.50 for members of all societies except the four largest. However, with this formula, the largest societies cost per member is much closer to the other societies.
- Approximately the same total revenue for IEA.

The above proposals offer some range of options for changing the IEA dues structure for federated societies. To further assist in reviewing and evaluating the proposals and their implications, we have included Table 5. The table presents a synthesis of the proposals and their implications.

A final point: The federated societies that did not pay dues in 2004 on the basis of the formula have been included in Table 6. One point to be noted is that all of the societies that did not pay dues by the end of the 2004 year are in the lowest GDP/P category. This payment history is regarded as further support for the need to revise the dues structure. A reduction in the 20% rule to 10% and the adoption of one of the alternative dues formulas should provide needed relief for the poorer societies while being consistent with our goal of promoting ergonomics in developing countries.

Table 1. Dues Payments During 2004 by Federated and Affiliated Societies

	Fed & Aff SOCIETIES		Dues Owed	Dues Paid	Amount	# Members
1	ABERGO	Brazil	02,03,04	02,03	\$ 917.00	120
2	ACE	Canada	04	04	\$1,584.10	544
3	ADEA	Argentina	04	04	\$ 223.30	36
4	AEE	Spain	03,04	04	\$ 402.50	100
5	APERGO	Portugal	04	04	\$ 216.70	34
6	AUEA	Ukraine	04			
7	BES	Belgium	04	04	\$ 286.50	59
8	ChES	China	03,04			
9	CrES	Croatia	02,03,04			
10	CzES	Czech	04	04 (20%)	\$ 74.00	44
11	ES	UK	04	04	\$2,467.00	675
12	ESFRY	Yugoslavia	,02,03,04	02,03,04	\$ 413.00	
13	ESK	Korea	,03,04	03,04	\$3,094.00	520
14	ESSA	South Africa	04	04 (20%)	\$ 241.72	75
15	EST	Taiwan	04	04	\$ 427.70	109
16	GfA	Germany	04	04	\$1,519.70	499
17	HES	Greece	04			
18	HFES	USA	04	04	\$5,291.30	3192
19	HFESA	Australia	04	04	\$1,388.10	452
20	HKES	Hong Kong	04	04 (20%)	\$ 182.00	47
21	InES	Iran	04	04	\$ 286.18	80
22	IREA	Russia	04	04	\$ 24.00	225
23	IrES	Ireland	01,02,03,04	01,02,03,04	\$ 865.20	44
24	ISE	India	04	04 (20%)	\$ 13.00	
25	IsES	Israel	04	04	\$ 237.50	41
26	JES	Japan	04	04	\$3,845.10	1445
27	MES	Hungary	04			
28	NES	Nordic	04	04	\$2,618.70	1283
29	NVVE	Netherlands	04	04	\$1,522.50	500
30	NZES	New Zealand	04	04	\$ 430.50	110
31	OAE	Austria	04	04	\$ 167.30	16
32	PES	Poland	02,03,04	02,03,04	\$1,789.90	185
33	PhES	Philippines	04			
34	SCE	Colombia	03,04			24
35	SEA	Slovakia	00,01,02,03,04			
36	SEAES	Southeast Asia	04	04	\$ 122.50	
37	SELF	SELF (French)	04	04	\$1,707.50	632
38	SEM	Mexico	03,04	03,04	\$ 225.00	
39	SIE	Italy	04	04	\$ 657.50	191
40	SOCHERGO	Chile	04	04	\$ 234.50	40
41	SSE	Switzerland	04	04	\$ 500.50	135
42	TES	Turkey	04			
43	HES-J	Japan	03,04			

Table 2. Federated societies dues sorted by gdp/p

2004	Fed & Aff SOCIETIES	Dues Owed	GDP	GDP/P	Dues/Member	
1	SSE	Switzerland	05	311737	43486	3.71
2	IrES	Ireland	05	153729	38864	4.92
3	NES	Nordic	05	181370	37940	2.04
4	HFES	USA	05	10857200	36924	1.66
5	JES	Japan	05	4317131	33819	2.66
6	NVVE	Netherlands	05	512882	31759	3.05
7	OAE	Austria	05	253116	31187	
8	ES	Great Britian	05	1798540	30355	2.10
9	BES	Belgium	05	301885	29257	4.89
10	SELF	SELF (French)	05	1757551	29222	2.70
11	GfA	Germany	05	2403068	29137	3.05
12	ACE	Canada	05	853832	27097	2.91
13	HFESA	Australia	05	523349	26525	3.07
14	SIE	Italy	05	1465835	25527	3.44
15	HKES	Hong Kong	05	159445	22618	
16	AEE	Spain	05	838620	20424	4.02
17	NZES	New Zealand	05	74988	19350	3.91
18	IsES	Israel	05	116449	18101	5.79
19	HES	Greece	04,05	172221	15690	
20	APERGO	Portugal	05	147352	14645	6.37
42	EST	Taiwan	05	287000	12755	3.92
21	ESK	Korea	05	527508	11059	2.98
22	CzES	Czech	05	90425	8834	
23	SEAES	Southeast Asia	05	133699	8789	
24	MES	Hungary	04,05	82806	8384	
25	CrES	Croatia	02,03,04,05	28329	6398	
26	SEA	Slovakia	00 thru ,05	32519	6019	
27	SEM	Mexico	05	615051	5945	
28	PES	Poland	05	206619	5355	3.23
29	SOCHERGO	Chile	05	71495	4523	5.86
30	ESSA	South Africa	05	159886	3551	
31	TES	Turkey	04,05	243783	3418	
32	ADEA	Argentina	05	129707	3375	6.20
33	IREA	Russia	05	433490	3026	
34	ABERGO	Brazil	04,05	481866	2700	3.82
35	InES	Iran	05	143273	2079	3.58
36	SCE	Colombia	03,04,05	77117	1744	
37	ChES	China	03,04,05	1409848	1100	
38	PhES	Philippines	04,05	80420	1005	
39	AUEA	Ukraine	04,05	47289	975	
40	ISE	India	05	591455	555	
41	ESFRY	Yugoslavia	05			

Table 3. Current formula dues per member

Formula:

Base \$122.50

1-500 members 2.80/member

500 members + 1.40/member

# Members	Total Dues	Dues/Member
50	262.50	5.25
100	402.50	4.02
200	682.50	3.41
300	962.50	3.21
400	1242.50	3.11
500	1522.50	3.05
600	1662.50	2.77
700	1802.50	2.58
800	1942.50	2.43
900	2082.50	2.31
1000	2222.50	2.22
1200	2502.50	2.09
1400	2782.50	1.99
3200	5302.50	1.66

Table 4.

FED SOC	GDP	GDP/P	2004 # Memb	2004 Paid	04 /Dues /Memb	Proposal 1 Dues	Change	Dues Per Memb	Proposal 2 Dues	Change	Dues Per Memb	Proposal 3 Dues	Change	Dues per Memb
Switzerland	311737	43486	135	\$ 500,50	\$ 3,71	\$ 437,50	0,87	\$ 3,24	\$ 337,50	0,67	\$ 2,50	\$ 337,50	0,67	\$ 2,50
Ireland	153729	38864	44	\$ 216,30	\$ 4,92	\$ 210,00	0,97	\$ 4,77	\$ 110,00	0,51	\$ 2,50	\$ 110,00	0,51	\$ 2,50
Nordic	181370	37940	1283	\$ 2.618,70	\$ 2,04	\$ 3.307,50	1,26	\$ 2,58	\$ 3.207,50	1,22	\$ 2,50	\$ 3.066,00	1,17	\$ 2,39
USA	10857200	36924	3192	\$ 5.291,30	\$ 1,66	\$ 8.080,00	1,53	\$ 2,53	\$ 7.980,00	1,51	\$ 2,50	\$ 6.884,00	1,31	\$ 2,16
Japan	4317131	33819	2159	\$ 3.845,10	\$ 1,78	\$ 5.497,50	1,43	\$ 2,55	\$ 5.397,50	1,40	\$ 2,50	\$ 4.818,00	1,25	\$ 2,23
Netherlands	512882	31759	500	\$ 1.522,50	\$ 3,05	\$ 1.350,00	0,89	\$ 2,71	\$ 1.250,00	0,82	\$ 2,50	\$ 1.250,00	0,82	\$ 2,50
Great Britain	1798540	30355	1174	\$ 2.467,00	\$ 2,11	\$ 3.035,00	1,23	\$ 2,59	\$ 2.935,00	1,19	\$ 2,50	\$ 2.848,00	1,15	\$ 2,43
Belgium	301885	29257	59	\$ 286,50	\$ 4,86	\$ 247,50	0,86	\$ 4,19	\$ 147,50	0,51	\$ 2,50	\$ 147,50	0,51	\$ 2,50
SELF	1757551	29222	629	\$ 1.707,50	\$ 2,71	\$ 1.672,50	0,98	\$ 2,66	\$ 1.572,50	0,92	\$ 2,50	\$ 1.572,50	0,92	\$ 2,50
Germany	2403068	29137	499	\$ 1.519,70	\$ 3,05	\$ 1.347,50	0,89	\$ 2,71	\$ 1.247,50	0,82	\$ 2,50	\$ 1.247,50	0,82	\$ 2,50
Canada	853832	27097	544	\$ 1.584,10	\$ 2,91	\$ 1.460,00	0,92	\$ 2,68	\$ 1.360,00	0,86	\$ 2,50	\$ 1.360,00	0,86	\$ 2,50
Australia	523349	26525	452	\$ 1.388,10	\$ 3,07	\$ 1.230,00	0,89	\$ 2,72	\$ 1.130,00	0,81	\$ 2,50	\$ 1.130,00	0,81	\$ 2,50
Italy	1465835	25527	191	\$ 657,50	\$ 3,44	\$ 577,50	0,88	\$ 3,02	\$ 477,50	0,73	\$ 2,50	\$ 477,50	0,73	\$ 2,50
Sub Total				\$ 23.604,80		\$ 28.452,50	1,21		\$ 27.152,50	1,15		\$ 25.248,50	1,07	
Spain	838620	20424	100	\$ 402,50	\$ 4,02	\$ 300,00	0,75	\$ 3,01	\$ 200,00	0,50	\$ 2,00	\$ 250,00	0,62	\$ 2,50
New Zealand	74988	19350	110	\$ 430,50	\$ 3,91	\$ 320,00	0,74	\$ 2,91	\$ 220,00	0,51	\$ 2,00	\$ 275,00	0,64	\$ 2,50
Israel	116449	18101	41	\$ 237,50	\$ 5,79	\$ 182,00	0,77	\$ 4,44	\$ 82,00	0,35	\$ 2,00	\$ 102,50	0,43	\$ 2,50
Portugal	147352	14645	34	\$ 216,70	\$ 6,37	\$ 168,00	0,78	\$ 4,94	\$ 68,00	0,31	\$ 2,00	\$ 85,00	0,39	\$ 2,50
Taiwan	287000	12755	109	\$ 427,70	\$ 3,92	\$ 318,00	0,74	\$ 2,92	\$ 218,00	0,51	\$ 2,00	\$ 272,50	0,64	\$ 2,50
Korea	527508	11059	520	\$ 1.547,00	\$ 2,98	\$ 1.140,00	0,74	\$ 2,19	\$ 1.040,00	0,67	\$ 2,00	\$ 1.300,00	0,84	\$ 2,50
Sub Total				\$ 3.261,90		\$ 2.428,00	0,74		\$ 1.828,00	0,56		\$ 2.285,00	0,70	
Poland	206619	5355	185	\$ 596,63	\$ 3,23	\$ 285,00	0,48	\$ 1,54	\$ 185,00	0,31	\$ 1,00	\$ 462,50	0,78	\$ 2,50
Chile	71495	4523	40	\$ 234,50	\$ 5,86	\$ 140,00	0,60	\$ 3,51	\$ 40,00	0,17	\$ 1,00	\$ 100,00	0,43	\$ 2,50
Argentina	129707	3375	36	\$ 223,30	\$ 6,21	\$ 136,00	0,61	\$ 3,78	\$ 36,00	0,16	\$ 1,00	\$ 90,00	0,40	\$ 2,50
Brazil	481866	2700	120	\$ 458,50	\$ 3,82	\$ 220,00	0,48	\$ 1,83	\$ 120,00	0,26	\$ 1,00	\$ 300,00	0,65	\$ 2,50
Iran	143273	2079	80	\$ 286,18	\$ 3,58	\$ 180,00	0,63	\$ 2,25	\$ 80,00	0,28	\$ 1,00	\$ 200,00	0,70	\$ 2,50
Sub Total				\$ 1.799,11		\$ 961,00	0,53		\$ 461,00	0,26		\$ 1.152,50	0,64	
Total			12236	\$ 28.665,81		\$ 31.841,50	1,11		\$ 29.441,50	1,02		\$ 28.686,00	1,00	

Table 5. Synthesis of proposals and their effects

Proposal	GDP/P categories	Fee per member	Base fee				
1	< \$10,000	\$ 1.00 per member	\$ 100	Effects on societies with lower GDP/P	Effects on other societies		
	\$10,000 - \$25,000	\$ 2.00 per member					
	> \$25,000	\$ 2.50 per member					
2	< \$10,000	\$ 1.00 per member	\$ 0			Comments	Effects on IEA
	\$10,000 - \$25,000	\$ 2.00 per member					
	> \$25,000	\$ 2.50 per member					
3	none	\$ 2.50 to 1000 members, \$ 2.00 > 1000 members	\$ 0	Reduction in dues for the lowest GDP/P category by a factor of about 40-50% Reduction in dues for the middle GDP/P category by a factor of about 25%	In the highest GDP/P category, increase of 23-53% for the four largest societies		
1			Somewhat less spread in dues per society member				
2			A significant difference in cost per member for the three GDP/P categories as defined by the formula			Increase of approximately \$800 in revenue for IEA	
3			The dues per member is fixed at \$2.50 for members of all societies except the four largest. However, with this formula, the largest societies cost per member is much closer to the other societies	Approximately identical revenue for IEA			

Table 6. Federated Societies that did not pay, on a formula basis in 2004

Fed Soc	GDP/P	2004 Pay	Basis
Austria	31187	\$ 167.30	16 memb
Hong Kong	22618	\$ 182.00	20%
Greece	15690	\$ 122.25	20%
Czech	8834	\$ 74.00	20%
Russia	8789		
Hungary	8384		
Croatia	6398		
Slovakia	6019		
Mexico	5945	\$ 122.50	base
South Africa	3551	\$ 241.72	20%
Turkey	3418		
SEAES	3026	\$ 122.50	base
Columbia	1744		
China	1100		
Philippines	1005		
Ukraine	975		
India	555	\$ 13.00	20%
Yugoslavia			

6.3.3. Auditors' report

6.4. Development

6.4.1. Report

Jan Dul, Chair of the IEA Development SC

Plan

During the Council Meeting in San Diego the following activities were planned for 2005-2006 (see minutes of meeting):

- "IEA Best-Practices" project will be the major activity of the Development Committee
- Working groups, with representatives of societies and lead by members of the DC, will have discussions by e-mail on selected topics
- These working groups will prepare documents for the IEA'2006 workshops, and will organize the workshops.
- A special section in the IEA website will be dedicated to the "IEA Best-Practices" project, in order to inform non participating IEA societies and other interested parties about the developments of the discussions.
- The Development Committee will be established, and it will primarily consist of active members of the "IEA Best Practices" project, including leaders of working groups. The goal is to have an internationally balanced DC, with representation from all over the world.

Outcome

The following results have been reached so far:

- The "IEA Best-Practices" project is the only activity of the Development Committee until IEA2006. IEA Best Practices Initiative has the following 3 objectives:
 - To contribute to the development of ergonomics societies
 - To encourage and support interactions and open discussions between IEA member societies
 - To explore needs of societies and networks
- Guided by these objectives, and based on a list of topics developed during 2005, three working groups (sub-groups of the development committee) were formed to further develop the initiative.

The three sub-groups are:

- a. Professional development
- b. Internal communications
- c. External networks.

The major tasks allocated to these sub-groups were:

- to initiate and coordinate the discussions in the sub-group, based on the contributions of National Societies (long list of topics), and the discussions during the Council-meeting in San Diego, July 16, 2005 (short list)
- to organise workshops at the IEA2006 congress based on the discussions in the sub-groups

The working groups have an international mix of chairs, co-chairs and members (see below).

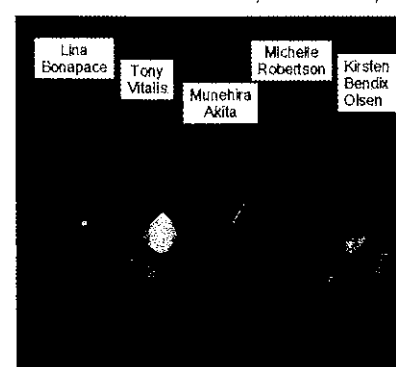
- based on the list of topics gathered during 2005, specific discussions have been initiated in the subgroups. Several societies have given extensive and valuable input for the discussion. Nevertheless, the process is slower than anticipated due to lack of input from several societies.

- preliminary results of the Best Practices project will be presented and discussed during three workshops at IEA 2006. All members of the IEA Best Practices project, all president and board members of IEA federated societies, all council members and other interested persons are invited to participate. This allows for further discussions and input from all societies.

Monday afternoon:

Best-practices of ergonomics societies PART 1: Promotion of ergonomics in external networks Chair: Lina Bonapace, Italy; Co-chair: Tony Vitalis, New Zealand.

Tuesday afternoon: Best-practices of ergonomics societies PART 2. Communication within the society. Chair: Kirsten Bendix Olsen, Denmark; Co-chair: Munehira Akita, Japan



Wednesday afternoon:

Best-practices of ergonomics societies PART 3. Professional development of ergonomists; Michelle Robertson, USA; Co-chair Mauricio Kohan, Chile

Due to lack of progress with regard to the content, the development of a special website has been postponed.

- The development committee consists of all members of the sub-groups (see table).

Chair-persons (the woman) and co-chairs of the subgroups of the Development Committee

Members of subgroups DC (February 2006)

Societies	Representative	e-mail	sub-group
IEA Federated or Associated Society			
Associação brasileira de ergonomia (Brazil)	Marcelo Soares	marcelo2@nlink.com.br	A
Association Of Canadian Ergonomists/ association Canadienne d'ergonomie (Canada)	Margo Fraser Shrawan Kumar	margo@ace-ergocanada.ca shrawan.kumar@ualberta.ca	A C
Chilean Ergonomics Society (Chile)	Mauricio Kohan	mkohan@mutual.cl	Co-chair A
Ergonomics Society (United Kingdom)	Dave Stubbs	d.stubbs@surrey.ac.uk	B
Czech Ergonomics Society (Czech Republic)	Sylva Gilbertová (not able to attend IEA2006)	sylva.gilbertova@volna.cz	A
Gesellschaft für Arbeitswissenschaft (German speaking)	Holger Luczak Christopher Schlick Klaus Zink	Astrid.Peters@fir.rwth-aachen.de c.schlick@iaw.rwth-aachen.de kjzink@wiwl.uni-kl.de	C A B
Hong Kong Ergonomics Society (Hong Kong)	Simon Yeung Alan Chan	rssyeung@polyu.edu.hk Alan.chan@cityu.edu.hk	B C
Human Factors & Ergonomics Society (USA)	Michelle Robertson Mike Kalsher Hal Hendrick Mike Wolgater Wendy Rogers Kristen Gilbert	Michelle.Robertson@LibertyMutual.com kalshm@rpi.edu HHendrick@aol.com	Chair A B C B A A
Japan Ergonomics Society (Japan)	Munehira Akita Yoshinori Horie	m-akita@h8.dion.ne.jp horie@cit.nihon-u.ac.jp	Co-chair B C
Nordic Ergonomics Society (Denmark, Finland, Iceland, Norway, Sweden)	NES: Kirsten Bendix Olsen Denmark: Katrine Therkildsen Edvin Grinderslev Finland: Nina Nevala Sweden: Christina Jonsson Göran Hägg	kirsten_b_olsen@hotmail.com knt@ki.dk edgr@ke.dk nina.nevala@ttl.fi christina.jonsson@av.se goran.hagg@niwl.se	Chair B C A B B A
Societe D'ergonomie De Langue Française (French speaking)	Pascal Beguin Michel Neboit	beguin@cnam.fr neboit.michel.estelle@wanadoo.fr	C A
Societa Italiana Di Ergonomia (Italy)	Sara Albolino Lina Bonapace Tommaso Bellandi Riccardo Tartaglia	s.albolino@mail.regione.toscana.it bonapace@ergosolutions.it	C Chair C B A
Ergonomics Society Of South Africa (South Africa), not yet confirmed	Patt Scott	p.a.scott@ru.ac.za	A
New Zealand Ergonomics Society, not yet confirmed	Tony Vitalis	a.vitalis@massey.ac.nz	Co-Chair C
IEA networks			
ULAERGO (Latin America)	María Eugenia Figueroa	MEFigueroa@mutual.cl	A,B,C
FEES (Europe)	Pieter Rookmaaker	rookmaaker@intergo.nl	A,B,C
IEA coordinators			
chairman IEA Development Committee	Jan Dul	jdul@rsm.nl	
secretary IEA Development Committee	Maurice Aarts	ieamaurice@gmail.com	

6.5 International Development

6.5.1 Report

David C. Caple, Chair of the IEA ID SC

Action Plan Summary – April 2006

This table summarizes the numerous projects being undertaken together with the future actions (in bold).

Project	Progress	Comment / Suggestion
(1) ILO "Ergonomic Checkpoints" review prior to re-launch at IEA 2006	<p>1.1. Workshop jointly convened by David Caple and Kazu Kogi arranged for May 21st / 22nd, 2005 in Bali, Indonesia. A total of 16 attendees included:</p> <ul style="list-style-type: none"> - Dr Sara Arphorn, Thailand - Dr Akiyoshi Ito, Japan - Dr Tsuyoshi Kawakami, Japan - Dr Halimahtun Khalid, Malaysia - Dr Barbara Silverstein, USA - Mr David Caple, Australia - Dr Kazutaka Kogi, Japan - Prof. Sutjana, Indonesia - Dr Shengli Niu, Switzerland - Dr Erna Tresnaningsih, Indonesia - Budi Santoso Goutama, Indonesia - Theresia A Pawitra, Indonesia - Prof. Pierre Falzon, France - Prof. Martin Helander, Singapore - Ms Sudthida Krungkrai Wong, Thailand - Mr Jose Maria S Batino, Philippines <p>1.2 Funding to IEA of US\$10,000 provided by ILO to assist conduct of workshop in Bali</p>	<p>1.1. Cooperation with ILO in arranging and funding contribution to workshop has brought IEA and ILO programs closer</p> <p>1.2. Broad international participation in workshop</p> <p>1.3. Tangible support from the ID Committee to SEAES conference committee for program and registrations</p> <p>1.4. The changes to the checkpoint text were finalized by the end of December 2005</p> <p>1.5. New checkpoints were finalized by the end of March, 2006</p> <p>1.6. These will be submitted to the ILO for editing.</p> <p>1.7. The new illustrations for the checkpoints will be completed by the end of May, 2006 and submitted to the ILO</p> <p>1.8. The book is planned to be launched during IEA 2006 if it is ready for publication</p>
(1) cont'd	<p>1.3. Attendees invited to participate in South East Asian Ergonomics Society conference following workshop</p> <p>1.4. Suggested changes to the text plus new checkpoints have been developed.</p> <p>1.5. New illustrations for the checkpoints are being prepared in Vietnam by Dr Khai arranged by Kazutaka Kogi</p>	

Project	Progress	Comment / Suggestion
(2) Joint development of the IEA/ILO publication Ergonomics Checkpoints In Agriculture.	<p>2.1. Dr Kazutaka Kogi has documented 100 checkpoints relating to agriculture in Cambodia, Laos, Japan and Vietnam</p> <p>2.2. Illustrations for these checkpoints have been prepared by Dr Khai in Vietnam in consultation with Dr Kogi</p> <p>2.3. The ILO provided the IEA \$5,000 which was paid on to the Indian Society of Ergonomics to host the workshop on the new checkpoints. This was hosted in Guhawati, India on the 14th and 15th December, 2005</p> <p>2.4. A total of 23 invited persons from the agriculture advisory service in India participated in the workshop plus another 11 students from the ergonomics program</p> <p>2.5. The host of the HWWE 2005 conference Dr Chakrabarti from IIT Guhawati provided an excellent team of helpers and resources for the workshop</p>	<p>2.1. The ergonomic principles in the agriculture checkpoints were found to be transferable to the Indian farming areas. A range of additional topic areas such as animal husbandry and woman's work were highlighted for further attention</p> <p>2.2. The diversity of agriculture activities in the different climate zones need to be reflected in the text and illustrations</p> <p>2.3. Although the illustrations from Vietnam clearly showed the ergonomic principles, further examples with direct relevance to India are recommended</p> <p>2.4. The outputs of the workshop will be disseminated to the ID members involved and the ILO before changes are made</p> <p>2.5. The option of a further workshop in southern Africa was discussed due to the different climate and topography in these developing areas</p> <p>2.6. The development of the checkpoints in agriculture will continue in 2006 with a possible launch in 2007</p>

(2) cont'd	<p>2.6. Dr Kogi conducted the workshop on the new checkpoints including a range of case studies from India provided by the participants. This provided an opportunity to verify if the checkpoints developed in Asia would be transferable to India</p> <p>2.7. David Caple and Pierre Falzon attended to assist with the facilitation of the workshop and prepare the documentation of the findings</p> <p>2.8. Ingrid Christensen from the ILO office in Dehli attended the HWWE conference to represent the ILO in supporting the workshop</p>	
(3) ILO publications on other "Checkpoint" areas	<p>3.1. IEA ID Committee members requested to identify suitable areas. These include:-</p> <ul style="list-style-type: none"> - Forestry - HCI - Tourism - Office - Health care <p>3.2. Consultation has commenced with the STP Committee to discuss if the Technical Committees with interests in these areas would take up the development of generic checkpoints for a specific area.</p>	<p>3.1. Members of the ID Committee and Chairs of the IEA Technical Committees are invited to nominate their interest to assist with these or other Checkpoint topics</p> <p>3.2. At least 2 new Ergonomic Checkpoint areas will be commissioned in 2006 – 07</p>
(4) ILO development of Ergonomic Instrument focusing on MSD prevention	<p>4.1. Extensive literature review including approaches taken by Governments and other agencies completed by the ID Committee and accepted by ILO in early 2004</p> <p>4.2. ILO "SafeWork" program debating status for Ergonomics document prior to commissioning the drafting process</p>	<p>4.1. The ILO has to consult further with employers and unions who have different expectations of this document</p> <p>4.2. A meeting was held with the ILO in Bali to determine the future direction for this publication</p>
(5) WHO registration as an NGO.	<p>5.1. During 2004/05, contact with the WHO was maintained via this ID Committee</p> <p>5.2. The WHO has released their Strategy Plan for 2006 -2010 including 6 Activity Areas. They have invited the IEA to submit projects that are consistent with these areas</p>	<p>5.1. The ID Committee has submitted 4 major projects from our own activity plan for inclusion in the WHO action plan</p> <p>5.2. Annual reports on IEA activities will be provided to the WHO and attendance to their meetings where possible</p>
(6) Ergonomic training / awareness materials suitable for small or newly affiliated Federated Societies to assist in general promotion of ergonomics	<p>6.1. Michelle Robertson (HFES) and David Stubbs (ES) volunteered to explore what existing materials could be made available for IEA use. No specific progress to date</p>	<p>6.1. This may be past to the IEA Development Committee as part of their "Internal" IEA support program</p> <p>6.2. IEA Website planned updating to include more general ergonomic promotion materials</p> <p>6.3. A review of this project will be undertaken in 2006 to determine if it is viable</p>

Project	Progress	Comment / Suggestion
(7) Donations of CDs and books from IEA endorsed conference proceedings.	7.1. Recipients from developing countries were requested to nominate a library to receive the materials. This has been completed 7.2. CDs and conference books have regularly been posted to 11 recipient developing countries	7.1. Program appreciated by recipients. A number of very complimentary letters have been received. 7.2. Possibility to expand the list and share the available CDs 7.3. Any committee member interested in coordinating this mail out? 7.4 The option of making these proceedings available online from the IEA website requires evaluation to provide broader distribution 7.4. This donation program will continue with assistance from the IEA endorsed conference conveners
(8) Donation of complete and current sets of ergonomic journals	8.1. Whilst a program that has resulted in donations across the world has been successful, it has primarily depended on individuals contacting each other directly and finding their own funding for transport costs	8.1. We may need to have a section on the IEA website listing potential donors so recipients can make direct contact, rather than via the ID Chairman or committee member 8.2. This program will continue in 2006 -2007 with assistance from ID Committee members
(9) Main publishers of Ergonomic journals to contribute to free or subsidized online costs for new federated societies for an initial period	9.1. Main publishers participate in free online access via the United Nations HINARI program Unfortunately, these countries do not belong to IEA so we receive no measurable benefit 9.2. We have recently welcomed Samson Adaramola to our Committee from Nigeria. We have made application to HINARI for him and are awaiting feedback	9.1. This could be taken up by the Development Committee as part of the support to Internal IEA programs 9.2. Contact will be made with the United Nations to determine how the IEA can assist some of our Societies with limited resources
(10) Twinning between Federated Societies	10.1. Main project between The Netherlands, and Indonesia primarily dependent on Pieter Rookmaaker's team. Contacts in Indonesia difficult to secure for ongoing projects 10.2. An offer has been received from the HFESA (Australia) to support \$500 towards a participant from an ID Country to attend IEA 2006. They will work with the IEA in identifying a recipient 10.3. Prof Bob Bridger has offered his services as a Roving Professor to the ergonomic society in Chile	10.1. Support from other Committee members and their Societies would be appreciated 10.2. Partial review of needs in Indonesia will be undertaken as part of SEAES meeting in Bali, May 2005 10.3. The Twinning Project may fit in the Development Committee as well 10.4. Opportunities for more twinning projects will be explored with the ID Committee members. We hope to have at least 2 new twinning projects commenced over the next year

Project	Progress	Comment / Suggestion
(11) Participation of IDC researchers and research in IEA 2006 Congress	<p>11.1. Pat Scott continues to lead the program's IDC development with the IEA 2006 committee. She has arranged various streams of papers already</p> <p>11.2 The IEA2006 Congress committee has allocated a range of reimbursement options of all or part of the conference registration fee for up to 40 attendees from IDC's</p>	<p>11.1. A large number of Abstracts have been received from IDC members. Funding approvals to 43 IDC members has now been undertaken by the IEA Congress committee</p> <p>11.2. The IEA Congress program will reflect the active participation of IEA members from Developing Countries.</p>
(12) IOHA liaison on joint projects of interest	<p>12.1. David Zalk from IOHA (USA) continues to involve the IEA in their discussions on Control Banding and the area of toolkits</p> <p>12.1. The IEA ID committee and IOHA have requested a joint symposium during IEA2006 to discuss this issue</p>	<p>12.1. An invitation has been provided to the IOHA to attend the IEA Congress and to participate in discussions on issues of common interest.</p> <p>12.2. Direct and regular communication will be established between the IEA and IOHA</p>
(13) Ongoing ICOH project in occupational ergonomics	<p>13.1. The joint ICOH / IEA committee (Kazu Kogi, Pat Scott, Barbara McPhee) still finalizing this publication</p> <p>13.2. Joint discussions are planned at the IEA Congress</p>	<p>13.1. A draft of the document was discussed in Japan in mid 2005 between Kazu and Pat.</p> <p>13.2. An invitation has been provided to the ICOH to attend the IEA Congress and to participate in discussions on issues of common interest</p> <p>13.1. We need to finalize the publication in 2006 to enable a launch to be arranged.</p>
(14) Distance Learning in Ergonomics project in Portuguese speaking countries in Africa	<p>14.1. Anabela Simoes in Portugal continues to work hard in obtaining a local university to support this project. She has a strong commitment to translate and promote the project in Africa once agreements are reached</p> <p>14.2. A contract has been signed between David Caple on behalf of the IEA; John Wilson from the University of Nottingham and the Director of Anabela's University to enable this project to proceed</p>	<p>14.1. This will be an exciting ID Committee project that will need support from ID members</p> <p>14.2. The translation of the materials has now commenced</p>
(15) Monitor ergonomic research and programs relating to women and children in work	<p>15.1. Lena Karlqvist (Sweden) is engaged in a project involving women in the workforce in India. She attended an International Congress on Women, Work and Health in New Delhi in November 2005. The website is www.swl/delhi.org&wwh</p> <p>15.2. The TC on Children has aspects of interest of children in work but primarily interested on education issues.=</p>	<p>15.1. Further work is required to determine how best to position IEA to contribute to the application of ergonomics to benefit women and children in work. This will be led by a sub committee of the ID committee in 2006</p>

6.6 Professional Standards and Education

6.6.1. Report

Stephen Legg, Chair of the IEA PSE SC

The Professional Standards and Education (PSE) committee maintains, develops and disseminates the IEA Directory of Ergonomics Educational Programmes, endorses certification schemes (and provides advice and guidance about their development) and provides guidance on professional conduct, ethics and standards for ergonomics education. PSE has three subcommittees:

- Directory of Ergonomics Educational Programmes (DEEP)
- Professional Standards (PS)
- Ergonomics Education (EE)

This report gives the goals for the period 2005-6 for each subcommittee, followed by the results obtained.

Directory of Ergonomics Educational Programmes (DEEP) Subcommittee

Chair: Vacant. Members: Stephen Legg, Andy Marshall

Goals for 2005-6

1. To maintain the DEEP on the IEA Web site (www.iea.cc/directory)
2. Review the DEEP for accuracy every year
3. Review the DEEP supplementary advisory information supplied about courses every 3 years
4. Develop guidelines for inclusion of courses within the DEEP
5. Encourage updating DEEP via the IEA home-page
6. Promote DEEP more widely

Results

The chair for this subcommittee remains vacant so progress has been limited to a maintenance function, conducted by Andy Marshall who has updated the Directory as requests for inclusion have been submitted. He has also maintained the updating of the website (www.iea.cc/directory). A new volunteer for chairperson is still needed.

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Professional Standards (PS) Subcommittee

Chair: Dr Carol Slappendel (resigned September 2005)

Endorsement of Certifying Bodies Subcommittee

Members: Stephen Legg (ex officio), Francois Daniellou, Jerry Duncan, Harvey Cohen.

Goals for 2005-6

1. The Subcommittee, in conjunction with the Chair of the IEA Standing Committee for Professional Standards and Education, will actively promote the endorsement option to existing certification schemes, particularly CREE.
2. The Subcommittee will provide advice and guidance as necessary and appropriate within the means of its' resources to Federated Societies or any other groups which are, or are considering, developing certification schemes.

Results

The IEA certification endorsement scheme was actively promoted to CREE and FEES as well as to some Latin American and Asian countries but no applications for endorsement were received during the period. A further query about the endorsement process was received from Japan. New Zealand has just completed a substantial revision of its certification scheme regulations and structure. It requested and was sent application forms in May 2006.

IEA Code of Ethics Review Subcommittee

Members: Stephen Legg (ex officio), Shrawan Kumar, Ian Randle.

Goals for 2005/6

1. Finalise and submit the IEA Code of Ethics Review Report to EC and WC for approval.
2. Submit the revised IEA Code of Conduct to WC as a voting item in 2006.

Results

The IEA Code of Ethics Review Report was finalised. It contains an analysis of similar codes used by other organisations, a detailed analysis of the existing IEA Code of Ethics and the results of initial consultation with CREE and BCPE as well as with the Nordic Ergonomics Society at its annual conference _NES2004, in which 'Ethics in working life' was the central theme. The Report recommended that a new code be adopted by the IEA, called the 'IEA Code of Conduct for Ergonomists (COCE)', on the grounds that it is shorter (only two pages), more concise yet contains as much relevant material as the IEA Code of Ethics. In addition it is more firmly based on the

four fundamental principles of ethical conduct: beneficence (doing good); veracity (truthfulness, accuracy and integrity); autonomy (respect for persons); justice (fairness), and is more clearly relevant for ergonomists rather than mainly ergonomics researchers.

Both the Review Report and the proposed new COCE were submitted for consideration by EC in August 2005 and sent for comment in April/May 2006 to all IEA Presidents and Council Members. Although the response rate was less than desirable, all respondents commented without exception that the Review Report was very good, thorough etc. Specific comments made by respondents were addressed in a revision of the IEA Code of Ethics Review Report, dated 23 May 2006. This report recommended that the revised new COCE, also dated 23 May 2006, be submitted as a voting item at the 2006 Council meeting.

Ergonomics Education (EE) Subcommittee

Chair: Stephen Legg. Members: Robin Hooper (deceased), Tom Smith, Robin Burgess-Limerick, Gaur Ray, Bob Bridger, Enda Fallon, Theresia Pawitra

Goal

Prepare an IEA document: 'Guidelines on the minimum specifications for a Masters degree in Ergonomics/Human Factors (including guidance about distance learning)'

Results

A joint IEA/APERGO workshop on Ergonomics Education in July 2004 facilitated the development of a first draft version of an IEA Guideline on the minimum specifications for a Masters degree in Ergonomics/Human Factors (including guidance about distance learning). This was submitted for comment to the subcommittee members in February 2005 and presented in joint IEA workshops at the UK Ergonomics Society conference on 6 April 2005 and the South East Asia Ergonomics Societies conference on 25 May 2005. Plans for an additional IEA workshop in August 2005 with the Association of Canadian Ergonomists (ACE) were not realised due to unavailability of key participants. Following the PSE EE annual report to IEA Council in July 2005, the membership of the subcommittee was expanded considerably in August 2005.

Based on feedback from the workshops, a revised version of the Guideline was prepared and presented for discussion at a joint IEA/HFES colloquium at the Human Factors and Ergonomics Society (HFES) meeting on 26 September 2005 and at a joint IEA/Federation of European Ergonomic Societies (FEES)/ Centre for Registration of European Ergonomists (CREE)/Nordic Ergonomics Societies (NES) workshop at the NES2005 conference on 10 October 2005. Although comments from the NES2005 workshop were generally positive, it was clear that there were many issues that required further consideration. The outcome of the HFES colloquium also indicated that much more discussion was needed before an international consensus could be reached. It is therefore recommended that the PSE subcommittee should build on the outcomes of the already extensive international consultation by holding further workshops which focus on the attainment of greater international consensus than exists at present.

6.6.2. Voting item

Voting Item for IEA Council meeting July 2006

The Professional Standards and Education IEA Code of Ethics Review Subcommittee recommends that IEA Council approves:

Replacement of the current IEA Basic Document: 'IEA Code of Ethics' by a new IEA Basic document entitled: 'IEA Code of Conduct for Ergonomists'

Supporting Statement

Introduction

The IEA has had a Code of Ethics (COE) in place for some years. It comprises five sections called: Professional Conduct, Professional Qualifications, Practice, Research, and Disciplinary Action.

In 2003, the Chair of the IEA Standing Committee for Professional Standards and Education (PSE), John Wilson, identified that it was timely to review the Code of Ethics. The review was undertaken by a subcommittee, comprising Carol Slappendel, Shrawan Kumar, Ian Randle and Stephen Legg.

The review

The review examined the relevance and suitability of the IEA COE by examining 4 relevant codes of ethics and codes of conduct (i. Code of Conduct for those registered as European Ergonomists (CREE), ii. Board for Certification in Professional Ergonomics (BCPE) Code of Ethics and Professional Conduct, iii. Board for Certification of New Zealand Ergonomists Professional Code of Conduct, iv. Canadian College for the Certification of Professional Ergonomists Code of Ethics for Ergonomists), by seeking opinions from representatives from two large professional certification schemes (CREE and BCPE) and by considering information arising from the Nordic Ergonomics Society (NES2004) conference, which was organised around the theme: Working life ethics.

Findings

The current COE already contains most of the important material required, but it is lengthy, complex and repetitive in places. The other codes examined were succinct, but focused on professional conduct. There was limited reference to research ethics. The NES2004 conference on Working life ethics indicated that there was a clear need for guidance on ethics, particularly amongst ergonomics practitioners. There was also a clear need for guidance on the distinction between ethics and professional practice. If this is true in the Nordic countries, it is likely to be just as true elsewhere in the world.

Conclusions

The COE contains considerable substantive material that is directly relevant for Federated Societies. However it is a lengthy and somewhat complex document (1,564 words in 4 pages) which contains repetition and unnecessary generic statements. Although it includes considerable and appropriate guidance about the professional conduct of ergonomists, this is not reflected in the title. It is not presented clearly as a guide or template for use by Federated Societies or groups or institutions of ergonomists, such as professional certification programmes.

The COE review recommended that the current IEA Code of Ethics needed to be revised so that it is shorter, simpler and more concise, but still refers to both professional conduct and research ethics.

The proposed new IEA Basic Document: 'IEA Code of Conduct for Ergonomists'

The review subcommittee then identified the specific changes that were needed to action the above recommendation. This resulted in a new proposed IEA Basic Document: 'IEA Code of Conduct for Ergonomists', initially dated 15 August 2005. This was more concise and included reference to both professional conduct and research ethics. It represented a substantial revision of the current IEA Code of Ethics in that it was shorter, more succinct, retained most of the substantive material that is directly relevant, yet removed repetition and unnecessary generic statements.

This was submitted to the IEA Executive Committee (EC) for comment in August 2005 and sent to all IEA Federated Societies Presidents and Council Members in April 2006. Most comments were supportive and all comments that were received were addressed through minor changes in wording. Details of these are contained in Appendix 9 of the Review Report. The resultant proposed IEA Basic Document "IEA Code of Conduct for Ergonomists" dated 24 May 2006, is therefore submitted to the IEA Council for approval.

If the recommendation is approved, it will be necessary for the EC to ensure that the IEA Basic Document: 'Criteria for Endorsement of Certification Programmes' be modified so that it more clearly specifies that a certification programme should have a code of conduct and that this should be broadly aligned with the IEA Code of Conduct for Ergonomists.

Supporting documents

1. Proposed 'IEA Code of Conduct for Ergonomists' (Appendix 1 of the Code of Ethics Review Report)
2. IEA Code of Ethics Review Report, dated 24 May 2006

Proposed new IEA Basic document

24 May 2006

International Ergonomics Association Code of Conduct for Ergonomists

Introduction

High standards are important for the effectiveness and credibility of the ergonomics profession. Codes of conduct help to set out the standards required of ergonomists in terms of professional practice and research ethics. Federated societies of the International Ergonomics Association (IEA) and professional certification organisations should demand their members to abide by a code of conduct. Any reported violations must be addressed through disciplinary procedures.

The IEA seeks to promote the ergonomics discipline and the consistent application of standards in ergonomics practice within and between countries. The IEA Code of Conduct for Ergonomists provides a model document for federated societies and professional certification organisations that are developing or revising their own codes.

Ethics Principles

The IEA Code of Conduct for Ergonomists is based on fundamental ethics principles of: beneficence (doing good); veracity (truthfulness, accuracy and integrity); autonomy (respect for persons); justice (fairness).

Professional Conduct

In the conduct of their profession, ergonomists shall:

1. maintain at all times personal integrity, objectivity and respect for evidence.
2. not lay false claim to educational qualifications, professional affiliations, characteristics or capacities for themselves or their organizations.
3. refrain from making misleading, exaggerated or unjustified claims for the effectiveness of their methods, and they shall not advertise services in a way likely to encourage unrealistic expectations about the effectiveness and results of those services.
4. conduct themselves in their professional activities in ways which do not damage the interests of the recipients of their services or participants in their research and which do not undermine public confidence in their ability to perform their professional duties.
5. limit their practice to those areas of ergonomics for which they are qualified by virtue of training and/or experience, and endeavor to maintain and develop their professional competence. Any work taken outside the competence must be conducted only with proper professional supervision or they shall give every reasonable assistance towards obtaining the required services from those qualified to provide them.
6. always value the welfare of all persons affected by their work, protecting the privacy of individuals and organizations and follow ethical principles when conducting or reporting on research involving human participants.
7. not use race, ethnicity, disability, gender, sexual preference, age, religion, or national origin as a consideration in hiring, promoting, or training in any situation where such consideration is irrelevant.
8. avoid all situations that contain elements of conflict of interest, and provide full disclosure of those conflicts to all potentially affected parties.
9. take all reasonable steps to preserve the confidentiality of information acquired through their professional practice and to protect the privacy of individuals or organizations about whom the information was collected or held. Furthermore, they shall not divulge the identity of individuals or organizations without permission from those concerned.
10. neither solicit nor accept financial or material benefit from those receiving their services beyond what was contractually agreed. Furthermore, they shall not accept such rewards from more than one source for the same work without the consent of all parties concerned.
11. when becoming aware of professional misconduct by a colleague, that is not resolved by discussion with the colleague concerned, they shall take steps to bring that misconduct to the attention of appropriate authorities in the professional organisations to which they belong.

12. take all reasonable steps to ensure that those working under their supervision act with full compliance to this code of conduct.

Research

Ergonomists who conduct research should follow ethical guidelines including:

Conduct of research

All ergonomists shall comply with the Geneva Convention and Helsinki Accord in treating both human and animal participants, in addition to obeying national and local laws, and generally accepted procedures within the scientific community. In particular, ergonomists shall:

1. only proceed with research if it has promise of benefit beyond the harm that might be caused to research participants.
2. conduct only those research projects which have been approved by the local ethics review committee.
3. identify all potential sources or causes of harm in the research they are conducting. These hazards must then be effectively managed to ensure that participants are not harmed.
4. obtain prior written informed consent from human participants. Information must be provided in writing and orally to human participants in plain and clear language indicating the terms of participation, particularly about any hazards involved. Occasionally there may be exceptions in which the human participant is not able to consent. In such cases prior informed consent should be obtained from a person with (preferably legal) responsibility for the participant.
5. empower human participants to terminate their involvement in the research at any time without prejudice.
6. terminate any research process or experiment immediately if the participant's exposure to hazards exceeds commonly accepted thresholds. Further, if necessary, medical treatment must be provided.
7. keep the identity of human participants confidential unless permission is obtained from the participants.
8. not coerce anyone to participate in research nor use undue monetary reward to induce participants to take risks they would not otherwise take.
9. ensure these ethical guidelines are followed by collaborators, assistants, students, and employees.

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Reporting of research

In pursuit of their profession, ergonomists who are engaged in research and scholarly activities have an obligation to report their work to the scientific community. In particular, ergonomists shall:

- ensure the integrity and accuracy of the data recorded before reporting results and conclusions to the scientific community.
- identify original sources (i.e. not plagiarise) and give credit to those who have contributed on a professional level to the work.
- pay special attention to the communication of research findings so as to facilitate their practical application.
- maintain the highest degree of objectivity when they are reviewing or editing works of other colleagues. In particular, they must ensure that their objectivity is not impaired by their own views even if the data and results reported conflict with their own previously published work.

6.6.3. Draft of Code of Conduct

IEA Code of Ethics Review (24 May 2006)

Professional Standards and Education Committee
IEA Code of Ethics Review Subcommittee

Chair

Carol Slappendel
(July 2003-September 2005)
Stephen Legg
(October 2005-July 2006)

Members

Shrawan Kumar
Ian Randle
Stephen Legg

Summary

The IEA has had a Code of Ethics in place for some years. In 2003, the IEA Professional Standards and Education Committee considered that it was timely to review this document.

The review was conducted in 2004/5. It examined the relevance of the current IEA Code of Ethics. This involved conducting a general review of relevant codes of ethics and codes of conduct, seeking general opinions about the current IEA code and its relevance and considering information arising from the Nordic Ergonomics Society's conference NES2004, which was organised around the theme: Working life ethics. In 2005/6 comments from the IEA Executive Committee and Federated Societies' Presidents and Council members were sought and addressed.

The review concludes that the current IEA Code of Ethics should be revised to provide more concise guidance on ethical principles, professional conduct and research ethics for ergonomists. The review identifies the specific changes needed to action this conclusion. This has resulted in a proposed new IEA Basic Document: 'IEA Code of Conduct for Ergonomists' (see appendix 1).

If the new document were to be approved by the IEA Council, it would be appropriate to modify a related IEA Basic Document: 'Criteria for Endorsement of Certification Programmes' so that it more clearly specifies that a certification programme should have a Code of Conduct and that this should be broadly aligned with the IEA Code of Conduct for Ergonomists.

The IEA Code of Ethics Review Subcommittee therefore submits for approval by the IEA Council at its 2006 meeting, that the IEA Council:

Replacement of the current IEA Basic Document: 'IEA Code of Ethics' by a new IEA Basic document entitled: 'IEA Code of Conduct for Ergonomists'

Introduction

The IEA has had a Code of Ethics in place for some years. It is a lengthy document (1,564 words) that comprises five sections called: Professional Conduct, Professional Qualifications, Practice, Research, and Disciplinary Action (see Appendix 2).

In 2003, the Chair of the IEA Standing Committee for Professional Standards and Education, John Wilson, identified that it was timely to review the Code and make some improvements including:

- Changing the name of the Code of Ethics to a Code of Conduct for Ergonomists
- Separating the Code of Ethics into a Code of Conduct and a body of Ethical Principles for Research with Human and Animal Participants
- Presenting the Code more clearly as a guide or template for use by Federated Societies or groups or institutions of ergonomists, such as professional certification programmes.

A review has subsequently been undertaken by a Subcommittee of the current IEA Standing Committee for Professional Standards and Education, comprising Carol Slappendel (Chair from July 2003 to September 2005), Shrawan Kumar, Ian Randle and Stephen Legg (Chair from October 2005 to July 2006).

The review examined the relevance of the current IEA Code of Ethics. This involved conducting a review of relevant codes of ethics and codes of conduct, seeking general opinions about the current IEA code and its relevance and considering information arising from the Nordic Ergonomics Society (NES2004) conference, which was organised around the theme: Working life ethics. It also included consideration of revision comments from IEA Executive Committee members and IEA Presidents and Council Members in 2005/6.

General review of relevant codes of ethics and codes of conduct

The review identified four codes from ergonomics organizations that were directly relevant:

- a. The Code of Conduct for those registered as European Ergonomists (CREE) (Appendix 4). This code is short, comprising nine key points relating primarily to standards of professional conduct such as competence, integrity, equity and fairness. Maintenance of high ethical standards is mentioned prominently. There is no specific guidance about research ethics.
- b. The Board for Certification in Professional Ergonomics (BCPE) Code of Ethics and Professional Conduct (Appendix 5). This code is similarly short, comprising a preamble and eight principles covering responsibility for professional judgement, honesty, fairness, impartiality, integrity, development and maintenance of competence, avoidance of misrepresentation, deception avoidance and conflict of interest, equity, confidentiality and public welfare and interest. There is no specific guidance about research ethics.
- c. The Board for Certification of New Zealand Ergonomists (BCNZE) Professional Code of Conduct (Appendix 6). This is called a Professional Code of Conduct but, as it is based on the IEA Code of Ethics, it also includes guidance on research ethics.
- d. The Canadian College for the Certification of Professional Ergonomists Code of Ethics for Ergonomists (Appendix 7). This Code of Ethics does not appear to be based on the IEA Code of Ethics. It is of medium length and quite detailed. A preamble identifies it as a guidance tool, yet also discusses mandatory and voluntary adherence. It contains eight sections: definitions, professional responsibilities, responsibilities and obligations toward the public, profession, clients, colleagues, discipline and disciplinary processes. Although it is called a code of ethics, in reality, it almost exclusively deals with professional conduct.

Conclusion

The word 'conduct' is referred to more often in the titles of the four codes than 'ethics', reflecting their association with professional certification schemes. All four codes refer to similar standards of professional conduct. Only one, the New Zealand replicate of the IEA Code of Ethics, refers to research ethics.

Relevance of the current IEA Code of Ethics to professional certification programmes

The IEA is particularly concerned about ensuring that high standards are promoted and maintained in relation to the design and operation of professional certification programmes for ergonomists and human factors professionals. The IEA has produced criteria for such programmes and has a system for programme endorsement by the IEA.

Professional certification programmes should have a code of conduct in place to guide the activities of certified members. The IEA Endorsement Criteria need to be amended to make this requirement more explicit than it is currently.

If the IEA is relevant and useful we would expect to see its guidance materials being used by existing and new certification programmes. To this end, the IEA Code of Ethics Review Subcommittee contacted a number of certification programmes seeking general opinions on the IEA Code of Ethics and whether it had had any impact. Responses were received from the CREE and BCPE certification schemes, as follows:

CREE in Germany: email message from Prof. Dr.H.Strasser

"In our System of Certification of Professional Ergonomists according to CREE we use a German translation of the CREE Code of Conduct. This Code (see Appendix 4) comprises nine elementary topics, which seem to stem from the IEA Code of Ethics existing at the time when the Harmonized European Training Programmes for the Ergonomics Profession (HETPEP) and the CREE Certification System in 1992 have been established. To my personal opinion, the present Code of Ethics is too extensive. It should be shortened, focussing on essential ergonomics-related topics and not addressing all "human rights".

BCPE: email message from Kris Rightmire, Executive Administrator

"The BCPE's Code of Ethics and Professional Conduct was adopted in May of 2002 (see Appendix 5). If memory serves me correctly, I believe the BCPE's Code was modelled after those of other certification organizations (non-ergonomics) here in the United States with whom we have established cordial, working relationships, namely, the American Board of Industrial Hygiene (ABIH), www.abih.org, and the Board of Certified Safety Professionals (BCSP), www.bcsp.org. I do not recall if IEA's Code was taken into consideration by the committee charged with developing our Code, but would guess no."

Conclusion

The impact of the IEA Code of Ethics on the two largest professional certification programmes appears to be variable. Feedback from CREE suggests that the IEA Code could be simplified.

Nordic Ergonomics Society (NES2004) conference theme: Working life ethics

To assist the IEA Code of Ethics Review subcommittee, the Nordic Ergonomics Society conference committee

agreed to have for its 2004 conference (NES2004) a central theme: Ethics in working life. A report and the outcomes are attached in appendix 8 and can be found at the web site www.nes2004.dk.

The conference included three keynote presentations about ethics in praxis and research (ethics of science, ethics of consultancy work, ethics in the company) and extensive group discussion about the nature, content and practical use of Codes of Ethics and Professional Conduct in ergonomics and by ergonomists.

There was great diversity in the knowledge and understanding of ethics between ergonomists in the Nordic countries and whether ethical considerations were adequately included in research projects and consultancy tasks. The experience of focussing the NES2004 conference on the theme of 'Working life ethics' was successful in helping to raise the awareness of Nordic ergonomists about ethics, both in research and in praxis.

Conclusion

There was a clear need for guidance on ethics, particularly amongst ergonomics practitioners. There was also a clear need for guidance on the distinction between ethics and professional practice. If this is true in the Nordic countries, it is likely to be just as true elsewhere in the world.

Conclusions

The current IEA Code of Ethics (Appendix 2) already contains most of the important material required, but it is lengthy and complex.

The other codes that were examined (Appendices 4-7) were succinct, but focused on professional conduct. There is limited reference to research ethics.

This review concludes that the current IEA Code of Ethics needs to be revised so that it simpler but still refers to both professional conduct and research ethics.

The proposed new IEA Basic Document: 'IEA Code of Conduct for Ergonomists'

The review subcommittee then identified the specific changes that were needed to action the above recommendation. This resulted in a new proposed IEA Basic Document: 'IEA Code of Conduct for Ergonomists', initially dated 15 August 2005.

An analysis of the differences between the current IEA Code of Ethics and the proposed new 'IEA Code of Conduct for ergonomists' document of 15 August 2005 is in Appendix 3.

The proposed new IEA Code of Conduct for ergonomists' document of 15 August 2005 is more concise and includes reference to both professional conduct and research ethics. It represented a substantial revision of the current IEA Code of Ethics in that it was shorter, more succinct, retains most of the substantive material that is directly relevant, yet has removed repetition and unnecessary generic statements.

The proposed new IEA Code of Conduct for Ergonomists' document of 15 August 2005 was submitted to the IEA Executive Committee (EC) for comment in August 2005 and sent to all IEA Federated Societies Presidents and Council Members in April 2006. A tabulation of the comments received and subsequent minor changes made are given in Appendix 9.

The resultant proposed new IEA Basic Document "IEA Code of Conduct for ergonomists" dated 24 May 2006, is in Appendix 1.

Recommendations to the IEA Council

The Professional Standards and Education IEA Code of Ethics Review Subcommittee recommends the following for approval by the IEA Council at its July 2006 meeting:

It is recommended that IEA Council approves:

Replacement of the current IEA Basic Document: 'IEA Code of Ethics' by a new IEA Basic document entitled: 'IEA Code of Conduct for Ergonomists'

Appendix 1. of the Proposed new IEA Basic document

24 May 2006

International Ergonomics Association Code of Conduct for Ergonomists

Introduction

High standards are important for the effectiveness and credibility of the ergonomics profession. Codes of conduct help to set out the standards required of ergonomists in terms of professional practice and research ethics. Federated societies of the International Ergonomics Association (IEA) and professional certification organisations should demand their members to abide by a code of conduct. Any reported violations must be addressed through disciplinary procedures.

The IEA seeks to promote the ergonomics discipline and the consistent application of standards in ergonomics practice within and between countries. The IEA Code of Conduct for Ergonomists provides a model document for federated societies and professional certification organisations that are developing or revising their own codes.

Ethics Principles

The IEA Code of Conduct for Ergonomists is based on fundamental ethics principles of: beneficence (doing good) ; veracity (truthfulness, accuracy and integrity); autonomy (respect for persons); justice (fairness).

Professional Conduct

In the conduct of their profession, ergonomists shall:

13. maintain at all times personal integrity, objectivity and respect for evidence.
14. not lay false claim to educational qualifications, professional affiliations, characteristics or capacities for themselves or their organizations.
15. refrain from making misleading, exaggerated or unjustified claims for the effectiveness of their methods, and they shall not advertise services in a way likely to encourage unrealistic expectations about the effectiveness and results of those services.
16. conduct themselves in their professional activities in ways which do not damage the interests of the recipients of their services or participants in their research and which do not undermine public confidence in their ability to perform their professional duties.'
17. limit their practice to those areas of ergonomics for which they are qualified by virtue of training and/or experience, and endeavor to maintain and develop their professional competence. Any work taken outside the competence must be conducted only with proper professional supervision or they shall give every reasonable assistance towards obtaining the required services from those qualified to provide them.
18. always value the welfare of all persons affected by their work, protecting the privacy of individuals and organizations and follow ethical principles when conducting or reporting on research involving human participants.
19. not use race, ethnicity, disability, gender, sexual preference, age, religion, or national origin as a consideration in hiring, promoting, or training in any situation where such consideration is irrelevant.
20. avoid all situations that contain elements of conflict of interest, and provide full disclosure of those conflicts to all potentially affected parties.
21. take all reasonable steps to preserve the confidentiality of information acquired through their professional practice and to protect the privacy of individuals or organizations about whom the information was collected or held. Furthermore, they shall not divulge the identity of individuals or organizations without permission from those concerned.
22. neither solicit nor accept financial or material benefit from those receiving their services beyond what was contractually agreed. Furthermore, they shall not accept such rewards from more than one source for the same work without the consent of all parties concerned.
23. when becoming aware of professional misconduct by a colleague, that is not resolved by discussion with the colleague concerned, they shall take steps to bring that misconduct to the attention of appropriate authorities in the professional organisations to which they belong.
24. take all reasonable steps to ensure that those working under their supervision act with full compliance to this code of conduct.

Research

Ergonomists who conduct research should follow ethical guidelines including:

Conduct of research

All ergonomists shall comply with the Geneva Convention and Helsinki Accord in treating both human and animal participants, in addition to obeying national and local laws, and generally accepted procedures within the scientific community. In particular, ergonomists shall:

10. only proceed with research if it has promise of benefit beyond the harm that might be caused to research participants.
11. conduct only those research projects which have been approved by the local ethics review committee.
12. identify all potential sources or causes of harm in the research they are conducting. These hazards must then be effectively managed to ensure that participants are not harmed.
13. obtain prior written informed consent from human participants. Information must be provided in writing and orally to human participants in plain and clear language indicating the terms of participation, particularly about any hazards involved. Occasionally there may be exceptions in which the human participant is not able to consent. In such cases prior informed consent should be obtained from a person with (preferably legal) responsibility for the participant.
14. empower human participants to terminate their involvement in the research at any time without prejudice.
15. terminate any research process or experiment immediately if the participant's exposure to hazards exceeds commonly accepted thresholds. Further, if necessary, medical treatment must be provided.
16. keep the identity of human participants confidential unless permission is obtained from the participants.
17. not coerce anyone to participate in research nor use undue monetary reward to induce participants to take risks they would not otherwise take.
18. ensure these ethical guidelines are followed by collaborators, assistants, students, and employees.

Reporting of research

In pursuit of their profession, ergonomists who are engaged in research and scholarly activities have an obligation to report their work to the scientific community. In particular, ergonomists shall:

- ensure the integrity and accuracy of the data recorded before reporting results and conclusions to the scientific community.
- identify original sources (i.e. not plagiarise) and give credit to those who have contributed on a professional level to the work.
- pay special attention to the communication of research findings so as to facilitate their practical application.
- maintain the highest degree of objectivity when they are reviewing or editing works of other colleagues. In particular, they must ensure that their objectivity is not impaired by their own views even if the data and results reported conflict with their own previously published work.

Appendix 2

IEA Code of Ethics (Current)

The International Ergonomics Association is an umbrella body of Federated societies, Affiliated societies and Sustaining members around the world including developed and developing countries. The global objectives of the International Ergonomics Association are:

1. to bring together organizations and persons with interest in ergonomics and human factors to promote creation of ergonomic knowledge, basic or applied, through international activities and cooperation
2. to promote the practice of ergonomics through international activities and cooperation to benefit human kind of all denominations in every facet of the entire human life.

The International Ergonomics Association Code of Ethics is compatible with its organization and objective.

Professional conduct

The professional conduct of all members of the International Ergonomics Association must be beyond reproach in keeping with the highest standards of professionalism. In particular, in pursuit of their profession, the members must pay special attention to the following:

1. they should maintain at all times personal integrity, objectivity and respect for evidence
2. they should conduct themselves such as to never compromise the integrity of their profession
3. they should endeavor to promote the cause of ergonomics and disseminate the new knowledge towards the benefit of humankind individually and collectively
4. they should always value the welfare of all persons affected by their work whether or not this is within the terms of reference of their employment
5. they should not use race, disability, gender, sexual preference, age, religion, or national origin as a consideration in hiring, promoting, or training in any job where such consideration is irrelevant to the demands of the jobs
6. they should show an impeccable regard for social and moral expectations of the community in which they work
7. they should not use their position as a teacher, a granting or contracting official, an employer or an employee, or any other position of influence to coerce or harass others
8. they should avoid all situations that contain elements of conflict of interest and must provide full disclosure of those conflicts to all potentially affected parties
9. they should take all reasonable steps to ensure that those working under their supervision act with full compliance to the code of ethics
10. when becoming aware of professional misconduct by a colleague, that is not resolved by discussion with the colleague concerned, they should take steps to bring that misconduct to the attention of appropriate authorities in their national ergonomics society as well as to the attention of the Secretary general of the International Ergonomics Association, doing so without malice.

Professional qualifications

In pursuit of their profession, the members of the International Ergonomics Association:

1. should have the responsibility of accurately representing their professional qualifications and the institutions they represent
2. should not lay false claim to professional qualifications, affiliations, characteristics or capacities for themselves or their organizations
3. should present their educational background in detail where a brief summary statement of qualifications would be deceptive or misleading. Furthermore, they should not allow their names to be used in connection with their services in such a way as to misrepresent the nature and efficiency of their services. When such a misrepresentation has occurred, the members should do everything to correct the situation as soon they become aware
4. should endeavor to maintain and develop their professional competence. While recognizing and working within this limit, they shall strive to identify and overcome the factors restricting their competence.

Practice

In pursuit of their profession, the members of the International Ergonomics Association :

1. Should limit their practice to those areas of ergonomics for which they are qualified by virtue of training and/or experience and not extend their practice beyond the scope of their competence. Any work taken outside the competence must be conducted only with proper professional supervision.
2. When requested to provide services outside their professional competence, should provide all reasonable as-

sistance to obtaining such services from those who are qualified to provide them.

3. Should not make misleading, exaggerated or unjustified claims for effectiveness of their methods. Furthermore, they should not advertise their services in a way to create unrealistic expectations of the effectiveness of their services.

4. Should not use their affiliation with the International Ergonomics Association or its members societies in a way to create an impression of tacit approval by these organizations.

5. Should avoid exaggeration, superficiality, deceptions and sensationalism. They should also avoid any misrepresentation in all statements, presentations, and submission to the client, the employer, or media.

6. Should hold the safety of the person, property, and health of individuals affected by their work of paramount importance

7. Should take all reasonable steps to preserve the confidentiality of information acquired through their professional practice and to protect the privacy of individuals or organizations about whom the information was collected or held. Furthermore, they should not divulge the identity of individuals or organizations without expressed permission from those concerned.

8. Should neither solicit nor accept financial or material benefit from those receiving their services beyond what was contractually agreed. Furthermore, they should not accept such rewards from more than one source for the same work without the consent of all parties concerned.

9. Should not advertise their service nor solicit employment in any way which might bring ergonomics or professional colleagues in disrepute.

10. Should refrain from offering professional services to a person or organization which they know is receiving similar services from an other member except with the latter's knowledge.

11. Should refrain from adverse public comment or criticism of the views, services or conduct of a professional colleague unless the person's activity endangers the rights or wellbeing of others.

Research

In pursuit of their profession, members of the International Ergonomics Association should endeavor to provide opportunity and encouragement for the development and advancement of all those with whom he/she comes in contact. These members who are engaged in research should follow the following set of principles for the conduct and reporting of their research.

Conduct of research

All members should comply with the Geneva Convention and Helsinki Accord in treating both human and animal subjects, in addition to obeying national and local laws and regulations, as well as generally accepted procedures within the scientific community. In particular the members:

1. should determine if the conduct of their research has a promise of a benefit beyond the limit of the hazard exposure to their subject. They should also determine carefully and as accurately as possible the exposure to hazard and stress to their research subject and divulge them accurately

2. should determine carefully and as accurately as possible the degree of hazard present in the research they are conducting and avoid exposure to their research subject as much as possible to ensure that no harm comes to the human subject. The members should ensure that any experiment is terminated immediately if the subject's exposure to hazard exceeds commonly accepted threshold. Further, if necessary, a medical treatment must be provided

3. should ensure that such ethical principles and practices are followed in their research laboratories by their collaborators, assistants, students, and employees

4. should conduct only those research project which have been approved by the local ethics review committee. Furthermore, the members must establish an informed consent form for human subjects. The information must be provided to human subjects in plain and clear language indicating the terms of participation, particularly with respect to any elements of risks, stress, or hazard involved in the entire experiment

5. should empower the human subjects to terminate the experiment at any time when they deem it necessary without any prejudice. The identity of human subjects must always be kept confidential unless permission is obtained from the subjects

6. should not coerce any potential human research subject to participate as a subject in a research project nor use undue monetary reward to induce subjects to take risks they would not otherwise take.

Reporting of research

In pursuit of their profession, those members of the International Ergonomics Association who are engaged in research and scholarly activities have an obligation to report their work to general scientific community and to give credit to those who have contributed on a professional level to that work.

1. This reporting can be through the means of a publication in a journal or presentation in a scientific meeting of any ergonomics society.
2. Members should ensure the integrity and accuracy of the data recorded and conclusions drawn therefrom before reporting to general scientific community. It is incumbent upon the members to maintain the highest standards of scientific rigor in experimentation, analysis and results reported.
3. It is incumbent upon the members to maintain the highest degree of objectivity when they are reviewing or editing works of other colleagues. In particular, they must ensure that their objectivity is not impaired by their own views even if the data and results reported conflict with their own previously published work.
4. The members should not plagiarize. The work and quotation taken from others must be duly recognized by identifying the original source.
5. The members should pay special attention to communication of research in a way to optimize understanding of practitioners for potential industrial application if so chosen. Therefore, the design implication must be addressed where applicable.

Disciplinary action

The Federated Societies may contemplate appropriate disciplinary action for the violation of their adopted "Code of ethics" in whole or in part.

Appendix 3

An analysis of the differences between the current IEA Code of Ethics and the proposed new IEA document

Current	Proposed	Comment
<p>IEA Code of Ethics The International Ergonomics Association is an umbrella body of Federated societies, Affiliated societies and Sustaining members around the world including developed and developing countries. The global objectives of the IEA are:</p> <ol style="list-style-type: none"> 1. to bring together organizations and persons with interest in ergonomics and human factors to promote creation of ergonomic knowledge, basic or applied, through international activities and cooperation 2. to promote the practice of ergonomics through international activities and cooperation to benefit human kind of all denominations in every facet of the entire human life. <p>The International Ergonomics Association Code of Ethics is compatible with its organization and objective.</p>	<p>International Ergonomics Association Code of Conduct for Ergonomists <i>Introduction</i> <i>High standards are important for the effectiveness and credibility of the ergonomics discipline. Codes of conduct help to set out the standards required of ergonomists in terms of professional practice and research ethics. Federated societies of the International Ergonomics Association (IEA) and professional certification organisations should require their members to abide by codes of conduct and address any reported violations through disciplinary procedures.</i></p> <p><i>The IEA seeks to promote the ergonomics discipline and consistency of standards in ergonomics practice within and between countries. The IEA Code of Conduct provides a model document for federated societies and professional certification organisations that are developing or revising their own codes.</i></p> <p><i>The IEA Code of Conduct is based on fundamental ethical principles relating to beneficence (do good), non-maleficence (do no harm), respect for persons, justice and veracity.</i></p>	<p>The name of the Current Code of Ethics has been changed to Code of Conduct to increase the focus on standards of practice. The reference to ergonomists also makes clear whom the code is intended for. The new introduction focuses more on the importance of standards for ergonomists, and less on the objects of the IEA.</p>
<p>Professional conduct The professional conduct of all members of the International Ergonomics Association must be beyond reproach in keeping with the highest standards of professionalism. In particular, in pursuit of their profession, the members must pay special attention to the following:</p> <ol style="list-style-type: none"> 1. they should maintain at all times personal integrity, objectivity and respect for evidence 2. they should conduct themselves such as to never compromise the integrity of their profession 	<p>Professional Conduct In the conduct of their profession, ergonomists shall:</p> <p>Professional Conduct Clause 1: maintain at all times personal integrity, objectivity and respect for evidence.</p>	<p>References in the Current Code to 'members' of the IEA have been deleted. Federated societies, rather than individual ergonomists, are members of the IEA.</p>
<ol style="list-style-type: none"> 3. they should endeavor to promote the cause of ergonomics and disseminate the new knowledge towards the benefit of humankind individually and collectively 		<p>Same clause retained in Proposed Code.</p> <p>No equivalent clause included in Proposed Code. The clause in the Current Code is too general - better to specify key elements of conduct</p> <p>No equivalent clause has been included in the Proposed Code because the clause in the Current Code is too general.</p>

4. they should always value the welfare of all persons affected by their work whether or not this is within the terms of reference of their employment

Professional Conduct Clause 4: always value the welfare of all persons affected by their work, and follow ethical principles when conducting or reporting on research involving human participants.

The clause in the Current Code has been extended in the Proposed Code to include reference to research ethics. As such it provides a link between the professional conduct part of the Code and the Ethical Guidelines for Research.

5. they should not use race, disability, gender, sexual preference, age, religion, or national origin as a consideration in hiring, promoting, or training in any job where such consideration is irrelevant to the demands of the jobs

Professional Conduct Clause 5: not use race, disability, gender, sexual preference, age, religion, or national origin as a consideration in hiring, promoting, or training in any situation where such consideration is irrelevant.

Minor wording change in the Proposed Code makes the clause clearer.

6. they should show an impeccable regard for social and moral expectations of the community in which they work

The clause in the Current Code is very general. No equivalent clause has been included in the Proposed Code.

7. they should not use their position as a teacher, a granting or contracting official, an employer or an employee, or any other position of influence to coerce or harass others

No equivalent clause in the Proposed Code as the intent is covered by aspects of other clauses elsewhere.

8. they should avoid all situations that contain elements of conflict of interest and must provide full disclosure of those conflicts to all potentially affected parties

Professional Conduct Clause 6: avoid all situations that contain elements of conflict of interest, and provide full disclosure of those conflicts to all potentially affected parties.

Minor wording change only in the Proposed Code

9. they should take all reasonable steps to ensure that those working under their supervision act with full compliance to the code of ethics

Professional Conduct Clause 10: take all reasonable steps to ensure that those working under their supervision act with full compliance to this code of conduct

Minor wording change only in the Proposed Code

10. when becoming aware of professional misconduct by a colleague, that is not resolved by discussion with the colleague concerned, they should take steps to bring that misconduct to the attention of appropriate authorities in their national ergonomics society as well as to the attention of the Secretary general of the international Ergonomics Association, doing so without malice.

Professional Conduct Clause 9: when becoming aware of professional misconduct by a colleague that is not resolved by discussion with the colleague concerned, take steps to bring that misconduct to the attention of appropriate authorities in the professional organisations to which they belong.

Reference to ergonomics societies in the Current Code has been made more generic in the Proposed Code to allow for reporting to professional certification organizations

Professional qualifications

In pursuit of their profession, the members of the International Ergonomics Association:

- 1. should have the responsibility of accurately representing their professional qualifications and the institutions they represent
- 2. should not lay false claim to professional qualifications, affiliations, characteristics or capacities for themselves or their organizations
- 3. should present their educational background in detail where a brief summary statement of qualifications would be deceptive or misleading. Furthermore, they should not allow their names to be used in connection with their services in such a way as to misrepresent the nature and efficiency of their services. When such a misrepresentation has occurred, the members should do everything to correct the situation as soon they become aware.
- 4. should endeavor to maintain and develop their professional competence. While recognizing and working within this limit, they shall strive to identify and overcome the factors restricting their competence.

Professional Conduct Clause 2: not lay false claim to educational qualifications, professional affiliations, characteristics or capacities for themselves or their organizations.

No preamble required

The three quite specific clauses in the Current Code are covered by a single clause in the Proposed Code that deals with a more general principle.

Practice

In pursuit of their profession, the members of the International Ergonomics Association:

- 1. Should limit their practice to those areas of ergonomics for which they are qualified by virtue of training and/or experience and not extend their practice beyond the scope of their competence. Any work taken outside the competence must be conducted only with proper professional supervision.
- 2. When requested to provide services outside their professional competence, should provide all reasonable assistance to obtaining such services from those who are qualified to provide them.

Professional Conduct Clause 3: limit their practice to those areas of ergonomics for which they are qualified by virtue of training and/or experience, and endeavor to maintain and develop their professional competence. Any work taken outside the competence must be conducted only with proper professional supervision.

Professional development has been included in Professional Conduct Clause 3 of the Proposed Code, which deals with qualifications.

No preamble required.

Minor wording changes in Proposed Code and inclusion of reference to professional development.

Original clause is very specific and should be dealt with through a more general principle. No equivalent clause has been included in the Proposed Code, as it seems unnecessary.

3. Should not make misleading, exaggerated or unjustified claims for effectiveness of their methods. Furthermore, they should not advertise their services in a way to create unrealistic expectations of the effectiveness of their services.

4. Should not use their affiliation with the International Ergonomics Association or its members societies in a way to create an impression of tacit approval by these organizations.

5. Should avoid exaggeration, superficiality, deceptions and sensationalism. They should also avoid any misrepresentation in all statements, presentations, and submission to the client, the employer, or media.

6. Should hold the safety of the person, property, and health of individuals affected by their work of paramount importance

7. Should take all reasonable steps to preserve the confidentiality of information acquired through their professional practice and to protect the privacy of individuals or organizations about whom the information was collected or held. Furthermore, they should not divulge the identity of individuals or organizations without expressed permission from those concerned.

8. Should neither solicit nor accept financial or material benefit from those receiving their services beyond what was contractually agreed. Furthermore, they should not accept such rewards from more than one source for the same work without the consent of all parties concerned.

9. Should not advertise their service nor solicit employment in any way which might bring ergonomics or professional colleagues in disrepute.

These clauses are covered by Professional Conduct Clause 2, which deals with not laying false claims.

This is covered by Professional Conduct Clause 4, which deals with concern for welfare of other persons.

No change.

Professional Conduct Clause 7: take all reasonable steps to preserve the confidentiality of information acquired through their professional practice and to protect the privacy of individuals or organizations about whom the information was collected or held. Furthermore, they shall not divulge the identity of individuals or organizations without permission from those concerned.

Professional Conduct Clause 8: neither solicit nor accept financial or material benefit from those receiving their services beyond what was contractually agreed. Furthermore, they shall not accept such rewards from more than one source for the same work without the consent of all parties concerned.

No change.

The clause in the Current Code is very specific and should be dealt with through a more general principle. No equivalent clause has been included in the Proposed Code.

10. Should refrain from offering professional services to a person or organization which they know is receiving similar services from another member except with the latter's knowledge.

The clause in the Current Code is unrealistic and potentially restrictive of competitive business practice. No equivalent clause has been included in the Proposed Code.

11. Should refrain from adverse public comment or criticism of the views, services or conduct of a professional colleague unless the person's activity endangers the rights or wellbeing of others.

The clause in the Current Code is very specific and should be dealt with through more general principle. No equivalent clause has been included in the Proposed Code.

Research

In pursuit of their profession, members of the International Ergonomics Association should endeavor to provide opportunity and encouragement for the development and advancement of all those with whom he/she comes in contact. These members who are engaged in research should follow the following set of principles for the conduct and reporting of their research.

Research

Ergonomists who conduct research should follow ethical guidelines including:

Title has been changed, and the preamble has been shortened. The title refers to "guidelines" which apply underlying ethical principles such as autonomy and justice.

Conduct of research

All members should comply with the Geneva Convention and Helsinki Accord in treating both human and animal subjects, in addition to obeying national and local laws and regulations, as well as generally accepted procedures within the scientific community. In particular the members:

11.0.1. Conduct of research

All ergonomists shall comply with the Geneva Convention and Helsinki Accord in treating both human and animal participants, in addition to obeying national and local laws, and generally accepted procedures within the scientific community. In particular, ergonomists shall:

Minor wording change. Also, the term 'research participants' is used in the proposed guidelines instead of 'research subjects'. The term 'participants' is considered to be more respectful and appropriate.

1. should determine if the conduct of their research has a promise of a benefit beyond the limit of the hazard exposure to their subject. They should also determine carefully and as accurately as possible the exposure to hazard and stress to their research subject and divulge them accurately.

Ethical Guideline A1: only proceed with research if it has promise of benefit beyond the harm that might be caused to research participants.

This guideline is retained but statement has been shortened. 'Participants' has replaced 'subjects'.

2. should determine carefully and as accurately as possible the degree of hazard present in the research they are conducting and avoid exposure to their research subject as much as possible to ensure that no harm comes to the human subject. The members should ensure that any experiment is terminated immediately if the subject's exposure to hazard exceeds commonly accepted threshold. Further, if necessary, a medical treatment must be provided.

3. should ensure that such ethical principles and practices are followed in their research laboratories by their collaborators, assistants, students, and employees.

4. should conduct only those research project which have been approved by the local ethics review committee. Furthermore, the members must establish an informed consent form for human subjects. The information must be provided to human subjects in plain and clear language indicating the terms of participation, particularly with respect to any elements of risks, stress, or hazard involved in the entire experiment.

5. should empower the human subjects to terminate the experiment at any time when they deem it necessary without any prejudice. The identity of human subjects must always be kept confidential unless permission is obtained from the subjects.

6. should not coerce any potential human research subject to participate as a subject in a research project nor use undue monetary reward to induce subjects to take risks they would not otherwise take.

Reporting of research

In pursuit of their profession, those members of the International Ergonomics Association who are engaged in research and scholarly activities have an obligation to report their work to general scientific community and to give credit to those who have contributed on a professional level to that work.

A3: identify all potential sources or causes of harm in the research they are conducting. These hazards must then be effectively managed to ensure that participants are not harmed.

A6: terminate any research process or experiment immediately if the participant's exposure to hazards exceeds commonly accepted thresholds. Further, if necessary, medical treatment must be provided.

A9: ensure these ethical guidelines are followed by collaborators, assistants, students, and employees.

A2: conduct only those research projects which have been approved by the local ethics review committee.

A4: use an informed consent form for human participants. The information must be provided to human participants in plain and clear language indicating the terms of participation, particularly with respect to any hazards involved.

A5: empower human participants to terminate their involvement in the research at any time without prejudice.

A7: keep the identity of human participants confidential unless permission is obtained from the participants.

A8: not coerce anyone to participate in research nor use undue monetary reward to induce participants to take risks they would not otherwise take.

Reporting of research

In pursuit of their profession, ergonomists who are engaged in research and scholarly activities have an obligation to report their work to the scientific community. In particular, ergonomists shall:

B2: identify original sources (i.e. not plagiarise) and give credit to those who have contributed on a professional level to the work.

The statement in the Current Code has been split into two guidelines. Reference to experiments has been deleted as research may involve other methods. 'Participants' replaces 'subjects'.

Reference to laboratories has been removed – as research may occur in other locations.

The statement in the Current Code has been split into two guidelines. Reference to 'experiment' has been removed so as to allow inclusion of other research approaches. 'Participants' replaces 'subjects'.

The statement in the Current Code has been split into two guidelines. Wording changes have been made consistent with those mentioned above.

Minor wording changes to simplify and clarify the meaning.

Preamble now refers to ergonomists rather than members and some content has been separated out as a guideline.

1. This reporting can be through the means of a publication in a journal or presentation in a scientific meeting of any ergonomics society

Clause in Current Code focuses too narrowly on meetings of ergonomics societies. No equivalent clause has been included in the proposed research guidelines.

2. Members should ensure the integrity and accuracy of the data recorded and conclusions drawn therefrom before reporting to general scientific community. It is incumbent upon the members to maintain the highest standards of scientific rigor in experimentation, analysis and results reported.

B1: ensure the integrity and accuracy of the data recorded before reporting results and conclusions to the scientific community.

Wording in research guidelines has been simplified.

3. It is incumbent upon the members to maintain the highest degree of objectivity when they are reviewing or editing works of other colleagues. In particular, they must ensure that their objectivity is not impaired by their own views even if the data and results reported conflict with their own previously published work.

B4: maintain the highest degree of objectivity when they are reviewing or editing works of other colleagues. In particular, they must ensure that their objectivity is not impaired by their own views even if the data and results reported conflict with their own previously published work.

Minor wording changes only in proposed research guidelines.

4. The members should pay special attention to communication of research in a way to optimize understanding of practitioners for potential industrial application if so chosen. Therefore, the design implication must be addressed where applicable.

B3: pay special attention to the communication of research findings so as to facilitate their practical application.

Wording in proposed research guidelines has been simplified.

Disciplinary action

The Federated Societies may contemplate appropriate disciplinary action for the violation of their adopted "Code of ethics" in whole or in part.

Disciplinary procedures are referred to in the Introduction of the Code of Conduct

Appendix 4

Code of Conduct for those registered as European Ergonomists (CREE)

1. In the conduct of their profession they shall maintain high standards of integrity and respect for evidence, and maintain high ethical standards.
2. They shall present themselves as having expertise and abilities only in those areas in which they are competent.
3. They shall continually endeavour both to improve their competence in ergonomics and to contribute to the body of ergonomics knowledge.
4. They shall continuously endeavour to safeguard the welfare and interests of all those affected by their work.
5. They shall protect the privacy of individuals or organisations about whom information is collected and maintain the confidentiality of personal or commercially sensitive information.
6. They shall not allow their work to be affected by considerations of religion, sex, ethnic origin, age, nationality, class, politics or any other factors extraneous to the conduct of the work in which they are engaged.
7. They shall not accept any consideration from a client beyond that which was contractually agreed, neither shall they receive benefits from other sources for the same work without the agreement of all the parties involved.
8. Where they perceive a question of professional misconduct which they cannot resolve with the individual concerned, they shall report it without malice to their national professional body or the Board of CREE.
9. They shall ensure that all those working with them are aware of this code, and that those they supervise adhere to it.

Appendix 5

Board of Certification in Professional Ergonomics Code of Ethics and Professional Conduct

The Board of Certification in Professional Ergonomics (BCPE) is dedicated to protect the consumer of ergonomists' professional services by: (a) establishing, promoting, and revising as necessary, standards that reflect the qualifications for the professional practice of ergonomics; (b) establishing procedures for the evaluation of the credentials of those who voluntarily apply for Certification by the BCPE, causing the issuance of a Certificate to those who have qualified, in the sole judgment of the BCPE, as having met the standards established by the BCPE; (c) maintaining and disseminating a directory of certificate holders on a regular basis; and (d), otherwise advancing the field as well as the practice of ergonomics. To promote and sustain the highest levels of professional and scientific performance by its certificate holders, BCPE has adopted this Code of Ethics. Certificate holders shall, in their professional ergonomics activities, sustain and advance the integrity, honor, and prestige of the ergonomics profession by adherence to these principles.

Principle 1. BCPE certificate holders shall practice their profession following recognized scientific principles and practices. The lives, health, and well-being of people depend upon their professional judgment. They are obligated to protect the health and well-being of the public.

Principle 2. BCPE certificate holders shall be honest, fair, and impartial. They shall act with responsibility and integrity in all professional actions. They shall adhere to high standards of ethical conduct with balanced care for the interests of the public, employers, clients, employees, colleagues, and the ergonomics profession. They shall avoid all conduct or practice which is likely to discredit the profession or deceive the public.

Principle 3. BCPE certificate holders shall undertake assignments only when qualified by education or experience in the specific technical fields involved. They shall accept responsibility for their continued professional development by acquiring and maintaining competence through continuing education, experience and professional training.

Principle 4. BCPE certificate holders shall avoid deceptive acts which falsify or misrepresent their academic or professional qualifications.

They shall not misrepresent or exaggerate their degree of responsibility in or for the subject matter of prior assignments. They shall not misrepresent pertinent facts concerning employers, employees, associates, or past accomplishments.

Principle 5. BCPE certificate holders shall conduct their professional relations by the highest standards of integrity and avoid compromise of their professional judgment by conflicts of interest.

Principle 6. BCPE certificate holders shall act in a manner free of bias with regard to religion, ethnicity, gender, age, national origin, or disability.

Principle 7. BCPE certificate holders shall keep confidential personal and business information obtained during the conduct of their services, except when required by law.

Principle 8. BCPE certificate holders shall seek opportunities to offer constructive service in civic affairs and work for the advancement of the safety, health, and well-being of their community and their profession by sharing their knowledge and skills.

Adopted 4 May 2002

Appendix 6

Board for Certification of New Zealand Ergonomists Professional Code of Conduct

This code is based on the 'IEA Code of Professional Conduct'. The International Ergonomics Association (IEA) is an umbrella body of Federated Societies, Affiliated Societies and Sustaining Members from developed and developing countries around the world. All members of the New Zealand Certification Scheme must abide by this code. International Ergonomics Association Code of Professional Conduct.

The professional conduct of all ergonomists must be beyond reproach in keeping with the highest standards of professionalism. In particular, in pursuit of their profession, ergonomists must pay special attention to the following:

1. They should maintain at all times professional integrity, objectivity, and respect for evidence.
2. They should conduct themselves such as to never compromise the integrity of their profession.
3. They should endeavour to promote the cause of ergonomics and disseminate new knowledge toward the benefit of humankind individually and collectively.
4. They should always value the welfare of all persons affected by their work whether or not this is within the terms of reference of their employment.
5. They should not use race, disability, gender, sexual preference, age, religion, or national origin as a consideration in hiring, promoting, or training in any job where such consideration is irrelevant to the demands of the job.
6. They should show an impeccable regard for the social and moral expectations of the community in which they work.
7. They should not use their position as a teacher, a granting of contracting official, an employer or an employee, or any other position of influence, to coerce or harass others.
8. They should avoid all situations that contain elements of conflict of interest and must provide full disclosure of those conflicts to all potentially affected parties.
9. They should take all reasonable steps to ensure that those working under their supervision act with full compliance to this code of professional conduct.
10. When becoming aware of professional misconduct by a colleague, that is not resolved by discussion with the colleague concerned, they should take steps to bring that misconduct to the attention of the appropriate ergonomics authority, doing so without malice.

Professional Qualifications

In pursuit of their profession, all ergonomists:

1. Should have the responsibility of accurately representing their professional qualifications and the institution they represent.
2. Should not lay false claim to professional qualifications, affiliations, characteristics or capabilities for themselves or their organisations.
3. Should present their educational background in detail where a brief summary statement of qualifications would be deceptive or misleading. Furthermore, they should not allow their names to be used in connection with their services in such a way as to misrepresent the nature and efficiency of their services. When such a misrepresentation has occurred, the members should do everything to correct the situation as soon as they become aware.
4. Should endeavour to maintain their professional competence, while recognising and working within this limit, and they shall strive to identify and overcome the factors restricting their competence.

Practice

In pursuit of their profession, all ergonomists:

1. Should limit their practice to those areas of ergonomics for which they are qualified by virtue of training and/or experience and not extend their practice beyond the scope of their competence. Any work taken outside their competence must be conducted only with proper professional supervision.
2. When requested to provide services outside their professional competence, they should provide all reasonable assistance to obtaining such services from those who are qualified to provide them.
3. Should not make misleading, exaggerated, or unjustified claims for effectiveness of their methods. Furthermore, they should not advertise their services in a way that creates unrealistic expectations of the effectiveness of their services.
4. Should not use their affiliation with the Board for Certification of New Zealand Ergonomists, the NZ Ergonom-

ics Society, or any other ergonomics society, in a way to create an impression of tacit approval by these organisations.

5. Should avoid exaggeration, superficiality, deception, and sensationalism. They should also avoid any misrepresentation in all statements, presentations, and submissions to the client, the employer, or media.

6. Should hold the safety of the person, property, and health of individuals potentially affected by their work of paramount importance.

7. Should take all reasonable steps to preserve the confidentiality of information acquired through their professional practice and to protect the privacy of individuals or organisations about whom the information was collected or held. Furthermore, they should not divulge the identity of individuals or organisations without express permission from those concerned.

8. Should neither solicit nor accept financial material benefit from those receiving their services beyond what was contractually agreed. Furthermore, they should not accept such rewards from more than one source for the same work without the consent of all parties concerned.

9. Should not advertise their service nor solicit employment in any way which might bring ergonomics or professional colleagues in disrepute.

10. See footnote .

11. Should refrain from adverse public comment or criticism of the views, services or conduct of a professional colleague unless the person's activity endangers the rights or well-being of others.

Research

In pursuit of their profession, all ergonomists should endeavour to provide opportunity and encouragement for the development and advancement of all those with whom he/she comes in contact. Ergonomists who are engaged in research should follow the following set of principles for the conduct and reporting of their research.

Conduct of research

All ergonomists should comply with the Geneva Convention and Helsinki Accord in treating both human and animal subjects, in addition to obeying national and local laws and regulations, as well as generally accepted procedures within the scientific community. In particular, ergonomists:

1. Should determine if the conduct of their research has the promise of benefit beyond the limits of the hazard exposure of the subjects. They should also determine carefully and as accurately as possible the exposure to the hazards and stress to their research subjects and divulge them accurately.

2. Should determine carefully and as accurately as possible the degree of hazard present in the research they are conducting and avoid exposure to their human research subjects as much as possible to ensure that no harm comes to them. Ergonomists should ensure that no harm comes to the human subject. Ergonomists should ensure that any experiment is terminated immediately if the subject's exposure to hazards exceeds commonly accepted thresholds.

3. Should ensure that ethical principles and practices are followed in their research laboratories by their collaborators, assistants, students, and employees.

4. Should conduct only those research projects which have been approved by the local ethics committee. The ergonomist must establish an informed consent form for human subjects. Information must be provided to human subjects in plain and clear language indicating the terms of participation particularly with respect to any elements of hazardous exposure, pain or injury involved in the entire experiment.

5. Should empower human research subjects to terminate their involvement in the research at any time when they deem it necessary without any prejudice. The identity of human subjects must always be kept confidential unless permission is obtained from the subjects.

6. Should not coerce any potential human research subject to participate as a subject in a research project, nor use undue monetary reward to induce subjects to take risks they would not otherwise take.

Reporting of Research

In pursuit of their profession, all ergonomists who are engaged in research and scholarly activities have an obligation to report their work to the general scientific community and to give credit to those who have contributed on a professional level to that work. This reporting can be through the means of a publication in a journal or presentation at a scientific meeting of any ergonomics society.

1. Ergonomists should ensure the integrity and accuracy of the data recorded and conclusions drawn therefrom before reporting to the general scientific community. It is incumbent upon the ergonomist to maintain the highest standards of scientific rigour in experimentation, analysis and results reported.

2. It is incumbent upon the ergonomist to maintain the highest degree of objectivity when they are reviewing or

editing works of other colleagues, In particular, they must ensure that their objectivity is not impaired by their own views even if the data and the reported results conflict with their own previously published work.

3. Ergonomists should not plagiarize. The works and quotations taken from others must be duly recognised by identifying the original source.

4. Ergonomists should pay special attention to communication of research in a way to optimize understanding of practitioners for potential industrial application, if so chosen. Therefore, the design implications must be addressed where applicable.

Appendix 7

Canadian College for the Certification of Professional Ergonomists Code of Ethics for Ergonomists

Preamble

By adhering to this Code of Ethics, members of the Canadian College for the Certification of Professional Ergonomists (CCCPE) and the Association of Canadian Ergonomists (ACE) will have common standards for practice that will not only set them apart but will also serve as an invaluable tool to guide them through situations they occasionally have to confront regarding complex professional conduct issues.

All certified professional ergonomists who are members of the CCCPE shall abide by the Code of Ethics. Adherence to this Code is also recommended for all ACE members.

To preserve the integrity of the members, a flexible and effective disciplinary process has been provided for in the Code.

In order to benefit potential clients, the Code and the members' directory shall be regularly updated and published.

Definitions

In this Code, the terms indicated below mean:

Ergonomist: an ergonomist or associate ergonomist who is a member of the Canadian College for the Certification of Professional Ergonomists (CCCPE) or of the Association of Canadian Ergonomists (ACE) who adheres to this Code on a mandatory (CCCPE) or voluntary (ACE) basis.

Professional Responsibilities

Confidentiality and professional secrecy

1. An ergonomist shall ensure secrecy of all confidential information gathered while exercising his or her profession.
2. An ergonomist shall disclose proprietary information only with permission from his or her client or when ordered to do so by law.
3. An ergonomist shall not use confidential information to harm a client or to gain direct or indirect benefits for himself or herself, or for others.
4. An ergonomist shall not, without explicit agreement from the concerned individuals, communicate or use personal information obtained during a study conducted confidentially, for means other than the ones initially stipulated. Personal information includes: information on the individual's state of health, photos and video recordings of the individual at work and information gathered during an interview.

Record keeping

1. Data collected during an investigation must be kept for at least two years.
2. Expert reports and relevant correspondence must be kept for at least four years.

Integrity

An ergonomist must fulfil his or her professional responsibilities in all honesty. He or she must particularly:

1. be objective and impartial when intervening in relationships between his or her client(s) and another party;
2. respect the facts, express an opinion based on honest beliefs and behave in such a manner as to maintain both integrity and the appearance of integrity;
3. inform the client(s) of the limitations of his or her (the ergonomist's) qualifications and the outcome;
4. immediately inform the client(s), by appropriate means, of any error he or she (the ergonomist) might have made.

Conflicts of interest

1. An ergonomist shall at all times avoid any situation where a conflict of interest or a potential conflict of interest may arise. There is a conflict of interest when the interests are such that the ergonomist's loyalty towards the client(s) might be affected.
2. An ergonomist shall notify the client(s) in the event of a conflict of interest or a potential conflict of interest as soon as he or she becomes aware of the situation; the ergonomist shall need to obtain permission to continue the project.
3. An ergonomist shall act in the general interest of the client(s) in carrying out all work. An ergonomist shall avoid situations where there is a conflict of interest or shall provide full disclosure of those conflicts to all potentially affected parties. An ergonomist shall not carry out work on the same project for two or more clients who have competing interests. An example of such a situation would be where the ergonomist is doing work for a union and the union's company seeks from the ergonomist information related to the issue under study.

Responsibilities and Obligations toward the Public

General obligation

An ergonomist shall act with honesty, integrity and impartiality and show competence at all times in his or her work.

Publicity

An ergonomist may present his or her competence and expertise in any advertisement or presentation.

However, no ergonomist can:

- claim skills he or she does not have;
- produce or place a misleading advertisement;
- act to the detriment of his or her colleagues.

Responsibilities and Obligations toward the Profession

1. An ergonomist shall always seek to increase his or her competence.
2. An ergonomist shall contribute to the development of the profession as much as possible e.g.
 - by sharing his or her knowledge and experience with other colleagues,
 - by providing training and mentorship in ergonomics,
 - by contributing to his or her professional associations such as CCCPE and ACE.

Responsibilities and Obligations toward Clients

1. Subject to his or her responsibilities and obligations to others, an ergonomist shall act in the interest of the client(s) and within the limits of his or her contract.
2. An ergonomist shall provide to the client(s) clear information as to the services to be provided.

Responsibilities and Obligations toward Colleagues

1. Where an ergonomist is faced with professional misconduct on the part of a colleague, he or she shall attempt to resolve the issue directly with the interested party. If the issue cannot be resolved by discussion between the two, he or she shall submit the issue to the President of the CCCPE or ACE.
2. Where there is a difference of opinion, an ergonomist shall avoid undermining a colleague's reputation.

Discipline

1. An ergonomist shall respect this Code. Adherence to the Code in writing is mandatory for all certified professional ergonomists who are members of the CCCPE. Adherence to the Code is recommended for all ACE members.
2. The CCCPE and ACE shall see to the proper communication and training of their members regarding professional conduct. They shall notify their members of the stipulated procedures for penalizing violations of the Code, including permanent striking of the member from the roll.
3. An ergonomist shall see to it that individuals working under his or her supervision are familiar with the Code and respect it.

Disciplinary Process

1. Any complaint against a CCCPE member or ACE member shall be submitted to the President of their organization. If the ergonomist is a member of both organizations, the complaint will be submitted to the CCCPE President.
2. When the CCCPE or ACE President receives a complaint that he or she judges to be of sufficient gravity, he or she will attempt to settle the dispute in an amicable way. In case of failure, the President will form a temporary disciplinary committee consisting of the President and two other members of the President's organization. This committee will be responsible to summon and hear the parties, judge whether the complaint is well founded and make recommendations to the CCCPE or ACE Board, as the case may be.
3. The disciplinary committee remains in control of the evidence and the procedure regarding any complaint received. The decisions are made by majority rule. Members of the committee shall maintain their duties until their decision has been rendered and their recommendations have been made to the Board.
4. The CCCPE or ACE Board, as the case may be, will make a decision, by vote of a simple majority during one of its meetings, further to the recommendations of the disciplinary committee. The decision will be incorporated in the Minutes of the meeting and the President will forward the decision and the reasons for it, in writing, to the member.
5. The actions taken against a guilty member can go from a reprimand to permanent striking from the membership roll. This can also result in lost certification. In case of lost membership or certification, no fees will be reimbursed.

Appendix 8

11 November 2004

Ethics in ergonomics - experience from the Nordic Ergonomics Societies 36th Annual Conference 2004 on Working life Ethics

Kirsten Bendix Olsen, *Conference organiser and EH&S coordinator at OFS Fitel Denmark I/S, Denmark*

Stephen Legg, *Chair of the International Ergonomics Association (IEA) Professional Standards and Education committee, IEA Code of Ethics review sub-committee member and Centre for Ergonomics, Occupational Safety and Health, Massey University, New Zealand*

Introduction

The Nordic Ergonomics Societies (NES) hold a conference every year. The conference alternates between the five Nordic countries (Denmark, Finland, Iceland, Norway and Sweden). In 2004, the conference 'NES2004' took place in Denmark from 16 -18 August. The theme was 'Working life Ethics'.

Aim

The first aim of this article is to consider if there are differences in the understanding and use of ethics between ergonomists in the Nordic countries. The second aim is to share the experience gained and lessons learnt from focusing the theme of the NES 2004 conference on working life ethics (ethics in ergonomics), in order to encourage others (e.g. ergonomics societies, practitioners, researchers, educators) to put ethics on their agendas wherever they meet in order to help ensure that ergonomists conduct their activities ethically.

The article presents our experience derived from the learning process used at the conference, a summary of the ethical discussion that took place and an assessment of the participating ergonomists' need for knowledge about ethics.

Working life Ethics

The main reason for choosing 'Working life Ethics' as the theme were the changes in society that influence the preconditions for ergonomists' work e.g. globalization, a growing dependence on sophisticated technologies, organizational flexibility under competitive pressures, unlimited work (encroaching into personal spare time), the changing focus of working conditions and risks to health promotion.

The conference committee decided it was an appropriate time to provide an opportunity to discuss the work of ergonomists in relation to ethical principles, to consider ethical limits, what kind of developments that ergonomists should, would and ought to participate in. The NES board was concerned that the theme would not attract members of the Nordic Societies to attend the conference. There was a feeling that ergonomists did not really know what was meant by ethics, especially not 'Working life Ethics'. Therefore the conference committee decided to create a conference structure that could be used as a learning process to find out about these issues. The learning process within the conference included an opening presentation by the chair of the Professional Standards and Education (PSE) Committee of the International Ergonomics Association (IEA) on 'The IEA code of ethics'. This also served as an opportunity for him to obtain impartial comments about the code which could be used to revise it, as it is currently under review. The conference included three keynote lectures, which dealt with different aspects of ethics in ergonomics. These were: Ethics of science; Ethics of consultancy work, and; Ethics in the company. In keeping with the conference theme, a special plenary session involved a dramaturgy of a fairy story (The king's new suit of clothes'). This was used as an exemplar of ethical/non-ethical behaviour.

The conference also included a request to all contributing authors and presenters to specifically address ethical issues in their papers or presentations. In addition, it included focussed discussion on ethics as part of the general discussion after each conference session. Sessions chairs were tasked with summarising the important issues that arose and reporting them for consideration by all the conference participants in an open dialogue-based poster session near the end of the conference.

The final part of the learning process involved two 'experts' in ethics related to ergonomics, reflecting on their perceptions and observations of the whole process in an 'interview style' final plenary session.

Need for support and structure to address ethics as an issue. Because of the concern that the theme 'Working life Ethics' would 'frighten' ergonomists into staying away from the conference, in the initial 'Call for papers' the conference committee encouraged presenters to submit papers that discussed ethical issues or to add ethical considerations to their paper.

Of the 61 papers submitted, only 14 specifically dealt with ethical issues as a large part of the paper. Before the reviewing process very few of the other papers dealt with ethical issues or included questions about ethics at the end of the paper as requested. Thus the conference committee provided further encouragement to authors by providing them with a description of ethics. This resulted in about 50% of the authors submitting ethical considerations.

It seemed difficult for many of the authors to deal with ethics in relation to their submissions. The conference committee felt that a high proportion of Nordic ergonomists stayed away from the conference partly because the theme was on ethics.

Ethical understanding and discussions

Professor Stephen Legg, Centre for Ergonomics, Occupational Safety and Health, Massey University, New Zealand and Chair of the International Ergonomics Association (IEA) Professional Standards and Education Committee and member of the IEA Code of Ethics review subcommittee, Associate Professor Lisbeth Knudsen, Institute of Public Health, University of Copenhagen, Denmark, and Professor Emeritus in Occupational Epidemiology Peter Westerholm, National Institute for Working Life (NIWL), Sweden presented the same understanding of ethics related to ergonomics.

It was summarised in these essential principles: (Legg, 2004 – Slide 2):

- Autonomy: Participants' right to decide whether they want to participate or not and have a right of withdrawal.
- Informed consent and right to know: Everyone has the right to know about the possible risks in the project. Results are published so that all can get to know about them. Personal information is confidential.
- Non-maleficence: No participants should suffer from the project's maleficence. The aim of the project should be to improve conditions for the participants.
- Justice: Advantages and disadvantages should be equally distributed among people.
- Interests/conflicts: No economic or personal interests in the project or results'.

This was referred to throughout the conference as a common understanding. Peter Westerholm explained that ethical problems were action-related. They were concerned with what you do or forgo to do in pursuance of an objective and how it is done and imply a conflict or competition between values or interests, causing a dilemma. For ethical decisions a basis is needed consisting of (Westerholm P. 2004): Slide):

- Medical, psychological, behavioural and other facts
- Relevant norms and values
- A reflected analysis
- Willingness to make decisions when all that needs to be known is not known for certain.

As examples on ethical dilemmas Peter Westerholm ended his speech with the following questions (Westerholm 2004):

- Is it ethically defensible to market OH services, which are not based on needs of the client?
- Is it ethically defensible to market OH services of doubtful effectiveness?
- Is it ethically defensible to market OH services for which the service provider has no or insufficient competence?
- Is it ethically defensible to market OH services aiming at protection of own.

Ethics related to ergonomics were concentrated around the three ethical value criteria and related to the ergonomists action or decisions before and while acting.

Some ethical issues from the sessions

Some of the ethical discussions related to research, practice (the consultants) and the workplace are addressed below.

In some of the research-based sessions, when to publish results (what is preliminary results and what is evidence), was considered to be an ethical dilemma by some researchers. This was discussed in relation to making changes in workplaces that would improve working conditions.

Ethical dilemmas about research on individuals was summarised by Christensen, who wrote:

'In this research programme the focus is on individual physical and mental resources in relation to the exposure and the result might show that some health care workers do not have resources appropriate for the work. It is an ethical problem if this situation will be used as selection criteria's to the work. It is important to discuss possible improvements for the health care students both during the educations and to discuss change in exposure at the work place.' (Christensen, 2004)

The design of research projects was discussed. One of the papers presented a computer model of the musculoskeletal system for ergonomic design. This raised the following question: Is it ethical to base health recommendations (e.g. for seating or chair design) on an unvalidated computer model (e.g. a sophisticated musculoskeletal model) if it is unethical and almost humanly impossible to validate the model – as it would require entirely unacceptable invasive measurements?

In a session on ergonomics in schools, the following questions were discussed: could or should children be given the same opportunities as adults; how could children's autonomy be ensured, for example through handling the parents' and the child's conflicting approach to the child's participation in a research project.

The session on 'The role of the Consultant' focused on the ergonomics consultant's ethical dilemmas. Questions about consultants' competence and the tasks they are asked to do and consultants' ability to ensure implementation of their advice were central as well as the compromises they often have to make. It included compromises

to ensure practical applications that will improve the working environment – even if only by small steps, and compromises between their own, costumers and different stakeholders perceptions of the working environment problems. It was discussed how to provide clear guidelines for consultants.

'The confirmed knowledge about psychosocial strain and organisational development may give general advice to the involved managers and representatives, but is not of much help unless a consultant can help to clarify or foresee the consequences of the very concrete choices that have to be made.'

(Limborg H-J. & Hasle P. 2004)

Ethical principles might be the best guidance specified in three principles:

1. The Consultancy *must result in concrete improvement of the working environment*
2. *A holistic approach must be applied in order to assure that improvement is not creating new health problems*
3. *The result must enable the workplace to help itself to control the risk in the future.*

(Limborg H-J. & Hasle P. 2004)

In Denmark a new working environment act has been adopted that pushes the Danish Occupational Health Service towards consultancy controlled by the market, liberated from the professional and ethical demands imposed by the former regulation. Ethical questions related to consultancy in Occupational Health and in the working environment is a very topical issue that has to be dealt with in the very near future in Denmark. With this background, the Association of Preventive Services in Denmark has developed a set of guidelines addressing the advisory-behaviour and competition-behaviour amongst the Occupational Health Service units. The Association fears that the change in legislation will make it difficult to implement the guidelines and make it difficult to find a positive answer to the following question:

'Is it realistic to ensure a certain level of good ethic practice in and among preventive services (OHS-unites) when they are acting on a free market with – in practice – only a very limited governmental inspection and control?'

(Kabel A. & Rasmussen P.W. 2004)

The papers in the session about 'Workers Participation in Ergonomics' dealt with ethics in the change process in companies. All five presenters stated that workers must participate to increase efficiency and improvements in the work environment and to create changes that will be 'permanent'. The papers focused on methods that involved the employees in developments but did not discuss the potential dilemmas in their projects. In particular, they did not discuss the issues related to: beneficence and the potential maleficence that could be caused by increased efficiency; workers' opportunity to refuse to participate in a project; the impact of power relationships between stakeholders in relation to who benefits from the project.

The discussion in the session on 'Safety and Accident Prevention' raised the question whether the research recommendation in one of the papers was influenced by the fact that the research had been performed by an insurance company. It was suggested that the employees should be screened in order to minimize the risk of allergic reactions to exposures at work. Lisbeth Knudsen had identified this type of screening as ethically problematic in one of the 'Ethics of science' session. No conclusion was reached but it was recommended that the researcher made this type of reflection public.

One workshop was based on a Danish project started by the union of Trade Unions in Denmark LO called 'Towards the Sustainable Workplaces'. The project in itself dealt with the questions: *why are values and ethics becoming increasingly important to enterprises these years'; how does the increased focus on values and ethics affect the legal status of workers and their psycho-social working environment'; should there be a set of professional requirements for setting up of values and ethical standards?'*

The discussion on sustainable workplaces circled around value based management and managements' use of values = moral/ethics. It was concluded that the working environment would deteriorate if management forced values such as self-determination and competence top-down on the workforce. They had found examples that showed that management could renounce its responsibility but still keep the power to fire workers and could use these values to create competition and conflicts between workers and could make workers work harder because they feared that they would be fired if they couldn't reach production demands.

There was also some discussion of the difference between ethical problems and practical problems but no clear conclusion was reached. Signe Kofoed, the co-chair on this workshop, commented that the distinction between practical and ethical problems was not easy to make. If it had been discussed earlier in the conference it would have made it easier to adhere to ethical discussion in the sessions where the focus was on practical and methodical problems.

Main points of the final discussion

The two 'experts on ethics', Peter Westerholm and Stephen Legg, pointed out that this meeting was the first ever on ethics in ergonomics and drew some conclusions and posed questions based on the open dialogue poster session.

Their immediate impression after reading the posters was that there was still a general lack of clarity about what were considered ethical issues. Their perception was that health professionals work largely alone with ethical

issues. They wondered if practitioners have the opportunity for peer debate and to obtain peer support for considering ethics issues. They thought that it was important to find out if a 'code of ethics' should be specific 'guidelines' or just contain 'principles', perhaps accompanied by some specific examples.

They found that the role of ethics committees was clear to researchers but not at all clear for practitioners. There was a need to more clearly identify/isolate ethical issues as early as possible, since ethics is both action and non-action related. They wondered if this meant that there was a need for professional codes of conduct in contrast to 'codes of ethics'.

What did the conference participants know about ethics and what did they learn?

The main concerns for most of the participants were: the working and living conditions for workers; the desire to prevent harm and to improve working conditions (even if it had to be by small steps), and; ethical dilemmas for consultants in ergonomics. The largest group of participants focussed on ethics in companies in relation to whom they were conducting their research on. They did not, however, focus on ethics in their own projects. Some examples were: not think about giving the control group the opportunity to have the same intervention as the test group after the study has finished; not having a clear plan for implementing the results of their investigation in the group involved in the project or in general.

Some of the participants were not aware of the difference between practical and ethical problems. They didn't understand the context of working life ethics or ethics related to research and consultancy in working environment or Occupational Health.

A majority of the participants seemed not to be able to distinguish between practical problems and ethical problems but several indicated that they had learnt that it was important to think of the ethical issues related to their consultancy and research. One example was where a conference participant who was a manager in a large consultancy and research organisation subsequently reviewed the organisations' guidelines by having a discussion with research and consultant staff to determine if they addressed ethical issues in the organisations' guidelines. They did not find ethics mentioned explicitly, but that the guidelines were 'ethical'. Furthermore, the organisation specified more precisely the resources the company had to bring to new project in order to give them a more realistic basis for their decision to participate.

What do ergonomists need to know about ethics?

The change (in Denmark) towards a more market-controlled consultancy (Occupational Health Services) has put ethics questions on the agenda. It is more important than ever that ergonomists (as consultants) are able to handle the dilemma between improving the work environment and fulfilling the costumers' desire or needs. More companies appear to focus on workers' lifestyle through health promotion than the internal work environment and use value based management.

The experience from the conference is that researchers and practitioners need more knowledge on ethics and on ethical conduct. They need to know more about ethics when they are planning and running their research and consultancy tasks. This is especially true in the Nordic countries where researchers only have to apply to ethics committees if their research involves biomedical study of human 'subjects'.

In her keynote lecture, Lisbeth Ehlert Knudsen encouraged researchers to make their own ethical valuation of their projects before it started. She encouraged them to make their own ethical guidelines for the projects and to try to spot ethical questions in advance and state them explicitly. To be able to do this, they have to build up their knowledge about ethics.

What can and should be done to improve ergonomists' knowledge about ethics?

Since the conference participants' knowledge on ethics was appeared to be limited, it is important to teach students and prospective ergonomists about ethics. This should be taught in relation to their future roles as consultants, researchers and practitioners in companies. The best way to teach it could be through research and projects as a part of their education. If we accept that ethical problems are action-related and imply a conflict or competition of values or interests causing a dilemma (Westerholm P.2004), ethics must be included in ergonomic courses of all types.

Selskab for Arbejdsmiljø (SAM) (the Danish Ergonomics Society) is considering conducting a review of the education of professionals associated with ergonomics, including what students are taught about ethics in relation to the three different roles identified above. The purpose of this should be to develop some recommendations for educational institutions about what kind of ethical issues to include in their educational programmes.

In the introductory abstract to the workshop on 'European Co-operation between Safety and Health Practitioner Organisations', Kabel raises the question:

'Which tasks would it be useful for the practitioners if the European Network of Safety and Health Practitioner Organisations (ENSHPO) would carry out, for example in the fields of:

- Organisation (management systems, employees participation and procedures for work and production lay-outing),
- Information (training, instruction and motivation and promotion),
- Intervention (problem-solving, prevention and improvement-processes)

- *Control and monitoring (exposure monitoring, health surveillance and internal control and external audits)?* (Kabel A. 2004)

In the light of the findings on ethics in ergonomics at the NES2004 conference, it would be useful if ENSHPO could take ethical considerations into all of the activities they initiate and especially if they focus on the information part mentioned above.

Post conference considerations

SAM has continued the discussion on ethics related to ergonomics. It held a meeting with the same title 'Working life Ethics' in October 2004, in which the issues and questions that arose from the NES 2004 conference were discussed.

As in the conference only a few members of SAM attended the meeting (20 out of 640 in total) indicating that the subject is not a core interest for ergonomics practitioners.

The participants at this meeting were formed into groups and tried to conduct an 'ethical analysis' of an ethical dilemma that had been experienced by one of the group members. A form, taken from the book on ethics by Westerholm et al. (2004), was used for the analyses.

The participants found it difficult to do the analyses, especially to evaluate the value criteria 'autonomy' and 'justice'. They found that they had to be very specific and concrete. The themes discussed at the meeting were on: health promotion; involving the employees with out giving them influence; specific tasks given to consultants with demands to use specific methods posed by the Danish Authority; consultancy on psychosocial problems commissioned by a manager that the consultant found a part of the problem.

Conclusions

There is great diversity in the knowledge and understanding of ethics between ergonomists in the Nordic countries and whether ethical considerations are adequately included in research projects and consultancy tasks.

The experience of focussing the NES 2004 conference on the theme of 'Working life Ethics' was successful in helping to raise the awareness of Nordic ergonomists about ethics, both in research and in praxis. It is concluded that the conference seemed to advance the consideration of ethical issues in work on ergonomics.

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Appendix 9

Collated Tabulation (24 May2006) of Comments on the draft IEA Code of Conduct of 15 Aug 2005

Source date	Comment	Action
Caryon IEA EC 4Sept06	<p>1. Under the 5th statement in "Professional Conduct", you should add: "ethnicity".</p> <p>2. Under the 4th statement in "Conduct of Research", you state "use an informed consent form for human participants". There are situations where informed consent cannot be practically obtained. For instance, in some of our studies, the participants are patients who are in critical conditions, and therefore we cannot ask for their informed consent. So, you may want to revise this statement and something like: "There may be exceptions to this statement when, for instance, the human participant is not able to consent"...</p> <p>3. The CREE code of conduct and the Canadian Code of Ethics talk about the necessity for ergonomists to continually improve their competencies. I did not find any reference to this issue in the revised Code of conduct. Maybe I missed it. But if it is not there, I would suggest that you add something to that effect under "Professional Conduct".</p> <p>4. Your committee did a great job at simplifying the code.</p>	<p>1. Suggestion accepted. 'Ethnicity' has been added. Rationale: Although 'ethnicity' duplicates 'race', which is already included, it is accepted that the addition of 'ethnicity' would account for inter and intra-racial cultural differences, whilst 'race' differentiates genetically and morphologically between humans.</p> <p>2. Suggestion accepted, but the need for an alternative source of 'informed consent' needs to be added, as for example is the case for children, where a 'responsible adult' may also be required to provide informed consent and also as indicated in comment from Laughery below.</p> <p>3. Agreed. Laughery's comment about this below points out that the issue is covered under item 3 in Professional Conduct. However as also suggested by Laughery, the word "further" has been added to the revision of 20 May 06.</p> <p>4. Thanks</p>

Laughery IEA EC
7Sept06

1. A very good contribution.
2. Caryon's second point - consent when a participant may not be able to provide consent - is correct. There may be such circumstances; however, consent should probably still be required from a person who is in a responsible (legal ?) position to provide it. I do not have any specific wording to address how this should be stated, but it may deserve some consideration.

3. Caryon's third point - updating or improving competencies. I agree, but I think this issue is addressed in item 3 under Professional Conduct. You might add the word "further" as follows: ... and endeavor to maintain and further develop their professional competence.

Zink, Germany
5May06

Re:IEA Code of Ethics Review Report: well done, no comments. Regarding Research:

1. Do we have animal participants?

2. Do we need to define "harm" or give examples?

3. There is one point included in CREE and the Canadian paper, which I would add to clause 4: "Especially protect the privacy of individuals and organizations."

1. Thanks

2. Suggestion accepted and a change incorporating the above comments and these needs to be made. In addition in retrospect, the wording of para 4 under 'Conduct of research', could be improved by stating that 'prior informed consent' is required, rather than just the 'use of an informed consent form. Additionally, the second sentence does not specify that both written and oral explanations are needed as part of the process of obtaining informed consent. Taking all these points into consideration, a revision of para 4 should be as follows:

"4. obtain prior written informed consent from human participants. Information must be provided in writing and orally to human participants in plain and clear language indicating the terms of participation, particularly about any hazards involved. Occasionally there may be exceptions in which the human participant is not able to consent. In such cases prior informed consent should be obtained from a person with (preferably legal) responsibility for the participant."

3. Agreed. The revision now has 'further' added.

Thanks

1. Generally ergonomists do not have animal participants but there may be occasions in which they do, so it is appropriate to include the reference to animals.

2. In this context the point being made is that the benefits should outweigh any potential harm. Since this is inevitably a subjective judgement to be made by the ergonomist or an ethics committee and is addressed in the Geneva Convention and Helsinki Accord, it is considered beyond the scope of the document to provide definitions of harm (and benefit)

3. Agreed. The following phrase has been added to Clause 4: 'protecting the privacy of individuals and organizations'

Takao Ohkubo Japan Ergonomics Society 30Apr06	1. Positive impression that the code certainly would be beneficial for further development of IEA activities in the future. 2. I surely agree with the all items indicated in the proposed new IEA code of conduct. 3. The IEA code should be replaced to make progress IEA activities more actively in the future.	1. Thanks 2. Thanks 3. Thanks
Shrawan Kumar, Subcommittee member 23May06	1. ACE ... will respond. 2. As far as I am concerned, I reviewed the documentation and generally agree with it. 3. You have done a great job.	1. Waiting 2. Good 3. Thanks
Clas-Håkan Nygård, NES 22May06	1. Support the proposal	1. Thanks
David O'Neill UK ES 23May06	<p>Review Report</p> <p>1. No specific comments... general support for adoption of a shorter document. No problem superseding old code of ethics provided the new code of conduct is comprehensive and comprehensible.</p> <p>Proposed IEA Code of Conduct</p> <p>2. Preliminary/Interim comments agreed at Council meeting 18/5/2006.</p> <p>3. The Professional Affairs Board ... considering it at next meeting.</p> <p>4. By far the greatest concern (to the point of alarm) was generated by the Draft Code of Conduct, Research Clause 1. This cannot remain as written: the various issues raised included "we should not cause harm irrespective of the circumstances"; "if the promised benefit were great, what level of harm could be justified?"; "torture has been justified by the great benefit that could be accrued despite the great harm caused to one or two individuals". This clause must be re-worded.</p> <p>5. Some concern re Clause 2 in A (Research): many practitioners will not have access to a local ethics review committee.</p>	<p>1.Thanks</p> <p>2. Good</p> <p>3. Awaiting more input</p> <p>4. The new COCE version is only a condensed version of the equivalent statement in the old CEO, so it is surprising that ES has not raised this objection before now. Perhaps this is a poor indictment on the lack of use of the COE. Nevertheless the point is real.</p> <p>5. Disagree. No change made. All people (including ergonomics practitioners) have access to ethics committees. Perhaps an underlying reason for this concern is that some practitioners are not aware of the need to access ethics committees, as was reported in appendix 8 of the Review Report: 'Ethics in ergonomics: experience from the Nordic Ergonomics Societies 36th Annual Conference 2004 on Working life Ethics, 11 November 2004.</p>

6. Other editorial changes/ comments, see attached ['track changes' version of proposed COCE], discussed at Council meeting.

7. Two [actually three were identified] additional clauses recommended to be added to 'Professional Conduct' as it was felt important to make these points explicit: ...Ergonomists... shall:

i. refrain from making misleading, exaggerated or unjustified claims for the effectiveness of their methods, and they shall not advertise services in a way likely to encourage unrealistic expectations about the effectiveness and results of those services.

ii. conduct themselves in their professional activities in ways which do not damage the interests of the recipients of their services or participants in their research and which do not undermine public confidence in their ability to perform their professional duties.

iii. Add to:

3. limit their practice to those areas of ergonomics for which they are qualified by virtue of training and/or experience, and endeavor to maintain and develop their professional competence. Any work taken outside the competence must be conducted only with proper professional supervision

the following:

or they shall give every reasonable assistance towards obtaining the required services from those qualified to provide them.

8. Would vote in favour of the COCE, but not as it stands as of 20May06

6. All minor editorial changed to syntax agreed as they improve accuracy and clarity

7. Agreed and have added all three of these clauses.

8. As of 1 June 06 all changes made except for item 4 above, upon which we are consulting....

Shrawan Kumar
24May06

While I appreciate the issue raised by the ES, I do not know if the example given by them is really valid. The reason being that we have insisted on 'informed consent form'. Therefore the subjects/participants will have to fully informed and provide their consent in writing. I do not believe anybody will agree to be tortured. Furthermore, by stating that our ethical standards and code of conduct do conform to Geneva Convention any possibility of such exploitation becomes impossible, and hence the whole debate is about a moot point. I also do not believe that we need to spell out or exemplify 'harm'. This can be a very dangerous thing to do unless we develop an extensive list of every possible thing. Harm signifies something of consequence. Would we consider getting tired as result of participation in an experiment 'harm'? Though in some sense it is, but on balance of cost benefit it is not. The definition of 'harm' is determined by societal values, which may change over time. If we define and exemplify harm we may exclude something which may be considered harm later of vice versa.

Excellent alternative view to ES UK. Sent 24May06 to ES UK for response.

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Dr Fujita
Chair of CPE-JES
committee
24May06

A guideline specified for Conduct of Research (i.e., Research-A-2) requires (or assumes) that all relevant organizations have ethics review committees. This may be too confining a condition especially for smaller organizations. A simpler guideline such as follows may be more effective in practice:
"2. conduct only those research project which comply with codes of ethics."

With respect to Dr Fujita's suggestion, I feel that there is a difference between complying with codes of ethics (like the one we are developing) and submitting research proposals to local ethics committees for assessment of ethical suitability. The intent of Clause 2 in the proposed COCE is the the latter, not the former, so I disagree with the suggested change.

As a matter of principle, I feel we should not be adapting the code to suit practice. If anything the opposite should be driving the formulation of our codes. In this example, the proposed code's demand for use of local ethics committees would act so as to encourage the formation of such committees where they may not otherwise exist, thereby reducing the chances that human research will be conducted without prior ethics scrutiny. It is better that this is done locally. If a local ethics committee does not exist, Clause 2 will act so as to encourage not only the the formation of one but also the use of one.

6.6.4. Guidelines on the minimum specifications for a Masters degree in Ergonomics/Human Factors

IEA Guidelines on the minimum specifications for a Masters degree in Ergonomics/Human Factors (including guidance about distance learning)

Version 1

11 March 2005

Recommendation

1. The IEA recommends that all Federated Societies agree to accept this Basic document as guidance on the minimum specifications for a masters degree in ergonomics/human factors (including guidance about distance learning).

Introduction

2. A masters degree in ergonomics or human factors is generally recognised as the major route for an individual to progress towards becoming a professional (certified) ergonomist either as a practitioner, researcher or academic.

3. It is therefore essential that a masters degree should provide students with most of the core knowledge, competencies, research training and preferably some or all of the supervised professional practice experience required of a professionally certified ergonomist. The academic level of study must be consistent with internationally agreed standards for masters degrees.

4. The remaining core competencies for professional certification as an ergonomist are normally acquired through the experience of independent professional practice. This is normally beyond the scope of most tertiary ergonomics education programmes, though some may assist in providing this via highly specialised professional development courses.

5. There are four IEA Basic documents that already contain information which is directly relevant to the development of guidelines for a masters degree in ergonomics and which have been taken into account in this text. These are:

- a. Definition of 'Ergonomics' and 'an Ergonomist',
- b. Core Competencies in Ergonomics,
- c. Minimum Criteria for the Process of Certification of an Ergonomist, and
- d. Guidelines on Standards for Accreditation of Ergonomics Education Programmes at Tertiary (University) Level.

6. Although the IEA has developed a considerable amount of material that can be used in the development of tertiary ergonomics programmes, there is no single document that explicitly describes the minimum specifications for the structure and content of a masters degree in ergonomics/human factors. Moreover, none of the material contained in the existing IEA Basic documents address the issue of distance learning in masters level ergonomics education.

7. This new IEA Basic document has therefore been developed to provide guidelines for a masters degree in ergonomics (or human factors) that are consistent with the four IEA Basic documents identified above. It also provides some guidance about distance learning.

[The two preceding points (6& 7) should not be in the text, but before, as an introductory note.]

Process used to develop this guideline [Irrelevant here. Extract points 8 to 14]

8. An ergonomics education (EE) subcommittee of the PSE committee was formed in 2004 and, under the chairmanship of Professor Stephen Legg, tasked with developing an IEA guidance document on the minimum specifications for an ergonomics/human factors masters degree (including guidance about distance learning). In February 2005 the EE subcommittee prepared a first draft version of the guidelines. It used material from the four relevant Basic documents identified above, so as to ensure consistency between and continuity with the existing IEA guidance documents. This was reviewed via email by the EE subcommittee members during March 2005, resulting in a second draft version in April 2005.

9. In order to obtain informed commentary and international consensus and acceptance of the draft guidelines from as wide as possible an audience, various versions of the new guidance document were presented and discussed at workshops at international conferences during 2005, as follows:

- 6 April 2005 United Kingdom Ergonomics Society conference (Convenor: EE subcommittee member Dr Robin Hooper)
- 23-25 May 2005 South East Asia Ergonomics Society (SEAES) Conference (Convenors: Professors Stephen

Legg and Adnyana Manuaba - the local convenor)

- August 2005 – TBA Association of Canadian Ergonomists (ACE) ?

- 26 September 2005 US Human Factors and Ergonomics Society (HFES) Conference (Convenors: Professors Stephen Legg and Thomas Smith – EE subcommittee member)

- 10-12 October 2005 Nordic Ergonomics Society (NES) Conference (Incl FEES and CREE and NES (Convenor: Professor Stephen Legg)

10. The workshops were advertised in such a way as to attract or to invite participants with a specific interest or special knowledge of masters level education in ergonomics/human factors.

11. Each workshop had a similar structure. After a brief welcome and introductory explanation of the development plan for the new IEA guidance document, the convenor will hand out a pre-prepared focal questionnaire that identifies specific issues that each participant should consider during the subsequent presentation and in which they are requested to express their views, in writing. The convenor then presented the latest version of the new IEA guidance document. This was followed by a short period for general questions, primarily concerned with clarification of the details of the guidance document.

12. The workshop participants were then divided into small groups, each with a chair identified, and asked to discuss their views on each of the issues specified in the focal questionnaire and to prepare summary notes representing each group's views (or diversity of views) on each issue. The convenor then led a feedback session, taking each specific issue in turn. A spokesperson for each group gave a short oral report on their group's views. This was immediately followed by a general discussion aimed at synthesising the views presented. The convenor noted the outcomes of the discussions on each specific issue and collected each individual's and group's completed questionnaires. Which were used to prepare a short report for the EE subcommittee.

13. The outcomes of each workshop were then reviewed and revised by the EE subcommittee so as to generate a sequence of versions of the guidance document. Thus by November 2005, an advanced version of the guidance document was generated, shaped through repeated revision into a form that was reflective of the considered views of a wide international group of people with special interest and expertise in ergonomics/human factors masters programmes.

14. In November 2005, the advanced version of the guidance document was sent to IEA Federated Society Presidents and IEA representatives soliciting open comment from all IEA federated societies and their members, with responses required by the end of Feb 2006. A near final version was then submitted to the IEA Executive Committee in March 2006 and a final version submitted for approval by the IEA World Council at its 2006 meeting in Maastricht, the Netherlands.

General requirements of a masters degree in ergonomics/human factors

15. A masters degree in ergonomics (or human factors) should provide students with an appropriate level (extent and depth) of

- a. ergonomics knowledge,
- b. ergonomics competencies,
- c. supervised ergonomics research training, experience and expertise,
- d. supervised ergonomics professional practice which might assist progression to national or international certification, and be consistent with internationally accepted
 - a. definitions of 'ergonomics' (and of 'an ergonomist'), definitions of domains of specialization
 - b. core competencies in ergonomics
 - c. accreditation standards for ergonomics education programmes at tertiary (university) level, and
 - d. criteria for masters level qualifications.

16. A masters degree in ergonomics/human factors is not expected to cover the level of research competence required of doctoral training nor the independent practice experience that is additionally required for full certification of an individual as a professional ergonomist.

17. In order for a tertiary (university level) institution to be able to offer a masters degree in ergonomics/human factors, it is necessary that it has the capacity to do so according to specified national or international standards such as the IEA Guidelines on Standards for Accreditation of Ergonomics Education Programs at Tertiary (University) Level.

18. It is therefore necessary that an IEA document such as this should specify not only the minimum criteria for the masters curriculum and the process of education, but also the mechanisms employed to ensure quality outcomes, the resources and facilities available, and the performance of graduates. In order to demonstrate the viability of a masters degree, issues relating to student selection and progression, faculty expertise and development, and arrangements for supervised research and work experience also need to be specified. In addition, it is also necessary to address such issues as differences in culture and professional practice expectations between countries.

Question – Could the next two sections (General Principles and Philosophy, Objectives and Scope) be combined and reduced? I feel there is unneeded replication here...

Stephen

General principles

19. The following general principles should be applied in the specification of minimum standards for a masters degree in ergonomics/human factors:

- a. the educational content and structure may reflect the diverse and unique character of individual programs/institutions
- b. there is recognition that excellent education programs may differ in many respects and that educational objectives may be achieved in a variety of ways
- c. innovation in achieving educational objectives should be encouraged
- d. although this guidance document specifies many details of a number of input elements, it is not intended to be prescriptive in terms of precise curriculum details (such as hours in any one subject). Rather, it aims to provide guidance about the ways that the appropriate knowledge, competencies, research and professional practice capabilities of students may be taught and learnt
- e. the degree should include all or an appropriate subset of core knowledge and competencies within its taught curriculum
- f. the degree should include a substantial element of supervised research training, including the preparation of a research report or thesis
- g. the degree should address professional issues relevant to the time and needs of the marketplace and include the option for students to gain an appropriate level of supervised professional practice.

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Should We Add? h) the degree should not be taught/learnt by distance or e-learning alone

20. While all masters degrees in ergonomics/human factors need to meet specified standards and to be consistent with the principles espoused above, flexibility in application of these specifications needs to be shown as appropriate to the country, its needs and objectives and the facilities available. It should be possible to select the detailed specifications relating to the curriculum content of a masters degree according to the particular focus of the institution or programme.

21. It is anticipated that in due course, masters degrees in ergonomics/human factors would be accredited according to international standards, such as the IEA Guidelines on Standards for Accreditation of Ergonomics Education, and/or national standards, developed by the relevant Federated Society.

Philosophy, objectives and scope

22. The philosophy and objectives of the degree should be clearly stated and be consistent with the professional practice of ergonomics. The degree should reflect the current needs for ergonomics in society, industry and commerce, trade unions, government, and academia.

23. The degree should be of sufficient duration to prepare the student in a comprehensive and defined sub-set of ergonomics, knowledge, competencies (such as those produced as guidance by the IEA) This allows the possibility for flexibility and selection of the core knowledge and competencies deemed to be relevant to a particular professional focus within the qualification.

24. The degree identifies the scope and level of ergonomics knowledge, competencies and research and professional practice capabilities for which it prepares the students by making reference to a comprehensive set of internationally agreed competencies about which they will learn/be taught (it is anticipated that reference would be made to the IEA Core Competencies document), and the specific sub-set of competencies which will be addressed in depth (that is, those competencies relevant to the focus of the masters degree).

25. The degree facilitates the student's potential for gaining certification as an ergonomist. It is preferable that the degree should include appropriate periods of ergonomics practice, supervised and validated by a qualified educationalist and/or a practising ergonomist so that students are able to achieve competency in specified core areas. Where this is not possible (for example in small countries where there may be only a few professionally certified practicing ergonomists), part of the degree should be designed to simulate supervised professional practice as closely as possible.

26. Policies, procedures and degree program information are current and readily available to the students, particularly as related to the aims and objectives, assessment, progression and requirements for graduation, appeals processes, costs and academic review processes.

Approaches to teaching/learning and problem solving

27. The degree program should use a range of teaching and learning methods appropriate for masters level, to the achievement of the objectives and the learning styles of the students.

28. An interdisciplinary learning environment should be provided to offer opportunities to learn from, and be influenced by, knowledge from outside as well as from within ergonomics. Students should be made aware of multiple styles of thinking, diverse social concepts, values, and ethical behaviours that will prepare them for identifying, redefining and fulfilling their responsibility to society and the profession.

29. The degree program should include opportunities for students, supervised or mentored by ergonomics academic faculty/staff, workplace supervisors or certified ergonomists, to participate in such activities as field trips, internship/practica at industrial, institutional or governmental work sites. Where the program structure precludes field trips, wherever possible opportunities to participate should be provided in laboratories where ergonomics programs are planned and implemented and/or where ergonomics research is performed.

30. The degree should provide opportunities for both independent and group/co-operative learning experiences.

Should we add? If the degree includes any distance or e-learning, it must include sufficient periods of time involving direct contact between students and academic faculty/staff consistent with the provision of adequate learning/teaching of practical skills and the core competencies, research and professional practice capabilities described in the above paragraphs in this section and elsewhere in this guidance document.

Possible routes to qualification with a masters degree

31. A masters degree is essentially a postgraduate qualification of one or two years of full time study (or equivalent), usually requiring prior completion of a relevant specialist field (usually an undergraduate degree). A number of possible routes to qualification with a masters degree in ergonomics/human factors might be acceptable, as follows:

- a. Tertiary (university level) postgraduate qualification in ergonomics of a minimum of one or two years of full time study (or equivalent), following prior completion of a tertiary (university level) educational program in a relevant specialist field (involving a minimum of three years education).
- b. Tertiary (university level) qualification in a related field of a minimum duration of four years of full time study (or equivalent), which has included a major component of ergonomics, has addressed a comprehensive set of core competencies and has required completion of a major ergonomics project.
- c. Tertiary (university level) qualification in a related field of a minimum duration of three years of full time study (or equivalent), followed by continuing education (CE) programmes to ensure comprehensive preparation in ergonomics core knowledge, competencies, substantial supervised experience in conducting research and in the practice of ergonomics

Note: "Related field" or 'relevant specialist field' referred to in the paragraph above may be in any professional field that prepares the student in a substantial set of basic core knowledge and competencies.

Overall curriculum content

32. Although the overall content of the curriculum may contain details of a large number of input elements, it will not be prescriptive in terms of precise curriculum details (such as hours in any one subject), but will seek to ensure that that core knowledge, competencies, research capability and professional practice experience can be acquired or developed at an appropriate level for a masters degree.

33. It is anticipated that for each Institution, the curriculum will be designed in sufficient depth and breadth and the philosophy of education be such as to ensure that the desired objectives and outcomes of the program can be achieved. The program should seek the preparation of graduates as competent ergonomists who have been introduced to the broad spectrum of ergonomics competencies (as expressed in the IEA Core Competencies document or its equivalent) and have a depth of understanding in a defined sub-set of competencies.

34. In some instances, specific features of content might be covered in pre-requisite study.

35. The list of detailed curriculum content provided below addresses all of the competencies included within the IEA Core Competencies document. In some instances, full coverage of this list would be more than could be expected for the particular qualification offered. It is understood that each degree program will focus on certain aspects of content and may choose to leave a number of areas for additional detailed study at an appropriate level of education.

Curriculum content

36. The content of the curriculum should include ergonomics/human factors theory, knowledge, research, prac-

tice and professional issues relevant to the time. [does that mean "state-of-the-art", up to date?]

37. The degree curriculum (or accepted credit for prior learning) should include opportunities for the student to appreciate theoretical concepts and gain supervised research and practical experience which would provide a breadth of knowledge across core areas, and a depth of knowledge in a specialised application of ergonomics consistent with the focus of the institution, where applicable, and as achieved by a thesis or project and /or professional practice experience.

38. The degree curriculum (or accepted credit for prior learning) should include the following ergonomics knowledge and competence areas appropriate to the achievement at masters level. A more detailed listing that could be used as a guide is given in the IEA Basic document on Core Competencies in Ergonomics.

a. An understanding of the theoretical bases for ergonomic planning and review of the workplace.

39. Theoretical concepts and principles of those aspects of physical, biological, social and behavioural sciences relevant to ergonomics.

40. The basics of physics, mathematics, functional anatomy, patho-physiology, exercise physiology, environmental science, and sensory, cognitive and behavioural psychology, organisational psychology, and sociology, relevant to the practice of ergonomics and to the extent required by the specific focus of the institution.

b. An appreciation of the effect of factors influencing health and human performance that have the potential for generating injury, disease or disorder

41. An introduction to occupational hygiene, biomechanics, anthropometry, motor control, forces applied, and stresses and strains produced in the human body.

42. An introduction to the effect of the environment (acoustic, thermal, visual, vibration) on human senses, human health and performance.

43. An introduction to psychological characteristics and responses and how these affect health, human performance and attitudes; the perceptual and cognitive aspects of information intake, information handling and decision making; and the psycho-physiological bases of perception and cognition.

44. The effect and interaction of factors influencing health and human performance.

c. An understanding of the requirements for safety and the concepts of risk, risk assessment and risk management

45. An introduction to industrial safety, safety management, human reliability and error, organizational failure, risk assessment and risk management.

d. An appreciation of the extent of human variability influencing design

46. The application of knowledge of human characteristics, the range of these, human error and human reliability.

e. An understanding of methods of quantitative and qualitative measurement relevant to ergonomic appraisal and design.

47. Validation of quantitative and qualitative measurement methods appropriate to ergonomics appraisal and design; application of survey methodology, observation and surveillance of human performance, or product use including operator considerations, and epidemiological approaches; methods of analysing feedback; instrumentation relevant to evaluation or design of workplaces, work procedures or work equipment, and methods of measurement; methods of interpreting results; use of the computer and other technology for technical calculations, data acquisition and processing, process control, design and other ergonomics-related functions and applications.

d. Analysis of current guidelines, standards and legislation

48. Awareness of the major, relevant sets of guidance and standards; matching measurements against identified standards and legislative requirements.

e. Identification of potential or existing high risk areas and high risk tasks

49. Methods of determining demands placed on people by tools, machines, jobs and environments; evaluation of products or work situations in relation to expectations for safe and effective performance; methods of determining the compatibility of human physical and psychological capacities and planned or existing work demands.

f. Ability to communicate effectively with the client and professional colleagues in verbal and written form.

50. Practice and feedback on written reports of various forms (management report, scientific paper, academic essay, thesis); verbal presentations to colleagues and faculty; presentations to external parties (e.g. project company).

9. Application of the principles of systems theory and systems design

51. Application of a systems approach to work analysis; application of human-system interface technology; ergo-

nomics analysis and planning in a variety of contexts; development of a holistic, integrated, balanced and prioritised plan for ergonomic design.

g. Application of appropriate concepts and principles at an organization level.

52. Organisational management; participatory ergonomics; human development and motivation; group functioning and socio-technical systems.

h. Ability to outline and justify appropriate recommendations for design or intervention.

53. Application of ergonomics principles in the control of organisational, physical, psychological, social and environmental factors which could influence human performance, an activity, a task, or use of a product; consideration of participation, role analysis, career development, autonomy, feedback and task redesign, as appropriate to the client and the defined problem; application of individual and organisational change techniques, including education and training, work structuring and motivational strategies; appropriate use of computer and non-computer modeling and simulation, instrumentation and design methodology; application of the principles of design of workplaces, products, information, and work organization; the testing of proposed solutions under realistic conditions; the identification and quantification of the potential benefits and costs of possible ergonomics solutions.

i. Ability to carry out evaluative research relevant to ergonomics.

54. Application of principles of experimental design and statistics, and thorough data analysis and interpretation; principles of marketing ergonomics; evaluation of the outcome of implementing ergonomics recommendations.

Question – could this section below be reduced or incorporated elsewhere to reduce the length of the document? Stephen

Organisation of curriculum

55. Learning experiences should include, at least, the integration of

- a. problem definition – such as task analysis, error analysis, operational analysis
- b. the design of experiments and/or equipment and of action strategies
- c. collection of data on operational users
- d. statistical analysis and interpretation of data
- e. the presentation of findings to operational personnel

56. The curriculum should be organised in a sequential and integrated manner to ensure effective learning and is designed to ensure the progressive development of skills of independent thinking, ethical and value analysis, communication, reasoning, problem solving skills and decision making.

57. Through interdisciplinary instruction and assigned projects, students should be exposed to research and practice issues which provide a holistic appreciation of the scope of the field of ergonomics.

58. Through involvement in a structured and concrete research or design project, students should be introduced to the integrative, interactive, social and iterative nature of applying ergonomics.

59. The program should be structured to include classroom, laboratory, field and research experiences and the timely and progressive exposure of students to a variety of work place problems of increasing complexity.

60. Students should be made aware of current professional, organisational, legal and ethical issues pertinent to ergonomics practice. The regional Ergonomics Society should be consulted to ensure that all relevant issues are fully addressed.

61. The practical experience should have sufficient breadth, depth and coverage to ensure that the objectives of the program are met; and that the students have the opportunity to integrate theoretical concepts into ergonomics practice; to perform professional responsibilities for ergonomics application under appropriate levels of supervision or mentoring; to observe professional role modelling; and to practise with timely and constructive feedback their skills and reasoning.

62. In workplace environments, specific procedures should be established for communication between the mentors and students so that issues of ergonomics design may be fully addressed. Specific procedures should be established for communication between work place mentors and the faculty on professional, curriculum and administrative matters.

63. The program should encourage the development of student portfolios which contain quality work products.

64. The content of the curriculum and the organisation of the learning experiences should foster a commitment to continuing professional growth including learning through self-directed, independent study.

Research and scholarship

65. The relationship between research activities and the content and delivery of the program should be well recognised and demonstrated by faculty/staff and student involvement in research and scholarship related to the ergonomics profession. The nature of such research should reflect the principal objectives of the program.

66. The approach taken to encouraging research should ensure that students gain an adequate understanding of research methodology so that they may accomplish applied studies in relevant professional positions. Faculty and students should be actively involved in research activities integral to the program objectives. Faculty/staff should act as effective mentors for students.

Institution

67. The University or College providing the degree should first have been accredited by an appropriate government agency in the geographic area, if such an agency and process exists in that country. Where such arrangements do not exist, the Institution should be accredited by an appropriate professional body according to international standards.

Faculty/Staff

Characteristics

68. Each academic faculty/staff member should have documented expertise in their area of teaching, demonstrable effectiveness in teaching and evaluation of students, and a record of involvement in scholarly research and/or professional practice in ergonomics consistent with the philosophy of the masters degree and the needs of the ergonomics community.

Qualifications

69. The academic faculty/staff as a whole should have a sufficient mix of qualifications to conduct the masters degree successfully, including a diversity of areas of expertise, a diversity of academic qualifications relevant to ergonomics and experience in curriculum design and development.

70. Each faculty/staff member should normally possess a Ph.D. in an appropriate cognate field. A Masters degree may be acceptable when combined with a record of quality work in an applied domain.

Publications

71. Each faculty/staff member's publication list should reveal productivity and quality in research and demonstrate active contribution to refereed journals or presentation of technical or other such reports, in the fields of ergonomics/human factors or other related cognate disciplines.

Relevant experience

72. Faculty/staff as a whole should have ergonomics/human factors experience in:

- teaching
- research
- professional practice
- publishing outcomes of research
- systems development or applications
- supervising masters theses and/or doctoral dissertations

Degree of accountability

73. There must be a clearly defined person with explicit responsibility for the masters degree, faculty/staff evaluation, and to whom faculty/staff report their activities.

Professional standing

74. Faculty/staff should be members of appropriate professional societies and should abide by their professional standards and codes of ethics.

Participation in professional issues

75. Faculty/staff should demonstrate their commitment to the advancement of the profession and to discussion of professional issues relevant to the time by participating in leadership positions and on professional committees.

Professional development activities

76. Faculty/staff should demonstrate an interest in remaining up-to-date by participating in continuing education or professional development programmes, where relevant.

Availability of support staff .

77. The masters degree programme should have adequate support staff and services, including library, computing and laboratory facilities, to meet the needs of the students and academic staff.

Faculty-student consultative process

78. There should be adequate time available and access to academic faculty/staff for students to consult on progress and course content.

Students

Pre-requisites for entry

79. Entry into the program should be offered on an assurance of equal opportunity with respect to race, creed, colour, national origin, gender, age, disability, religion, socio-economic and marital status.

80. The academic pre-requisites and any other specific criteria for entry to the program must be clearly stated, compatible with the requirements of a masters degree and equivalent to the completion of an undergraduate degree in a relevant field.

81. Where an institution chooses to admit students without all of the academic pre-requisite training that it has prescribed, arrangements must be made for students to rectify these deficiencies.

Student/faculty(staff) ratio

82. The masters degree should be viable in terms of faculty/staff and student numbers. Faculty(staff)/student ratios for class work should be appropriate for the subject, and ensure quality of supervision as appropriate for masters level study.

Policies on progression and graduation

83. Policies and procedures should be relevant to repeat enrolments after failure, competences and levels of assessment required for progress, maximum time allowable for course completion and final graduation must be clearly stated, appropriate for masters level study and made available to students at the commencement of the degree.

Student workload

84. There must be a clear outline of the expectation of study (workload) in relation to each component of the degree, including course work and research projects and theses.

Evaluations and assessments

85. The standards of achievement expected must be clearly stated to students and related to their professional practice and the IEA Core Competencies for Ergonomists (or similar set of competencies).

86. The programme should utilise a range of assessment methods appropriate to the objectives for both formative and summative purposes. Evaluations should match the competency being assessed, and include written, oral and practice formats. Students should receive regular feedback on performance. Final evaluations should provide an opportunity to assess overall and comprehensive knowledge, attributes and skills relevant to ergonomics practice and professional behaviour.

87. Assessment methods should be reviewed and evaluated regularly in terms of student load and their validity, reliability, emphasis, balance, appropriateness and relevance to the IEA Core Competencies or similar approved set of competencies.

Quality management

88. The degree must be offered in a recognised accredited tertiary education institution, preferably a University, which is supportive of ergonomics both as an academic and professional discipline. Programmes must be approved by an accredited University and are in compliance with regional academic regulations. There should be an ongoing programme of evaluation of the performance of the faculty/staff, which includes the assessment of teaching ability, scholarly activity and administrative competence. The organisational structure should provide a career path for faculty/staff and an ongoing programme of professional development for all faculty/staff which is linked to evaluation of performance.

88. The degree should have established mechanisms of accountability to the University and to the ergonomics profession. There should be a clear and accessible description of the academic governance of the degree programme with demonstrated lines of accountability and responsibility. The degree programme should maintain records of attrition, pass rates, failure rates, graduations, honours received and professional recognitions.

89. There should be clear and comprehensive policies on course development.

90. There should be clear and comprehensive policies for periodic review of course goals, content, relevance and quality. The curriculum should be developed and regularly reviewed at an institutional level by the faculty/staff of the programme, with input from representatives of the profession, the student body and other interested groups.

91. There should be a clearly defined organisational structure for the overview of the program. The faculty/staff should regularly review the admissions criteria, including pre-requisite subjects as part of the evaluation of the effectiveness of the programme in preparing graduates to be competent ergonomists.

Facilities and resources

92. The degree programme should have adequate funding available per student to provide sufficient numbers of staff and resources to achieve the programme goals.

Should we add? The degree should have sufficient institutional administrative, printing, computing and communication support facilities and resources to support any distance learning or e-learning elements of the programme.

93. The students and faculty/staff should have access to sufficient equipment relevant to ergonomics and human-system interface technology, and consumables to provide the means for effective learning and research.

94. Sufficient space and computing facilities should be available for students to have appropriate access over a prolonged period of the day. Appropriate and up to date computing packages relevant to ergonomics applications and to data analysis should be available for student use. The students should have ready access to informational resources including the World Wide Web and e-mail.

95. There should be sufficient classrooms, laboratories, work place facilities, offices and space for students, faculty and support staff to provide an environment conducive to learning and research.

96. The students should have ready access to a well maintained and catalogued library of appropriate media and holdings that are current and sufficient in number and breadth to support the content of the curriculum and to meet the needs of the programme. There should be database and bibliographic search facilities sufficient to identify appropriate information not held at the library, and inter-library loan facilities in order to obtain these resources.

97. The students should have ready access to those services that will facilitate their successful completion of the degree including student counselling, educational support including language instruction, health and residential facilities, and financial aid.

98. There should be occupational health and safety policies relating to a safe working environment, sexual harassment and disability.

6.7 Communication and PR – Report

6.1.1. Report

Andrew Marshall, Chair of the IEA CPR SC

Introduction

Communications has been raised as a topic that is problematic both for the IEA as a whole and for individual federated societies. As part of the best practice initiative of the Development Committee there will be a workshop session devoted to communications issues and newsletters in particular, at the IEA meeting in Maastricht.

Ergonomics International

The IEA newsletter is currently suspended, and there is a proposal to replace it with electronic bulletin more focussed on IEA activities. However, the decision on whether to terminate the Newsletter permanently will depend to some extent on the outcome of the communications workshop in Maastricht.

Council ListServe

The email list server is hosted by Louisville University. The list includes:

- IEA Executive
- IEA council members
- Alternative IEA council delegates
- Presidents of Federated and Affiliated societies
- Secretaries of Federated and Affiliated societies

All members of the list can send messages to all the others on the list. We encourage reasonable use of this facility for IEA and ergonomics related messages.

The use of this list is an important tool for communication. We are grateful to Waldemar Karwowski and Louisville University for providing this facility at no cost to the IEA.

IEA Website – www.iea.cc

The main routine changes to the website over the past 12 months have been to:

- Maintain and update the Ergonomics Programme Directory
- Maintain the IEA Roster
- Add International Development Committee newsletters (David Caple)
- Add and delete announcements
- Maintain the Committee pages
- Update the IEA Awards pages

All the IEA roster information is kept on the website and is used as the up to date repository for this information. If and when there are any changes required then please email the webmaster. Council members, listed in the roster can now elect to have their photo by their contact details. This is intended to aid recognition and communications, especially at the annual council meeting.

Planned additions to the website are Ergonomic texts being developed by the Science Technology and Practice Committee.

As pages are added or updated they are also updated to the latest standards for accessibility.

The website is hosted by Ergoweb, who are a Platinum Level sustaining member of the IEA.

Web Statistics – Visitor numbers

Over the last year the number of visits per week has ranged from 2,467 to 7,995. This is an encouraging rise over the previous year, which ranged from 1,950 to 3,825.

The graphs below show the weekly totals the last 12 months and for the previous year.

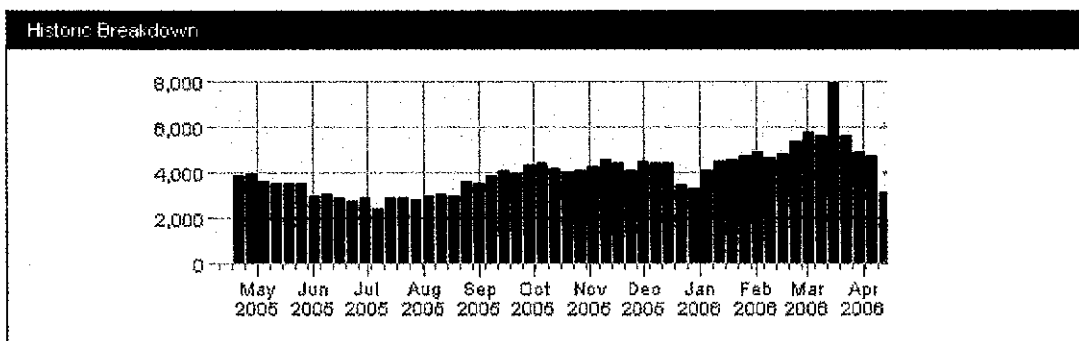


Figure 1: Past Year

The big peak during the second week of March was due to 2,000 extra visitors to the site on the two days after the IEA Logo competition email was sent out via the council listserver.

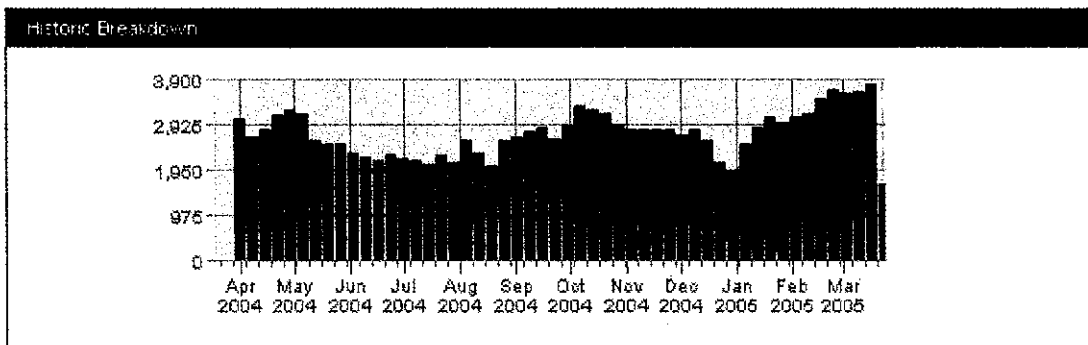


Figure 2: Previous Year

Web Statistics – most Popular Pages

The table below shows the 25 most popular pages on the web site for February 2006. The statistics are very similar to the previous year.

Description	Page	Total page views (month)	% of page views
1 IEA Home Page	/index.cfm	11546	23.5
2 Ergonomics Definition	/ergonomics/index.cfm	4403	9.0
3 Directory of Ergonomics Programmes, First Page	/directory/index.cfm	2126	4.3 ¹
4 Announcements	/announcement/index.cfm	2033	4.1
5 Ergonomic Standards	/standards/index.cfm	1852	3.8
6 Newsletter Main Page	/newsletter/index.cfm	1626	3.3 ²
7 Council Roster	/about/council.cfm	1243	2.5
8 Awards Main Page	/awards/index.cfm	1213	2.5
9 Contact Details	/contact/index.cfm	1116	2.3
10 Membership Structure and World Map	/about/membership.cfm	1043	2.1
11 IEA Endorsed Journals	/events/journals.cfm	911	1.8
12 Search the website	/search/search.cfm	711	1.4
13 Technical Committees	/events/technical.cfm	619	1.3
14 IEA Executive	/about/executive.cfm	600	1.2
15 Directory of Ergonomics Education Programmes, Country List	/directory/mainlist.cfm	597	1.2 ¹
16 Standing Committees Details	/about/standingcommittees.cfm	560	1.1
17 Newsletter March 2005	/newsletter/mar2005.cfm	485	1.0 ²
18 Science, Technology and Practice Committee Page	/events/science.cfm	461	0.9
19 Site Map	/sitemap.cfm	370	0.8
20 Development Committee Page	/events/develop.cfm	332	0.7 ³
21 Professional Standards and Education Committee Page	/events/education.cfm	330	0.7 ⁴
22 EQUID Committee Page	/events/equid.cfm	298	0.6
23 Newsletter July 2004	/newsletter/jul2004.cfm	295	0.6 ²
24 Auditory Technical Committee First Page	/auditory/index.cfm	284	0.6
25 Page removed	/about/federated.cfm	281	0.6

¹All Directory of Ergonomics Programmes pages accounted for 15.8% of page views.

²All Newsletter pages accounted for 15.6% of page views.

³All Professional Standards and Education pages accounted for 2.2% of page views.

⁴All Development Committee pages accounted for 1.9% of page views.

Web Statistics – Visitors by Continent

The figures below are for February 2006, but are similar to the other months through the year. Europeans are usually the second most frequent visitors, but Asia has also been second once during the year.

	Continent	Total Visits	Percentage
1	North America	6860	41.7
2	Oceania	3311	20.1
3	Europe	2993	18.1
4	Asia	2597	15.8
5	Africa	384	2.3
6	South America	306	1.9

Search Engine Listings

These statistics were obtained by typing ergonomics into the search engines on the 21 April 2006.

	April 06	April 05
Google	9	6
Yahoo	13	10
AOL	9	N/A
MSN	68	N/A

Wikipedia was listed 14th by Yahoo with a quote from the IEA Ergonomics definition:

Ergonomics (or human factors) is the scientific discipline concerned with the ... system performance (definition adopted by the International Ergonomics Association in 2000)

The competition for top 10 listings, particularly on Google is very fierce. We must congratulate the Ergonomics Society (UK) in being ranked number one by both Google and Yahoo yet again.



6.8. Science, Technology and Practice

6.8.1. Report

Pascale Carayon, Chair of the IEA STP SC

Pascale Carayon has been chair of the STP committee since April'2005.

General Strategy and Objectives

The STP committee promotes and coordinates the exchange of scientific and technical information at the international level. There are presently 17 subcommittees (known as Technical Committees or TCs) that address specific areas of technical interest (<http://www.iea.cc/events/technical.cfm>).

There are five major objectives of the Science, Technology and Practice Committee:

1. To identify and promote important research and application areas
2. To promote and coordinate the exchange of scientific and technical information at the international level
3. To advise and assist in the development of the technical program of IEA Triennial Congresses
4. To advise and assist in the organization and conduct of IEA sponsored meetings
5. To assist industrially developing countries in the assimilation of ergonomics practices and knowledge

For the 2005-2006 period, the main activities of the STP committee were:

1. To support activities of Technical Committees.
2. To facilitate and support the creation of Technical Committees.
3. To review the IEA Basic Documents and propose changes.
4. To review the procedures of IEA conferences and to create several series of IEA Conferences.
5. To initiate the Ergonomics Compendium.
6. To contribute to the organization of the IEA'2006 Congress.

1. Activities of Technical Committees

Reports of the TCs can be found in Appendix A. The table below highlights some of the activities and accomplishments of the TCs.

Technical Committees

Activity Theories for Work Analysis and Design

Dr P. Béguin

Laboratoire d'Ergonomie, CNAM, France

Aging

Prof. Juhani Ilmarinen, Ph.D.

Department of Physiology, Finnish Institute of Occupational Health, Finland

Agriculture

Prof. Peter Lundqvist, Ph.D.

Division of Work Science, Department of Agricultural Biosystems and Technology, Swedish University of Agricultural Sciences, Sweden

Auditory Ergonomics

Ellen Haas, Ph.D.

Auditory Controls and Displays Laboratory, Human Research and Engineering Directorate, USA

Building and Construction

Henk F. van der Molen, PhD.

Arbouw, Dutch National Institute for Safety and Health in the Construction Industry, The Netherlands

Ergonomics for Children and Educational Environments

Ms. Cheryl L. Bennett

Lawrence Livermore National Laboratory, USA

Healthcare Ergonomics

Dr Sue Hignett

Director: Healthcare Ergonomics and Patient Safety research Unit (HEPSU), Dept. of Human Sciences, Loughborough University, UK

Human Aspects of Advanced Manufacturing

Prof. Waldemar Karwowski, Ph.D.

PE Center for Industrial Ergonomics, University of Louisville, USA

Human-Computer Interaction

Tom Stewart

System Concepts, United Kingdom

Main accomplishments

Symposium at IEA'2006 (23 papers and 1 poster accepted)

Symposium at IEA'2006

International Symposium on Work Ability in Verona, Italy, October'2004

Symposium at IEA'2006 on "Ergonomics in the Primary Industries"

Proposal for changing the name of the TC to "Agriculture, Forestry and Fishing"

Multi-session symposium at IEA'2006

Launch of the website of the Auditory Ergonomics TC (www.iea.cc/auditory)

Henk van der Molen has accepted to be the new chair in replacement of Ernst Koningsveld.

Symposium organized at IEA'2006

Collaboration on special issues in the Scandinavian Journal of Work, Environment & Health and Applied Ergonomics

Symposium at IEA'2006

Tour of a school in Hannover, Germany, prior to the IEA'2006 congress
www.ergonomics4children.org

Symposium at IEA'2006 (over 80 papers)

Special edition of *Ergonomics* on patient safety (13 papers)

Special issue of *Applied Ergonomics* planned for 2006/2007

Collaboration with TC on Musculoskeletal Disorders and with ODAM TC

Organization of the HAMAHA'2005 conference in San Diego, California

Proposal for merging the WWCS (Work With Computing Systems) international group with the HCI TC

Next chair of the HCI TC: Tomas Bern

Human Reliability

Prof. Dr. Heiner Bubb
Lehrstuhl für Ergonomie der Technischen Universität München, Germany

Musculoskeletal Disorders

Prof. Enrico Occhipinti
Research Unit "Ergonomics of Posture and Movement" EPM, CEMOC – ICP
Hospital, Italy

Organizational Design and Management

Pascalé Carayon, Ph.D.
Professor of Industrial and Systems Engineering, Director, Center for Quality
and Productivity Improvement University of Wisconsin-Madison, USA

Process Control

Dr. John O'Hara
Science & Engineering Technical Division, Brookhaven National Lab, USA

Psychophysiology in Ergonomics

Shinji Miyake, Japan

Quality Management

Dr. Ram R. Bishu
IMSE Department, University of Nebraska, USA

Safety & Health

Prof. Masaharu Kumashiro
University of Occupational and Environmental Health, Department of Ergo-
nomics, Institute of Industrial Ecological Sciences, Japan

Standards

Mr. Nico J. Delleman
NIA TNO B.V., The Netherlands

Symposium at IEA'2006
Cooperation with ICOH

20th anniversary of the ODAM symposium in Maui, Hawaii on June 22-25,
2005

Symposium at IEA'2006; collaboration with Healthcare TC to sponsor a
session on patient safety
Next chair of the TC: Michelle Robertson

This TC has recently been inactive; recruitment of a new TC chair.

6th PIE conference to be held during the IEA'2006 Congress
Special issue on psychological engineering published in *Psychologica* in
2005

Launch of website: <http://PIE-IEA.org>
Next chair: Richard W. Backs

Panel at IEA'2006 and at HFES'2006

Refocus on the domain of work improvement and job design.

Re-evaluation of IEA activities regarding standards
www.iea.cc/standards

2. Creation of New Technical Committees

Several proposals for new TCs are being formalized:

- "Gender and Work" by Karen Messing (leader), Catherine Teiger, Pierre Falzon, Pascale Carayon and Lena Karlqvist
- "Slips, Trips and Falls" by Wen-Ruey Chang (leader), Richard Bowman, Roger Haslam, Sylvie Leclercq and Hisao Nagata
- "Ergonomics in Design" by Lina Bonapace (leader), Pierre-Henri Dejean and Waldemar Karwowski
- "Off-highway Vehicles" by Roberto Montanari, Francesco Tesauri and Stefano Marzani

3. Revision to IEA Basic Documents

Several revisions to the IEA Basic Documents are proposed (see 6.8.2):

- Simplification of the Basic Documents. For instance, we propose to remove the list of TCs from the Basic Documents; the list of current TCs can be found on the IEA website (www.iea.cc)
- Reduction of the number of type of conferences. We propose to remove "Joint Conferences", therefore leaving 3 types of conferences: (1) IEA Triennial Congress, (2) Sponsored Conference, and (3) Endorsed Conference.

4. IEA Conferences

The revisions to the IEA Basic Documents include a new structure for IEA conferences:

- IEA Triennial Congress (no change)
- Sponsored Conference (new name; used to be called 'IEA Conference')
- Endorsed Conference (no change).

We propose to eliminate "Joint Conferences". Work is on-going to create and launch a series of IEA Sponsored Conferences in the following domains:

- Healthcare Ergonomics and Patient Safety
- ODAM
- EQUID.

5. Ergonomics Compendium

The goal of the Ergonomics Compendium is to disseminate information on ergonomics and publicize the HFE discipline. We are exploring the use of Wikipedia as a mechanism for disseminating information in the Ergonomics Compendium (www.wikipedia.com). Wikipedia has one entry on ergonomics (<http://en.wikipedia.org/wiki/Ergonomics>) and one entry on human factors (http://en.wikipedia.org/wiki/Human_factors).

6. Involvement of STP in the Organization of the IEA'2006 Congress

STP very much contributed to the technical program of the IEA'2006 Congress through technical committees. See table above for the list of symposia organized by various TCs.

We are also organizing a series of 'Meet the experts' sessions for students and junior researchers in ergonomics at the IEA'2006 Congress. A few ergonomics experts and past presidents of IEA will be invited to meet informally over lunch with students and junior researchers.

APPENDIX A

REPORTS OF TECHNICAL COMMITTEES

TC on Activity Theories for Work Analysis and Design

Chair: Pascal Béguin, CNAM, France

TC ATWAD

Objectives of the TC

The official definition of ergonomics adopted by the IEA Council in August 2000, asserts that Ergonomics is «a systems-oriented discipline which now extends across all aspects of human activity»

Activity theories has gained increasing popularity, mostly used as a conceptual framework concerned with the understanding of interactions among humans and work environment. But the relation with methods, develop in order to optimize human well-being and overall system performance, in not always very clear. The purpose of the TC is to discuss and refine concepts, methods and practices in ergonomics, based on activity theories or ideas.

Accomplishments of your TC

The TC was created in July 2004 at the meeting hold at Funchal (Portugal). Its first manifestation will be a symposium at the IEA'06, Maastricht, the Netherlands.

The goals of the symposium are:

- *To have a first panorama of what is done on this topic on theoretical but also at practical level, and especially on methodological issues.*
- *To create an international network of ergonomist (researchers and practitioners) interested by this topic.*
- *To associate, to IEA congress, researchers and practitioners who usually come in other congresses (from Education or CSCW communities for example), but who are rarely at IEA congresses.*

The result of the evaluation process is indicated in the appended 1 below.

Planned activities for the next 3 years (2006-2009)

It depends of the symposium, in terms of the interest that will appears in the community during the congress, and as a result of the interest of the participant to continue.

Feedback you have on the functioning and roles of the IEA Tcs

This is a difficult but probably strategic question, regarding the future of the Tcs. It is necessary to define something like a contract, which could better delineate the relationships between Tcs and the IEA, as structure. Particularly: what the IEA is waiting from a Tc, and what a Tc can wait from the IEA.

Pascal Béguin
Mars 2006

Appended 1

Expertise for IEA 2006

Symposium on Activity theories for work analysis and Design

Accepted as oral presentation	23 (rate: 82,15%)
Accepted as poster	1
Rejected	4
Total	28

Id N°	Author(s)	E Mail	Title	Country
		ABSTRACTS	REJECTED (4)	
143	MM Menozzi	mmenozi@ethz.ch	Internet – based vision screening	Switzerland
145	MM Menozzi	mmenozi@ethz.ch	Visual information display and attention in augmented reality	
628	T Torizuka	tori@cit.nihon-u.ac.jp	A Study on Output of Human Physical Power – examination trough hummer stroke	Japan
1367	D.A. Coelho & Dahlman	denis@ubi.pt	An ergonomic design model structured by activity theory	Portugal
		ABSTRACT	ACCEPTED AS POSTER (1)	
618	A Valentin, Lemarchand, Mouloudi, Morizet-Mahoudeaux	annette.valentin@wanadoo.fr	Identifying relevant objects in users' activities with Quintilian's hexameter	France
		ABSTRACTS	ACCEPTED – oral – (23)	
	De La Garza & E. Fadier	cecilia.de-la-garza-corona@univ-paris5.fr	Learning from experience : a theoretical framework for the work activity analysis and safe design	France
	Y. Schwartz	schwartz@up.univ-aix.fr	« activités »	France
95	G. Bedny & W. Karwowski	gbedny@optonline.net	Evaluation of task complexity	UK/USA
102	G. Bedny & W. Karwowski	gbedny@optonline.net	The designing of work activity time-structure	UK/USA
108	L.Q. Querelle & Thibault	leo.q@wanadoo.fr	The practice of consulting ergonomist: a reflexive approach from the tools	France
196	G. Bedny & W. Karwowski	gbedny@optonline.net	Systemic-structural activity theory and its application to ergonomic design	UK/USA

455	F. Decortis & Boulanger	francoise.decortis@ulg.ac.be	Activity theory and design of a portable instrument supporting free-hands drawings	Belgium
495	B.K. Roed, Bjørkl, Gould, Hoff,	bjarte.roed@mac.com	Activity theory used in design of navigation equipment	Norway
652	K Launis	kirsti.launis@ttl.fi	Changes in production concepts emphasize problems in work-related well-being	Finland
656	Juha Pihlaja	juha.pihlaja@merikoski.fi	Production concepts and learning: The change of learning system	Finland
691	R.J.T. Virkkunen	jaakko.virkkunen@helsinki.fi	Collaborative development of a new operating concept for an activity	Finland
733	Liliana L Cunha	lcunha@fpce.up.pt	Drivers' activity in an ergologic sense: new territories of knowledge and intervention	Portugal
881	S Caroly & A. Weill-Fassinna	sandrine.caroly@upmf-grenoble.fr	How service relationship studies ask questions about the diversity in activity approaches?	France
929	F.L. Mascia, Sznelwar, Silva	fmascia@usp.br	TEAMWORK IN THE PUBLIC HEALTH AREA UNDER ERGONOMICS POINT OF VIEW	Brazil
978	M Da Silva-Vion & Theureau	martine.vion@univ-ubs.fr	Hospital porter's articulation work with units, and contribution to management and logistics	France
1011	L Norros	Leena.Norros@vtt.fi	A method for performance-based usability evaluation of complex human-technology systems	Finland
1190	F. Daniellou	Francois.Daniellou@ergo.u-bordeaux2.fr	Simulating future work activity is not only a way of improving workstations	France
1215	C. A. Owen	Christine.Owen@utas.edu.au	Using activity theory to analyse learning and development in High-3 work environments	Australia
1225	P. Béguin	beguin@cnam.fr	Taking activity into account during design	France
1239	M Cerf	cerf@inapg.inra.fr	The use of developmental intervention by targeted communities: Consultancy in agriculture	France
1249	S Caroly & A. Weill Fassinna	sandrine.caroly@upmf-grenoble.fr	Service relationship analysis state questions about the diversity of human activity theories	France
1289	L Kloetzer & Y. Clot	laure.kloetzer@gmail.com	Cross self confrontations : a dialogical method for transforming work	France
1438	C. A. Owen	Christine.Owen@utas.edu.au	Analysing the activity of work in emergency incident management	Australia

TC on Aging

Chair: Juhani Ilmarinen, Finnish Institute of Occupational Health, Finland

IEA Technical Committee – Aging

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Objectives:

- To identify and promote important research and application areas concerning Ageing and Work, as well as ergonomic solutions for the "Third Age"
- To promote and coordinate the exchange of scientific and technical information about the ergonomic challenges and needs of the ageing population in the international level
- To advise and assist in the development of the technical program of IEA Triennial Congresses
- To advise and assist in the organisation and conduct of IEA sponsored meetings
- To collaborate with other expert organisations, like the ICOH Scientific Committee Aging and work, in organising scientific meetings
- To assist industrially developing countries in assimilation of ergonomic practices and knowledge

Members:

Under preparation

Current activities and plans

After the IEA/Seoul 2003 the main activities focused on exchange of information between the co-operating partners in the theme ageing and work. The main target was to advise and assist in the organisation of 2nd International Symposium on Work Ability, held in Verona, 17-20 October 2004 (the 1st International Symposium was held in Tampere, Finland in 2001 as a part of the Nordic Ergonomic Society Conference). The title of the 2nd Symposium was " Assessment and promotion of Work Ability, Health and Well-being of Ageing Workers". The International Organising Committee consisted of:

Prof. Giovanni Costa, University of Verona, chair
Prof.em. Willem Goedhard, ICOH SC Aging and Work
Prof. Juhani Ilmarinen, IEA/TC Aging

The 2nd Symposium was a great success with nearly 200 active participants and more than 100 paper and poster presentations. The participants came from 25 countries (16 European countries, 9 countries of 4 different continents). The impressive figures indicate rapidly growing interest on Aging of the work forces all over the world. One of the key-element in promotion the work ability during ageing was ergonomics. To assess the work ability of the individuals, the validated method called Work Ability Index (WAI) was used in several studies. It was interesting to find out the increasing use of WAI world wide, which also allowed comparative studies of ageing workers in different countries. The WAI has been translated in 23 different languages, and the support of it's translations and implementations in different countries has been one of the running activities of TC Aging. The spring time 2005 has been used for the preparation of the proceedings.

A high level proceedings of the Verona Symposium was recently published:

Costa G, Goedhard W, Ilmarinen J (eds.) Assessment and promotion of Work Ability, Health and Well-being of Ageing Workers. Proceedings of the 2nd International Symposium on Work Ability, held in Verona, Italy between

18 and 20 October 2004, Elsevier 2005.

The NIVA 4th Age Management Course was carried out on 20-24th March 2006, Saariselkä, Finland. This advanced course for occupational health and safety experts, HR managers and researchers was a great success. Close to 50 experts from 10 countries participated and worked out practical ageing solutions in work shops.

The planned activities for 2005-2006 are the following:

- to publish the proceedings of Verona Symposium (published, see above)
- to plan the 4th Age Management Advanced Course with NIVA – Nordic Institute for Advanced Training for occupational health and safety professionals. The preliminary title of the international course is: Age Management: work after 60plus ? The course will be organised in March 2006, Lapland , Finland and the participants of the IEA/Agging meetings are one of the key target group (organised, see above).
- to co-operate with the ICOH SC Aging and work for ICOH2006 conference in Milan
- to assist in the development of the technical program concerning aging issues for the IEA2006 conference in Maastricht. The target is to organise 3-4 technical sessions on Ageing for IEA/2006
- to assist in the preparation of the IEA Ergonomics Compendium
- to assist and support the implementation of the work ability concept, and the use of Work Ability Index world-wide. A special emphasis will be in developing countries (like Brazil, Chile, Thailand, Vietnam) as well as in former east-European countries.
- to plan and coordinate an international Work Ability Network as well as a Work Ability Index Data Bank. The plan is that the WAI-network countries will organise first a national reference bank to provide information of work ability by age group, gender, occupation etc. for researchers and responsible bodies for work life development organisations in each country. The data banks will be organised so, that they are connected with other banks allowing the change of information. For example, the work ability of 55+ bus drivers of Tokyo can be compared with bus drivers in Hamburg, or Los Angeles. National Data Banks are already under preparation in Finland and Germany, and interest has been shown by the experts in The Netherlands, Portugal, Switzerland, Japan and Brazil.
- to plan the 3rd Work Ability Symposium on Work Ability, which will be held in 2007 in Europe. It will be planned and organised together with ICOH SC Aging and work committee and with the local organiser. The targets and plans for the next Symposium will be discussed in TC/Agging business meeting in Maastricht 2006.

Links to Relevant Sites

Under preparation

TC on Agriculture

Chair: Peter Lundqvist, Swedish University of Agricultural Sciences, Sweden

No report filed.

Proposal to rename the TC to "Agriculture, Forestry and Fishing"

TC on Auditory Ergonomics

Chair: Ellen Haas, US Army Research Laboratory, USA

A. PURPOSE

The Auditory AE TC founded in 2004 by Dr. Ellen Haas, head of the Auditory Controls and Displays Laboratory of the U.S. Army Research Laboratory. The purpose of the AE TC is to provide a forum for the international exchange of scientific and technical ergonomics information related to auditory issues, which include:

- Auditory warnings and displays
- Automatic speech recognition and voice input devices
- Speech synthesis
- Spatial auditory displays
- Sonification
- Noise
- Hearing protection
- Any other area that involves audio input or output.

The Auditory Ergonomics Technical Committee was founded to promote professional and public awareness of auditory ergonomics.

B. OBJECTIVES

The objectives of the AE TC are to foster a better understanding and appreciation for auditory ergonomics, and to promote the beneficial effects of this area by:

- **Serving as a network** and advocating the interchange of information between researchers, practitioners, educators, those involved in standards and regulations, and others with an interest in auditory ergonomics;
- **Fostering professional initiatives** for the International Ergonomics Association to promote auditory ergonomics throughout the world; including Congresses, symposia, and publications;
- **Compiling, presenting, and making readily accessible, research** related to auditory ergonomics throughout the world;
- **Identifying further research needs** and encouraging international research collaboration;
- **Advancing ergonomics** as a major consideration in the design phase of auditory systems and applications;
- **Promoting the development of ergonomic design guidelines** or codes of practice for auditory systems;
- **Organizing Committee activities, events, and meetings** to take place during IEA Triennial Congresses as well as during inter-Congress intervals;
- **Maintaining an IEA web page** describing current and future Committee activities, events, and meetings.

C. ACTIVITIES SINCE JUNE 2005

Ellen Haas and Dr. Sander van Wijnngaarden of the Speech and Hearing Group of TNO Laboratories in The Netherlands proposed an Auditory Ergonomics multi-session symposium for the IEA 2006 Congress. The proposed symposium was to consist of one session in the area of auditory warnings, one in the area of automatic speech recognition (also known as direct voice input), and a third in the area of special (miscellaneous) topics. The proposal was accepted by the IEA, and shortly after, Ellen Haas sent out a call for papers for this symposium.

Ellen Haas also sent a copy of the AE TC call for papers to Ms. Lois Smith, Communications Director of the Human Factors and Ergonomics Society. Ms. Smith published the Call for Papers in the 2005 HFES Congress bulletin and in the HFES Bulletin, the HFES monthly newsletter.

In October 2005, the AE TC received and reviewed approximately 20 abstracts for the IEA Congress Auditory Ergonomics Symposium. Dr. Judy Edworthy (University of Plymouth, U.K.) and Dr. James Bliss (Old Dominion University, U.S.A.) kindly offered to help review papers. Based on the papers received, the AE TC Preliminary Program was organized into four formal paper sessions: "Auditory Noise Control," "Spatial Auditory Displays," "Auditory Displays in Vehicle Systems," and "Issues in Auditory Ergonomics." Also included is Judy Edworthy's Interactive Session, "Matching form to function: Issues in auditory warning design."

Dr. Haas also asked Dr. Wijnngaarden if it would be possible to conduct a tour of his laboratory as part of the AE TC effort for the 2006 Congress. Unfortunately, the TNO laboratory is two hours away from the Congress venue, making a tour extremely difficult. The idea was scrapped.

With the valuable help of Andrew Marshall, the IEA Webmaster, the AE TC website was launched in August 2005. The website, which runs under the aegis of the IEA, describes the mission and purpose of the AE TC and offers an opportunity for interested persons to join the TC. Andrew was the first member who joined through the

website, which can be found at <http://www.iea.cc/auditory/>

The AE TC looks forward to a successful 2006 IEA Congress. They plan a formal meeting during the Congress.

D. PROPOSED ACTIVITIES FOR THE AE TC

AE TC proposed activities for the next three years (2006 through 2009):

Given the success of the 2006 AE TC Symposium, we plan organizing an AE TC multi-session symposia for the next (2009) IEA Congress.

We plan to enhance the IE TC web page by:

- Listing AE TC planned activities
- Listing AE TC events of interest to members
- Listing relevant research projects and papers
- Listing calls for papers for conferences of interest
- Describing books of interest, publishing book reviews
- Providing a forum for members to describe and discuss auditory ergonomics issues of interest

We plan on maintaining a presence at the AE-related conferences by organizing a special paper session at a Human Factors and Ergonomics Society Conference, and organizing a special paper session for the International Congress of Spoken Language Processing (INTERSPEECH) (even years) and Eurospeech (odd years)

Other ideas for future activities include proposing a special issue in journals such as Ergonomics or Human Factors, covering issues in auditory ergonomics.

Report respectfully submitted by

Ellen Haas,
AE TC Chair

TC on Building and Construction

Chair: Henk van der Molen (new chair; previous chair: Ernst Koningsveld), Arbouw, The Netherlands

This TC focuses on human factors in the construction industry, which is affected by a high incidence of musculoskeletal disorders, injuries and fatalities worldwide. Reflecting the international nature of the problem, members of the committee participate from all over the world. The TC has organized a symposium at the IEA Congress 2006. The TC collaborated in two scientific journals: the Scandinavian Journal of Work, Environment & Health (Volume 31, Supplement 2; 2005) and Applied Ergonomics (Volume 36, Issue 4; 2005) which contained 22 scientific articles and 2 editorials about occupational health and ergonomics in building and construction work. Henk van der Molen (vandermolen@arbouw.nl) succeeded Ernst Koningsveld as chair of this TC in 2006.

TC on Ergonomics for Children and Educational Environments

Chair: Cheryl Bennett, Lawrence Livermore National Laboratory, USA

In April 2006-04-01 the membership of ECEE has reached 162. We are pleased that membership from countries undergoing international development has been increasing. Together membership from these countries constitutes more than 10 percent of the total. The active interest in the welfare of children is remarkable.

	Number	Percent
Australia/NewZealand	23	14
South/Central America	10	6
North America	95	58
Europe/UK	16	10
Central/East Europe	4	3
Middle East/Africa	4	3
Asia/Pacific	10	6
Total	162	100

ECEE membership is open and currently no membership dues are levied. Currently active membership (defined by functioning email addresses) is closer to 150.

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Activities:

With the generous assistance of Dr. Dieter Breithecker, Cheryl Bennett organizing an informal tour prior to the IEA Congress. Attending ECEE members will tour a school that has implemented practices and design aimed at keeping students in motion rather than forcing them to "sit still". It has been termed a "moving school". The school is in Hannover, German and the tour is scheduled for the morning of Friday 7 July 2006.

The ECEE received over 40 abstracts in preparation for the IEA 2006 Congress. The reviews were coordinated by ECEE Chair, Cheryl Bennett and the reviewers were:

David Bacon,
Cheryl Bennett
Lina Bonapace,
Sara Dockrell
Robin Gillespie,
Clare Pollock, and
Thomas J. Smith

The number of accepted papers will be somewhere between 30-35 and six or seven paper presentation sessions are anticipated. The papers will be divided into topical areas such as the following:

Child Musculoskeletal Health
Childhood Challenges
Design for Children
Designing Ergonomics into Schools
Educational Ergonomics

The papers for the ECEE sessions were submitted from 17 different countries.

ECEE Website:

The ECEE has maintained a website since 2001 and it has been designed by Margo Fraser, hosted by the University of Minnesota through the auspices of Thomas Smith and maintained by the efforts of Pat McKay, also of the University of Minnesota.

www.ergonomics4children.org (<http://education.umn.edu/kls/ecee/>)

The ECEE would like to offer formal thanks to Margo Fraser, Thomas Smith and Pat McKay ECEE for supporting and maintaining the ECEE website. We would like to request permission to use certificates with the IEA logo to express appreciation for the generosity of these individuals.

ECEE Organization:

The Ergonomics for Children and Educational Environments (ECEE) Technical Committee was organized following the IEA2000 Congress by Cheryl Bennett and approved by the IEA Executive Committee in November 2000.

The approved mission and objectives for the committee are as follows:

Mission:

The purpose of the Ergonomics for Children and Educational Environments Technical Committee is to provide a forum for the international exchange of scientific and technical ergonomics information related to children and educational environments. The Committee promotes professional and public awareness of ergonomics related to children of all abilities in all aspects of their lives and the application of ergonomics in all educational environments.

Objectives:

The objectives of the Committee are to prevent or reduce the risks of developing musculoskeletal and vision disorders and to promote the beneficial effects of educational computing through:

- Serving as a network for the interchange between researchers, practitioners, school administrators, teachers, parents, health professionals, architects, designers, and manufacturers of furnishings, education supplies, software and equipment;
- Fostering professional initiatives for the International Ergonomics Association to promote ergonomics in schools throughout the world;
- Advocating ergonomics education for children, parents, teachers, librarians and health professionals;
- Developing materials for educational institutions as well as parents, teachers, librarians, and health professionals about ergonomics specifically adapted to children's postural and visual needs;
- Promoting ergonomics education for teachers and students in education information technology and design technology projects;
- Compiling, presenting, and making readily accessible, research related to ergonomics for children and educational environments;
- Identifying further research needs and encouraging international research collaboration;
- Encouraging collection and exchange of health and comfort data on incidence or prevalence of computer-related musculoskeletal and vision complaints among children;
- Advancing ergonomics as a major consideration in the design phase of learning environments;
- Defining strategies to inexpensively retrofit or redesign existing furniture used in computer environments at home, and in schools, libraries, children's museums and other educational environments;
- Advocating that a portion of major funding for information technology should be earmarked for ergonomics; and promoting the development of ergonomic design guidelines (or codes of practice) for software, hardware, furniture, classrooms, computer rooms, school libraries and other educational environments.

TC on Healthcare Ergonomics

Chair: Sue Hignett, Loughborough University, UK

The aims of HETC9 are to:

- Promote the recognition and development of hospital ergonomics as a specialist area of ergonomics
- Plan and develop paper sessions, symposia and group meetings on hospital ergonomics at IEA congress and other conferences
- Raise the profile of hospital ergonomics by creating an inclusive forum to represent the diversity of research and practice interests
- Liaise with other professional organisations to enhance the inclusive base of this group.

Background

HETC9 was started by Francois Daniellou in 1997, following the IEA Congress in Finland. Over 56 members responded to the initial invitation from 14 countries. All areas of the healthcare industry are represented for clinical and non-clinical working environments in both acute and community (social) settings.

HETC9 encourages the diverse range of interests from product to architectural design, musculoskeletal issues, accident analysis and organisational systems.

In 2003 there were 48 active members from 14 countries. In 2006 membership is 98 in 18 countries, a small increase on 2005 (95 members).

HETC9 Symposia

Over 80 papers were received for the Healthcare Ergonomics symposia at the IEA Congress 2006. There are 5 streams with 15 sessions:

1. Patient Safety 1: Human Factors in Patient Safety
2. Patient Safety 2: Error Analysis
3. Patient Safety 3: Patient safety in Critical Care situations
4. Healthcare Systems 1: Design and evaluation of Healthcare Systems
5. Healthcare Systems 2: Design and evaluation of Healthcare Systems
6. Healthcare systems 3: Healthcare as a High Reliability Organisation
7. Healthcare systems 4: Designing competences for patient safety and clinical risk managers
8. Healthcare systems 5: Emergency Room and Operating Room
9. Product design in Healthcare Ergonomics (1)
10. Product design in Healthcare Ergonomics (2)
11. Patient handling ergonomics 1
12. Patient handling ergonomics 2
13. Patient handling ergonomics 3
14. Healthcare Ergonomics: Architecture 1
15. Healthcare Ergonomics: Architecture 2

Journals/Books

- A special edition of Ergonomics on patient safety will be published in 2006. There are 13 papers (plus editorial) on a wide range of topics relating to healthcare ergonomics and patient safety.
- A special edition of Applied Ergonomics is planned for 2006/07. Papers were invited. Editors: Pascale Carayon and Peter Buckle.

Collaboration with other TC

A collaborative group has been convened with TC13 (Musculoskeletal disorders). This is a European venture and includes members from 13 EU member states. The group is called the European Panel on Patient Handling Ergonomics (EPPHE). The first collaborative paper has been written (9 participating countries) and is in review with the International Journal for Industrial Ergonomics.

A close link has been established with ODAM and HETC9 for Patient Safety issues.

Contact:

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TC on Human Aspects of Advanced Manufacturing

Chair: Waldemar Karwowski, University of Louisville, USA

No report filed.

The HAMAHA'2005 conference took place in San Diego, California, in July'2005.
The next HAMAHA conference will take place in Poland in 2007.

TC on Human-Computer Interaction

Chair: Tom Stewart, System Concepts, UK

No report filed.

A proposal for merging the WWCS (Work With Computing Systems) international group with the HCI TC will be presented to the WWCS group in Maastricht, The Netherlands.

Tomas Bern has accepted to be the next chair of the HCI TC.

TC on Human Reliability

Chair: Heiner Bubb, Universitat Munchen, Germany

No report filed.

TC on Musculoskeletal Disorders

Chair: Enrico Occhipinti, ICP Hospital of Milan, Italy

MEMBERS : The list of expert members is the one annexed to July-05 report. During IEA 06 Conference we expect to update that list of active members.

GENERAL OBJECTIVES: To collect, review and share with all ergonomists and OSH in the world, methods, "best" practices and "best experiences" for risk assessment and management of WMSDs, including aspects related to job/task design and to workplace/work tools design.

ACTIVITY: The activities during last year have been targeted to IEA06 conference and resumed in the intended plan of mini-symposia, ordinary sessions and interactive session that was processed by TC in connection with Conference organizers.

In the following the provisional plan is reported.

IEA06 - Symposium "Prevention of WMSDs"

PRELIMINARY PROGRAM

A) Mini-symposium with pre-determined sessions

A1) Advanced experiences of ergonomic intervention for UL WMSDs prevention in large manufacturing companies. (6 papers; 90 minutes)

A2) WMSDs prevention and international standards (ISO-CEN) (5 papers; 90 minutes)

A3) Prevention of WMSDs in the fishing sector. (6 papers; 90 minutes)

A4) Prevention of WMSDs in agriculture with special focus on viticulture. (4 papers; 90 minutes)

A5) Prevention of WMSDs in the building sector (5 papers; 90 minutes)

A6) Part 1 : Advanced experiences of prevention of WMSDs in computer workers (5 papers; 90 minutes)

A6) Part 2 : Advanced experiences of prevention of WMSDs in computer workers (5 papers; 90 minutes)

B) General symposium with ordinary sessions

Suggested sessions

B1) Strategies and plans for WMSDs prevention (6 papers; 90 minutes)

B2) Physiological studies for WMSDs prevention (5 papers; 90 minutes)

B3) Experiences of WMSDs prevention in the health care sector (5 papers; 90 minutes)

B4) Experiences of WMSDs prevention in different contexts (6 papers; 90 minutes)

B5) Other relevant studies for WMSDs prevention (5 papers; 90 minutes)

C) Interactive sessions

C1) Part 1: Risk assessment and management of WMSDs: applicative tools and softwares. Part 1 (4 presentations; 150 minutes)

C1) Part 2: Risk assessment and management of WMSDs: applicative tools and softwares. Part 2. (5 presentations; 150 minutes)

C2) Mini course on "The application of OCRA methods". (Presentation by Colombini and Occhipinti; 150 minutes)

C3) The Strain Index: a method for analyzing DUE Jobs. Presentation by Garg and Moore; 150 minutes)

1 key-lecture by D.Colombini "UL WMSDs prevention: from experiences of job (re)design to actual trends in standardization" has also to be considered as proposed by the TC

FUTURE ACTIVITIES (2006-2009)

The main topics already presented in previous report will be enforced; they are resumed by titles:

1. Prevention of WMSDs in the health care sector.

The strict cooperation with IEA TC "hospital ergonomics" (chair: Sue Hignett) will continue on this topic.

2. International Standards (and guidelines) relevant for WMSDs prevention.

As a lot of members of the TC are involved in preparing those standards, the task of the group will be: -To have a "lobby" of experts supporting the draft standards now under discussion; - to spread the knowledge of those standards; - to verify their usefulness and applicability also for giving some impulse to other national and international guidelines on the matter.

3. Methods and experiences of risk assessment,

management and of positive ergonomic intervention for WMSDs prevention in different working sectors with special focus on some "neglected" sectors (agriculture, fishing, building, SME, etc).

4. Other topics.

Other proposal will be formulated during a TC meeting that we plan during the IEA06 Conference. Expected proposals could refer to MSD aspects in office work (referents colleagues from Netherlands) ; development of softwares and tools useful for the application, at field level, of ergonomics methods given in standards and guidelines also by non ergonomics experts (referents colleagues from Germany)

COOPERATION WITH ICOH SCIENTIFIC COMMITTEE ON MSD

The cooperation with this scientific committee re-started during Premus 06 and is aimed at sharing projects and at better defining respective fields of interest also in order to avoid useless overlaps. Myself, as chair of IEA TC on MSD, become a member of the ICOH SC and together we planned interactions in view of the 2 respective conferences in 2006.

During the ICOH conference (Milano; June 2006) we plan to enforce cooperation for next years.

CHAIR

Enrico Occhipinti (myself) is available for chairing the TC in next 3 years, if this is appreciated by the IEA Board and by active TC members.

During the TC meeting at IEA06 conference we would like to find active co-chairs helping the chair in actuating the provisional program and the organization of future events up to the next IEA 09 Conference.

TC on Organizational Design and Management

Chair: Pascale Carayon, University of Wisconsin-Madison, USA

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The objectives of the ODAM Technical Committee are development and dissemination of scientific knowledge about the macroergonomic aspects in the design, implementation, and management of work systems, including:

- Organizational and psychosocial work environment
- Participatory ergonomics
- Management of complex, large scale technical systems
- Manufacturing systems and the organizational environment
- Assembly and service systems and the organizational environment
- Training systems and organizational learning
- Design of information technology systems and organizational change
- Information technology and the organizational environment
- Labor market and society in change
- Work organization, patterns of work, family interface
- Cross cultural perspectives and applications in organizational design
- Health, stress and well-being
- Occupational well being, health and safety
- Occupational psychosocial and ergonomic factors in office employee health and telecommuters
- Macro design
- Sociotechnical change
- Quality improvement: Methods and findings
- Competitive advances of better work organizations
- Organizational culture and values

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Accomplishments:

In 2005, the major accomplishment of the ODAM TC was the organization of the 20th anniversary of the ODAM Symposium (<http://cqp2.engr.wisc.edu/odam2005/>). The 20th anniversary of the Human Factors in Organizational Design and Management (ODAM) Symposium of the Macroergonomics Technical Group co-sponsored by the HFES (Human Factors and Ergonomics Society), the IEA (International Ergonomics Association) and Virginia Polytechnic Institute was held at the location of the first ODAM Symposium, Hawaii. The conference took place from June 22-25, 2005 at the Wailea Marriott on the island of Maui, Hawaii. More than 100 people attended the conference. The proceedings of the conference were published in a book under the auspices of the IEA Press: Carayon, P., Robertson, M., Kleiner, B. and Hoonakker, P.L.T. (Editors) Human Factors in Organizational Design and Management – VIII, IEA Press, Santa Monica, CA, 2005.

The ODAM TC was also involved in the organization of the ODAM symposium at the IEA'2006 congress, resulting in 7 sessions and 1 session co-organized with the Healthcare Ergonomic TC.

Activities planned:

The main activity planned for the ODAM TC is the organization of the ODAM'2008 conference in Brazil. Laerte Sznalwar and his colleagues at the University of Sao Paulo have accepted to organize the ODAM'2008 conference.

The TC is also working on transforming the ODAM conferences into 'IEA conferences'. A steering committee

for the ODAM conferences will be formed, and will be the governing body for ODAM conferences. The steering committee will have two main missions: (1) to guarantee the focus of ODAM and (2) to ensure the continuation of ODAM conferences by selecting relevant and capable bidders.

Michelle Robertson will be the new chair of the ODAM TC for the 2006-2009 period.

TC on Process Control

Chair: John O'Hara, Brookhaven National Laboratory, USA

No report filed.

Recruitment of a new TC chair needed.

TC on Psychophysiology

Chair: Shinji Miyake, Japan

The purpose of PIE is to promote and advance the understanding of psychophysiological methods and their application to ergonomic environments through the interchange of knowledge and methodology in the behavioral, biological and physical sciences, and engineering disciplines. PIE became a formal organization and a TC of the IEA in 1996.

PIE has grown from the initial organizing committee of Wolfram Boucsein, John Stern, and Akihiro Yagi to a membership of 260 members worldwide. The primary qualification for membership is: Interest or activity in the application of psychophysiological methods to the solution of ergonomic problems.

PIE holds autonomous biannual conferences, the objectives of which are to provide an international forum for the presentation of scientific work on the use of psychophysiological methods in the field of ergonomics and to foster the exchange of expertise among international scientists in this field.

The 3rd PIE conference, PIE 2000 took place in San Diego, California, in conjunction with the IEA'2000, on July 30, 2000.

The 4th PIE conference took place on September 22, 2002 in Glasgow, Scotland, in conjunction with the Annual Meeting of the British Psychophysiological Society.

The 5th PIE conference was held on September 19, 2004 in New Orleans in conjunction with the HFES 49th Annual Meeting.

The 6th PIE conference will be held during the IEA2006, on July 10-14, 2006 in Maastricht, The Netherlands.

A special issue on psychophysiology in ergonomics was published in the "International Journal of Psychophysiology" edited by Akihiro Yagi, Wolfram Boucsein and Fumio Yamada was published in April 2001.

A special section of "Human Factors" edited by Michael Trimmel, Nicola Wright and Richard W. Backs was published 2003.

A special issue on psychological engineering – psychophysiological approaches in "Psychologia" was published in 2005, edited by Akihiro Yagi.

During the IEA2003, PIE sponsored two symposium sessions with six presenters each on the use of psychophysiological methods in ergonomics (Sessions S062 and S063). Presenters were from Japan, Korea, Germany, Austria, and the Ukraine. The session organizer was Wolf Boucsein from Wuppertal, Germany, the co-organizer is Min Cheol Whang from Seoul, Korea.

A PIE sponsored session entitled "Real-Time Psychophysiological Measures for Adaptive Automation Systems" was held during the 45th Annual Meeting of the Society for Psychophysiological Research on September 21-24, 2005 in Lisbon, Portugal. Five papers were presented by PIE members.

PIE established its own website in 2005: <http://PIE-IEA.org>

PIE Officers (2004-2006):

President: Shinji Miyake, Ph.D., University of Occupational and Environmental Health, Kitakyushu, Japan.

President-Elect: Richard W. Backs, Ph.D., Central Michigan University, USA
(He will be the next chair (2006-2008) of TC)

Secretary/Treasurer: Wolfram Boucsein, Ph.D., University of Wuppertal, Wuppertal, Germany, email: boucsein@uni-wuppertal.de

Directors-at-large:

Stephen Fairclough, Dr., Liverpool John Moores University, UK
Michael Trimmel, Ph.D., Medical University Vienna, Austria

Michael Falkenstein, Ph.D. Leibniz Research Centre for Working Environment and Human Factors,
Germany
Hiroshi Nittono, Ph.D., Hiroshima University, Japan

Past President: Robert A. Henning, Ph.D., University of Connecticut, USA, email: henning@uconnvm.uconn.edu
President Elect:

Planned activities for the next 3 years (2006-2009):

2006: The 6th International Conference of PIE will be held in Maastricht during IEA2006. Twenty three papers will be presented in four sessions.

2007: PIE sponsored session in psychophysiology/ergonomics related congress is planned. No concrete plan is made at this moment.

2008: The 7th International Conference of PIE will be held as regular biannual meeting.

2009: PIE will organize some sessions in IEA2009.

TC on Quality Management

Chair: Ram Bishu, University of Nebraska

Things done so far:

1. Have been organizing symposiums in IEA 97, IEA 2000 and IEA 2003. I am trying to arrange one for IEA 2006 as well
2. Was involved in TQM in HF conference in Linkoping, Sweden 1999

Plan for future:

1. Do not have a clear idea on what is expected.
2. Will form a virtual group with Eklund (Sweden), Drury (USA), Kwan Lee (South Korea), Karwowski (USA) and any others you suggest, and get some directions.
3. Ideas for the group:
 - 3.1 Special Issue of ergonomics or app. Ergo or IJIE
 - 3.2 Get ASQ involved

Time Line:

Make some of these happen definitely before the end of the year

April 12, 2006

1. Am organizing a break out session/panel at IEA 2006 in Maastricht.
2. Am organizing a similar panel at 50th HFES in San Francisco
3. Would appreciate a meeting on Tuesday in the lunch slot
4. Does IEA have a member list of people with interest in Quality? Hope the meeting will get publicized. I will also send some emails.

Ram Bishu

TC on Safety & Health

Chair: Masaharu Kumashiro, Institute of Industrial Ecological Sciences, Japan

Objects of TC for Safety and Health

For the time being, the TC for Safety and Health is dealing only with Occupational Fields. The main target activity for Occupational Safety is to develop ergonomics activities ranging from discovery to improvement of unsafe conditions and actions in the workplace. Another important Occupational Health activity goal is the improvement and design of work conditions so as to minimize the onset of work-related diseases, occupational stress and fatigue, and the aging at the work place. The contribution of the TC for Safety and Health from now on in IEA will be to build an international database for work improvement/job design that will serve as a tool for achieving the above two targets.

Activities of TC for Safety and Health from 2006 to 2009

The IEA TC for Safety and Health will have a business meeting with active members during IEA2006, and will discuss about;

- (1) Reestablishment of the organization of The IEA TC for Safety and Health
- (2) Recruit new members, and a mailing list
- (3) Cooperated with The IEA TC for Aging
- (4) Activities

TC for Safety and Health do not have certain activities except the following three actions at the present stage.

- 1) Though we do not have any special session in IEA 2006, our members will submit papers to the Aging session which is organized by TC for Aging. That is, many of our members are interest to the aging in the field of occupational health and safety.
- 2) Conference of the IEA TC for Safety and Health will be held jointly with the 8th Pan-Pacific Conference on Occupational Ergonomics on 2007 in Bangkok, Thailand.
- 3) International Conference on "Women and Work" will be considered, and it will have on 2008 in Japan.

TC on Standards

Chair: Nico Delleman, NIA TNO, The Netherlands

No report filed.

IEA activities regarding standards are being re-evaluated.

6.8.2. Revision of the IEA Basic Documents related to Conferences in Ergonomics

IEA RULES

TITLE 9 – SOURCES OF INCOME

Article 1. Fees and other sources

The main sources of income of the Association are : annual fees of federated and affiliated societies ; annual fees of sustaining members ; capitation fees from IEA sponsored and endorsed conferences and IEA triennial congress ; donations and bequests from individual and organizations who support the IEA ; other sources of income as deemed appropriate by the Council.

Annual fees and capitation fees are defined in the IEA Operating Procedures.

IEA OPERATING BODIES

TITLE 5 – STANDING COMMITTEES – DEFINITION

Much of the work of the IEA is accomplished through its Standing Committees. The following are the Standing Committees of the IEA, some of which have subcommittees responsible for specific functions or activities.

Article 6. Science, Technology and Practice

This committee promotes and coordinates the exchange of scientific and technical information at the international level. There are presently eighteen subcommittees (known as IEA Technical Committees), which address specific areas of technical interest.

The list of IEA Technical Committees can be found on the IEA website (www.iea.cc).

TITLE 13 – SCIENCE, TECHNOLOGY AND PRACTICE COMMITTEE

Article 1. Objectives

The objectives of the committee are :

- to promote and coordinate the exchange of scientific and technical information at the international level;
- to advise and assist in the development of the technical program of IEA Triennial Congresses;
- to take the initiative or to advise and assist in the organization and conduct of IEA sponsored meetings ;
- to assist industrially developing countries in the assimilation of ergonomics practices and knowledge ;
- to endorse journals and technical documents as appropriate according to the IEA rules.

Article 2. Committee Policies

At least once every three years, the Committee will survey all Federated Societies to determine if there are new areas of technical interest at the international level, and to develop new IEA Technical Committees where there is sufficient indication of interest.

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 <#>Human Aspects of Advanced Manufacturing, ¶
 <#>Human-Computer Interaction, ¶
 <#>Human Reliability, ¶
 <#>Musculoskeletal Disorders, ¶
 <#>Organizational Design and Management, ¶
 <#>Process Control, ¶
 <#>Psychophysiology in Ergonomics, ¶
 <#>Quality Management, ¶
 <#>Rehabilitation Ergonomics, ¶
 <#>Safety and Health, ¶
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The committee will :

- working through the IEA Technical Committees, promote the organization of international conferences and symposia under IEA sponsorship ;
- review all requests for IEA sponsorship of meetings, symposia, etc., and make recommendations to Council regarding the nature and level of sponsorship support ;
- monitor directly, or through IEA Technical Committees, as applicable, all IEA sponsored activities ;
- explore and develop new means for promoting technical information exchange at the international level and make recommendations to Council.

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Article 3. Procedures

The Science, Technology and Practice Committee maintains oversight and will promote the activities of the IEA Technical Committees. The Science, Technology and Practice Committee will discharge either directly or through the Technical Committees, as appropriate, the objectives, policies and procedures herein stated.

Chairs of Technical Committees shall submit a statement of intended activities and milestone dates to the Chair of the Science, Technology and Practice Committee annually by the last day of May. This statement may include items such as:

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- planning of activities for IEA Triennial Congresses ;
- organization of international conferences to include IEA Sponsored Conferences, and Endorsed Conferences. These are described in the "IEA Policy on the Support of Conferences in Ergonomics";
- sponsorship of international seminars and expert meetings;
- proposals for technical publications may be endorsed by the Chair of the Science, Technology and Practice Committee. Such publications may be published by Taylor & Francis under the IEA imprint or by another publisher.

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One member from each Technical Committee shall serve as a member of the Science, Technology and Practice Committee. This may be the Chair of the Technical Committee or a member selected to represent the Chair.

Committee members shall communicate as often as necessary and conduct face-to-face meetings when practical. The Chair of the Science, Technology and Practice Committee shall take the initiative for such meetings.

New Technical Committees may be suggested by the Federated Societies or individuals associated with IEA.

The Chair of the Science, Technology and Practice Committee will, after nominations by the Federated Societies and in collaboration with members of a Technical Group, select a Chairperson for each Technical Group.

Members of a Technical Group shall be proposed by the Chair of the Technical Committee and confirmed by the Chair of the Science, Technology and Practice Committee.

Chairs and members of Technical Committees are expected to serve for a maximum of three years, but the time period may be shorter or longer as convenient.

Technical Committees that are no longer viable as technical entities may be dissolved by the Chair of the Science, Technology and Practice Committee subject to approval of the Executive Committee.

IEA POLICY ON THE SUPPORT OF CONFERENCES IN ERGONOMICS

TITLE 1 – GENERAL

It is the policy of the IEA to support international scientific conferences organized by any of its Federated Societies or by other international bodies that have an interest in ergonomics or that are organizing a conference with a major ergonomics team. Support will be given for conferences of four major types:

- IEA Triennial Congress
- ~~Sponsored Conference~~
- ~~Endorsed Conference~~

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The IEA Triennial Congress is organized and hosted by a Federated Society. The other three types of conferences will normally be organized by a Federated Society, IEA Technical Group, or by Societies representing the IEA in cooperation with other bodies as may be appropriate.

The IEA supports these conferences to varying degrees, depending upon the type, in three basic categories:

- providing "seed" funds as approved by the Council
- providing publicity through its member societies (also see note below)
- permitting the use of its name and logo to endorse the conference.

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The IEA requires to receive eleven (11) copies of the conference proceedings, delivered to the Secretary General's address or to addresses designated by the Secretary General. This requirement applies to all types of IEA supported conferences (see table below). One copy will be retained by the IEA for archival purposes and the other ten copies will be distributed to industrially developing countries.

TITLE 2 – FINANCES

Article 1. General

No monetary remuneration or salary is to be afforded any individual involved in the organization and management of any type of IEA supported conference except for reimbursement of actual expenses incurred in performing the duties and activities of organizing and/or managing the conference. This requirement does not apply, of course, to compensation for the services of a professional meeting organizer if one is utilized.

Article 2. Capitation Fee

For all types of conferences, the IEA expects to derive some financial benefit from its support. This takes the form of a capitation fee and a pro-rated fee per part-time registrant, except for the "Endorsed Conference" (flat fee). The table indicates the level of support offered and capitation schedule for each conference.

Conference Type	Seed Funds	Publicity (P)	Endorsement	Capitation Fees
Triennial IEA Congress	X	X	X	28 US Dollars
Sponsored Conference	X	X	X	14 US Dollars
Endorsed Conference (EC)		X	X	flat fee of twice the regular registration fee

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For conferences organized by federations of societies, like the IEA, for organizations with which the IEA has an MOU, and for other requests to be reviewed on a case-by-case basis by the Executive Committee, there is no fee for IEA conference sponsorship.

The number of registrants to be used for assessing the capitation fee is the sum of the number of delegates on each day divided by the number of days of the conference. Thus, for a four day conference, four delegates attending one day would be counted as one full delegate subject to a capitation fee.

Where the capitation fees constitute a significant concern to the applicant society or conference organizer, the capitation fees may be replaced by an alternative scheme to be negotiated on an individual basis. This will require a careful analysis of the conference budget. Alternative arrangements should provide a similar financial return to the IEA as the capitation fees.

The Executive Committee may waive, at its discretion, the capitation fees for conferences held in industrially developing countries or for delegates from industrially developing countries. Application for waivers will be considered for each conference on an individual basis.

In case of financial loss, the Executive Committee may waive the applicable capitation fees.

Article 3. Conference proceedings

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For all IEA supported conferences addressed in this policy, conference organizers shall provide to IEA eleven copies of the conference proceedings, in addition to all other requirements as stated in this policy.

Article 4. Surplus

For IEA Congresses, a minimum of 50% of the surplus (money remaining after capitation fees and all other obligations have been met) must be donated to the IEA for the purpose of establishing an IEA fund in the name of the host society. The organizers of ~~Sponsored Conferences are encouraged to~~ apply this provision as well. The terms and conditions of the Fund shall be proposed by the host society and approved by the Executive Committee.

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TITLE 3 – PROMOTION

The IEA will help promote IEA supported conferences (except Conference Endorsement) through the following means :

- IEA will provide a package including checklists for organizing conferences and the IEA logo for use in promotional material
 - scientific support from the IEA Technical Committees to organize sessions and promote subject area, if requested.
 - listing the conference in IEA home page and providing a link, if available and appropriate
 - advertising the conference in the IEA newsletter, Ergonomics International
 - requesting IEA approved journals to advertise the conference, if appropriate
- Federated Societies agree to help promote all IEA supported conferences (except Conference Endorsement) through the following means:
- listing of the conference in the calendar section of their newsletter, including a description or call for participation in their newsletter,
 - distributing promotional material such as call for papers and announcement to its members (or at their annual conference).

The organizers of IEA supported conferences are requested to provide exhibit

space to the IEA at a prominent location at the conference site for the duration of the conference for the purpose of displaying IEA leaflets, printed or published materials, conference calendars and other promotional displays.

IEA SUPPORT LEVELS	Triennial	Sponsored	Endorsed	Deleted: IEA
1. Seed Funds	x	x		Deleted: Joint
2. Publicity	x	x		Deleted: X
3. Endorsement	x	x		Deleted: x
4. Capitation Fee (US\$)	28	14	flat fee	Deleted: 10,50

TITLE 4 – GENERAL REQUIREMENTS FOR IEA CONFERENCE ENDORSEMENT

Article 1. Procedure for IEA Conference endorsement

For all types of conference endorsement the organizers should submit the relevant IEA Request Form.

Forms for IEA Triennial Congress are available from the Secretary General. Forms for the other types of conferences are available from the Chair of the Science and Technology Committee or may be downloaded from the IEA home page.

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For IEA congresses and Sponsored Conferences the IEA requires that comprehensive financial reports be completed and filed with the Treasurer of IEA within 4 months after the conference. For Approved Conferences, a report shall be submitted to the Treasurer of IEA indicating the final attendance details.

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Any financial return to IEA shall be provided with these reports.

6. Reports

Article 2. Conference request forms

A. GENERAL INFORMATION	Triennial	Sponsored	Endorsed	Deleted: IEA
				Deleted: Joint
1. Conference Title	x	x	x	Deleted: x
2. Organizers	x	x	x	Deleted: x
3. Type of Conference	x	x	x	Deleted: x
4. Financial Sponsors	x	x	x	Deleted: x
5. Plans – Solicit Papers	x	x	x	Deleted: x
6. Plans – Select Papers	x	x	x	Deleted: x
7. Publications	x	x	x	Deleted: x
8. Session Facilities	x	x	x	Deleted: x
9. Accommodations / Housing	x	x	x	Deleted: x
10. Exhibit Facilities	x	x	x	Deleted: x
11. Other Information	x	x	x	Deleted: x
B. INCOME AND EXPENSE SUMMARY		x		
1. Income	x	x		
2. Expenses	x	x		
3. Net Surplus / Loss	x	x		
4. Post Conference Distribution	x	x		
Income Detail				
1. Registration	x	x		
2. Site Proceedings Sales	x	x		
3. Social Functions	x	x		
4. Tours / Special Events	x	x		
5. Tutorials / Workshops	x	x		
6. Other Income	x	x		
Expense Detail				
1. Printing / Mailing	x	x		
2. Publicity	x	x		
3. Registration	x	x		
4. Facilities / Program	x	x		
5. Social Functions	x	x		
6. Tours / Special Events	x	x		
7. Tutorials / Workshops	x	x		
8. IEA Capitation Fees	x	x		
9. Other	x	x		
10. Contingency	x	x		
C. APPROVAL		x	x	
1. Conference General Chair	x	x	x	Deleted: x
2. Chair Sponsoring Organization	x	x	x	Deleted: x
3. President Local Society (if applicable)	x	x	x	Deleted: x
4. President IEA Federated Society	x	x	x	Deleted: x
5. IEA Treasurer	x	x	x	Deleted: x
6. IEA Council (President)	x	x	x	

TITLE 5 – CONGRESS OF THE INTERNATIONAL ERGONOMICS ASSOCIATION

Article 1. General

The primary conference activity of the International Ergonomics Association (IEA) is the IEA Triennial Congress (Congress). When a host society and a venue for a Congress have been selected, the IEA will give the organizers of the Congress all reasonable support. Support includes financial assistance at a level to be determined by the Council of the IEA. In addition, one or more representatives appointed by the IEA Council will actively participate in the organization of the Congress.

The officers of the IEA and the representative(s) of the IEA Council will hold periodic consultations with the organizers and provide advice on finances, physical requirements, Congress organization, themes, topics, scientific speakers and other matters.

Article 2. Selection of Congress Host Societies

The IEA Council will select the host society based upon proposals submitted by Federated Societies at least six years prior to the proposed Congress. The IEA Council should invite societies to submit a formal proposal to the Council for its consideration, and should advertise for proposals at least one year prior to the decision. The following criteria will be employed by Council with respect to evaluation of the host society and its proposal:

- **Size of Society:** A host society should have a minimum of at least two hundred paying members in order to adequately staff the Congress.
- **Degree of Risk:** The organizational soundness and credibility of the host society, as well as capability and experience in conducting both similar sized and international conferences will be examined with respect to the degree of risk to IEA.
- **Location of Congress:** The geographical location of the Congress will reflect the strength of ergonomics worldwide and - provided that other criteria are met - the location should be spread around the major geographical regions. Although no strict rotational order will be followed, Congresses shall not normally be held consecutively within the same geographical region.
- **Growth of Congresses:** Host societies must be aware of the potential for the increasing size of triennial congresses and must be able to successfully cope with such growth.
- **Participation:** Host societies or host countries may not place any restrictions on the attendance of delegates, members, participants or visitors to the Congress by reason of national or racial origin, political or religious beliefs, gender or age.
- **Advantages to IEA:** An evaluation will be made to determine any strategic, scientific and political advantages to IEA.
- **Allocation of Gain:** Preference will be accorded host societies which offer a portion of excess profits to be used to establish special IEA funds.
- **Assistance to Participants:** Consideration will also be given to host societies which propose efforts to help fund delegates and participants from Central European and industrially developing countries as well as students.
- **Special Events and Tours:** Consideration will be afforded host societies which propose holding special events and/or technical tours of interest to delegates and participants.

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Article 3. Submission of Proposal

The IEA Council will also decide upon the venue of the Congress based upon the proposals submitted by Federated Societies.

- Proposal: A proposal to host the Congress must be formally submitted by the governing body of a Federated Society of the IEA in English. The proposed Congress will be formally entitled the "Xth Congress of the International Ergonomics Association" where X is the appropriate cardinal number. The proposal should acknowledge the IEA policies herein provided and should provide details relating to the organization and technical program similar to that used in this document. Federated Societies wishing to submit proposals should contact the Secretary General for conference manuals, checklists, and the IEA Congress Meeting Request Form which must accompany all proposals.
- Scope of Congress: The proposed Congress must be international and intercontinental in its scope. In particular, theme speakers must be drawn from different national and continental backgrounds.
- Length of Congress: The Congress is normally held over a five day period.
- Attendance: The proposal should indicate the total expected, or planned, attendance.
- Financial Support: The proposal should indicate agreement with the financial arrangements as described herein. The Society sponsoring the proposed Congress must carry the financial responsibility for the Congress. At the Congress prior to the proposed Congress, the sponsoring society must provide a preliminary budget to Council for approval. The IEA may provide a financial advance to the organizing committee, the amount to be determined by Council. Revenue sources in addition to registration fees (i.e., exhibits, sponsorships, etc.) are to be encouraged where feasible. Also, the use of professional organizers should be considered, particularly if they offer services in a variety of languages. The return to the IEA will be the financial advance plus 25 Swiss francs per Congress registrant. Surplus revenue from the Congress will be retained by the host society. Expenses of the IEA Council appointed representatives on the organizing committee will be the responsibility of the IEA.

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Article 4. Congress Organization

- Location of Congress: The location of the proposed Congress should meet the following criteria:
 - Venue: The geographic site should be at, or close to, a major center, noted for its academic and/or professional affiliations, as well as for its social and historic attractions. It should be within easy access by air or land transportation from distant points.
 - Date: The Congress is normally held during the third quarter of the year. The specific dates for the Congress should be selected so as to minimize conflict with other related conferences, academic terms, major holidays, etc. The proposed date should be cleared with the Executive Committee of the IEA.
- Congress Center: The Congress center should preferably be in one building, in which can be found administrative and logistic facilities, a major hall or auditorium for plenary sessions, conference rooms for lesser sessions, committee rooms and suitable places for casual informal discussion with easy access to a continuous service of light refreshments. Consideration should be given to accommodating the special needs of handicapped or elderly persons. Ideally, the Congress should have sole occupancy of the center or at least that part of the center in which the Congress is housed.
- Audio-Visual Facilities: Facilities must be available to permit the use of 35mm slides, overhead projectors, and, if requested, film projectors and video equipment.

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Signage: The number and placement of signs depends upon the complexity of the center and location of the meeting rooms. Sufficient numbers of signs should be posted in English and in the local language to direct delegates to all points of interest (e.g., registration, information, tours, meeting rooms, press room, audio-visual room, photocopying room, washrooms, etc.). It is desirable to post signs outside each room to indicate the session in progress.

- Translation: Every effort should be made to communicate with delegates in their own language (i.e., through enlistment of multi-lingual volunteers) and to provide interpretation services for on-site registration and information. Facilities must be available for simultaneous translation on plenary sessions and the General Assembly into at least English and the language of the country where the meeting is held. Translation must be available in the same conference room as the original presentation.

- Accommodation: Accommodations must be available at or close to the Congress center. Accommodations should be of good quality, in terms of that normally found in the area. Different levels of accommodations should be available to meet different budgets; allowance should be made for single, double or multiple occupancy as preferred.

- Transportation: Where it is not possible to arrange for accommodations within reasonable walking from the Congress center, free transportation should be available at frequent intervals during the day. Arrangements must be made by the sponsoring society for the provision of transportation to and from all events authorized by the Congress. It is especially important that adequate transport be provided between the local airport, and rail or bus stations and the Congress location or that delegates be aware in advance of the public transport facilities available. Consideration should be given to having an information desk at the airport and station or to providing full details of Congress to the normal information agencies.

- Registration, Promotion, Publication: The sponsoring society must ensure that arrangements are made for pre-registration, registration, promotion and advertising. An opportunity should be provided in advance literature and the final program for a message from the President of the IEA. Announcements should be included in all related journals and advertising material distributed to Federated Societies, ILO, WHO and other related organizations as well as at related conferences within a year prior to the Congress.

- The IEA will assist in promotion and advertising. All promotional material and publications must state that the Congress is a function of the IEA and display the IEA logo. The IEA logo may be integrated with other artwork, if desired. The sponsoring society is responsible for publishing and issuing free of charge to delegates the proceedings of the Congress, and, if possible, a list of delegates including affiliations and full addresses.

- The organizing committee should consult with the Publication and Promotion Committee of the IEA in regards to matters related to the publication of invited or submitted papers in the proceedings or other publications following the Congress.

- Name Badges: Delegate badges should indicate the name of the delegate and affiliation using letters of size 20 points to ensure good readability. Badges for staff, IEA council members and officers, presenters and session chairpersons should indicate their role to facilitate recognition by delegates.

- Social Events: It is normal practice to arrange a welcome reception for all delegates and accompanying persons on the first evening of the Congress to facilitate interpersonal contact. The cost of the reception is to be included in the registration fee. Theme evenings and other social functions are optional as are pre- and post-Congress professional tours and sightseeing tours. A program for accompanying persons during the Congress is desirable.

- Reporting Requirements: Once approval has been obtained from Council for the Congress, the organizers are required to submit reports to Council at its annual meetings describing progress to date and any difficulties experienced or foreseen. Following the Congress, the organizers should submit a report to

the IEA for the benefit of later conference organizers, giving information on such things as the organization of the Congress, problems that had to be overcome, and unusual or outstanding difficulties encountered.

- Recommended Planning Timeline: The precise planning timetable will, of course, reflect the specific requirements of the Congress organizers and the circumstances surrounding the Congress. However, the following plan might serve as a useful starting point :

- Booking of the Congress hotel and reserving blocks of rooms at a number of alternate hotels (offering high, medium and low rates) – as soon as possible after approval of Congress by Council
- Preparation of preliminary budget – 3 years prior to Congress
- Preliminary announcement – at Congress prior to proposed Congress
- Announcements to relevant publications - sent regularly starting 3 years prior to Congress
- First announcement and call for papers – 18 months prior to Congress
- Brochures or posters distributed to societies, organizations, at conferences, etc. – 15 months prior to Congress
- Second announcement and call for papers – 15 months prior to Congress
- Abstract deadline – 12 months prior to Congress
- Authors kits distributed- 10 months prior to Congress
- Provisional program and registration distributed – 8 months prior to Congress
- Paper deadline – 7 months prior to Congress
- Early registration deadline – 3 months prior to Congress

Article 5. Technical Program

The technical program should be developed in close cooperation with the Science and Technology Committee and its various Technical Committees. The sponsoring society must ensure that during the period of the Congress, provision is made for a combination of superior quality technical sessions, both plenary and special interest, professional visits, if appropriate, and social events. The speakers at the plenary sessions will be selected with the advice of Council, will be of an international standing or of other high reputation, and in total will represent the international scope of ergonomics and emerging interests. Themes and topics must have the approval of the Council. The success of an international conference depends not only upon formal presentations, but also upon facilities for interpersonal contact and the interchange of ideas and views by discussion both formal and informal. In addition to ensuring that space is available for informal discussions, time should be allowed in the program for the exchange of ideas and views.

At least one and one half hours during the Congress must be scheduled for the IEA General

Assembly, chaired by the President. No other activities are to be scheduled during this time block. On the final day of the Congress, a "Futures Panel" shall be scheduled for one and one half hours. This panel discussion is organized by the Policy and Development Committee and addresses topics, trends, and forecasts concerning the future of ergonomics.

Advice should be sought from the Science and Technology Committee regarding the status of poster presentations, paper length for publication in proceedings, acceptance of papers, inviting speakers, selection of papers and themes, policy related to registration of presenters for purposes of inclusion in proceedings, etc.

In addition to advice from the Science and Technology Committee, two persons nominated by the IEA Executive Committee shall serve as members of

a Scientific Advisory Committee which shall be formed by the organizers of a Triennial Congress and which shall meet at least twice to oversee the planning of the technical program.

- **Audio-Visual Guidelines:** Presenters should be provided a standard set of guidelines for the preparation of audio-visual aids, including slides and overhead transparencies. All audio-visual material should be examined by technical staff prior to their presentation to ensure reasonable compliance with the guidelines. Presenters should be advised well in advance that aids which do not conform with the guidelines may be rejected. A facility for the on-site preparation of overhead transparencies would be desirable. Instructions on the use of audio-visual equipment should be provided on-site to all presenters and session chairpersons to ensure the proper use of the equipment. A rehearsal room, complete with slide and overhead projectors, should be provided for use by presenters. Audio-visual technicians should be readily available, ideally in each room, to operate audio-visual equipment and to assist with the presentations. A spare projection bulb and/or spare projector should be available.

- **Exhibits:** Exhibits may be arranged by the organizers providing they are not subsidized by registration income. Publications related to the exhibits must include a disclaimer stating that the IEA does not necessarily endorse the products or services being exhibited. Notwithstanding the disclaimer, the organizers must endeavor to ensure that the products and services being exhibited are of high quality and appropriate to the audience.

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Article 6. Provisions regarding IEA

The host society shall make arrangements to provide the IEA the following facilities and services, insofar as possible, at no cost to the IEA.

(a) A meeting room should be provided for a period of two days for the Council meeting prior to the Congress, the exact dates to be set by the Executive Committee. This meeting room must accommodate 40 or more persons seated around a conference table, plus some additional seating for invited observers. Refreshments (coffee and rolls) are to be provided during morning and afternoon breaks. Secretarial support (photocopying, preparation of last minute documents, etc.) is also required.

(b) Additional meeting space may be required for meetings of the IEA Executive Committee, IEA committees and subcommittees during the Congress period. The requirement for this should be ascertained by the organizers through contact with the IEA Executive Committee a year prior to the Congress.

(c) Suitable facilities should be provided for use by the President of the IEA for a period spanning the Council meeting and the Congress. These facilities, or, if not suitable, additional facilities should be provided for special receptions hosted by the IEA.

(d) The IEA President should be given space in the printed program as well as be invited to give a 15 to 20 minute address at the opening ceremony to welcome delegates.

(e) The registration fee should, if possible, be waived for all IEA Executive Officers, Standing Committee Chairs, and Council members. Defraying some of the travel expenses of these individuals paying their own way to attend the Congress should be considered.

(f) IEA Executive Officers, Standing Committee Chairs, and Council members should be invited to chair technical sessions of the Congress.

(g) A table should be provided in the main exhibit hall or near the registration area exclusively for displaying IEA brochures, a slide show and other materials.

All delegates to the Congress who are members of IEA Federated Societies should be entitled to a reduced registration fee. They should be required to identify their affiliation to verify their eligibility for the reduced fee.

TITLE 6 - ~~SPONSORED CONFERENCE~~

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Article 1. General

A ~~Sponsored Conference may be organized by a Federated Society, an IEA Committee, or a Technical Group of IEA.~~ The IEA has primary responsibility for this type of conference. Support includes financial assistance at a level to be determined by the Council of the IEA.

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The Executive Committee of IEA and the representative(s) of the IEA Council will hold periodic consultations with the organizers and provide advice on finance, venue requirements, conference organization, themes, topics, scientific speakers, and other relevant matters.

Article 2. Submission of Proposal

A proposal to host a ~~Sponsored Conference~~ is usually submitted by a ~~Committee~~ or Technical Group of the IEA, other groups, or by individuals. The proposal should acknowledge the IEA policies herein provided and should provide details relating to the organization and technical program. Those wishing to submit proposals should contact the Chair of the Science and Technology Committee for guidelines, budget outlines, and the ~~Sponsored Conference Meeting Request Form~~ which must accompany all proposals.

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All proposals to sponsor a ~~Sponsored Conference~~ must be coordinated with, and approved by, the IEA Federated Society in whose jurisdiction the conference will be held, and, if applicable, approved by the local ergonomics society as well.

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(a) ~~Scope of Sponsored Conference:~~ ~~Sponsored Conferences may have narrow~~ scientific themes or specialized interests (i.e., ergonomics in industrially developing countries), but they should be international and intercontinental in scope. Theme speakers should be drawn from different national and continental backgrounds.

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(b) ~~Length of Sponsored Conference:~~ Since ~~Sponsored Conferences may have~~ a narrow scope, no specific length is prescribed.

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(c) Attendance: There must be no restriction on the attendance of delegates, members, participants or visitors to a ~~Sponsored Conference~~ by reason of national or racial origin, political or religious beliefs, gender or age. Consideration should be given to accommodating the special needs of handicapped and elderly persons. The proposal should indicate the total expected, or planned, attendance.

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(d) Financial Support: The proposal should indicate agreement with the financial arrangements as described herein and include a preliminary budget. The IEA may provide a financial advance in the form of seed money to the organizing committee, the amount to be determined by Council. Revenue sources in addition to registration fees (i.e., sponsorships, exhibits, etc.) are to be encouraged

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where feasible. Also, if a large attendance is anticipated, the use of professional organizers should be considered, particularly if they offer services in a variety of languages.

The return to the IEA will be the financial advance plus 14 US Dollars per full paying registrant. Surplus revenue will be retained by the IEA. If an annual meeting of the IEA Council or a mid-year meeting of the IEA Executive Committee is to be held in conjunction with the conference, the registration fee for these persons should be waived and consideration given to helping offset their travel expenses. The sponsoring organization, in its discretion, may wish to consider reduced registration fees for special populations (i.e., Federated Society members, sponsoring organization members, registrants from industrially developing countries, and/or student registrants).

Article 3. Sponsored Conference Organization..... Deleted: IEA

(a) **Location of Conference:** The location of the proposed Sponsored Conference should meet the following criteria:

Venue: The geographic site should be at, or close to, a major center, within easy access by air or land transportation from distant points.

Date: The specific dates for the Sponsored Conference should be selected so as to minimize conflict with other related conferences, academic terms, major holidays, etc. The proposed date should be cleared with the Executive Committee of the IEA. Deleted: IEA

(b) **Conference Center:** The Sponsored Conference center should preferably be in one building with administrative and logistic facilities, a major hall or auditorium for plenary sessions, conference rooms for lesser sessions, committee rooms and suitable places for casual informal discussion with easy access to a continuous service of light refreshments. Ideally, the Sponsored Conference should have sole occupancy of the center or at least that part of the center in which the conference is housed. Deleted: IEA

Audio-Visual Facilities: Facilities should be available to permit the use of 35mm slides, overhead projectors, and, if requested, video equipment.

Signage: The number and placement of signs depends upon the complexity of the center and location of the meeting rooms. Sufficient numbers of signs should be posted in English and the local language to direct delegates to all points of interest (e.g., registration, information, tours, meeting rooms, press room, audio-visual room, photocopying room, washrooms, etc.). It is desirable to post signs outside each room to indicate the session in progress.

(c) **Translation:** Every effort should be made to communicate with delegates in their own language (i.e., through enlistment of multi-lingual volunteers) and to provide interpretation services for on-site registration and information. If a language other than English is to be used at technical sessions, whenever feasible, facilities should be available for simultaneous translation at these sessions. Translation must be available in the same conference room as the original presentation.

(d) **Accommodation:** Accommodations must be available at or close to the Sponsored Conference center. Accommodations should be of good quality, in terms of that normally found in the area. Different levels of accommodations should be available to meet different budgets; allowance should be made for single, double or multiple occupancy as preferred. Deleted: IEA

(e) **Transportation:** Where it is not possible to arrange for accommodations within reasonable walking from the Sponsored Conference center, free transportation should be available at frequent intervals during the day. Arrangements must be made by the sponsoring society for the provision of transportation to and from all events authorized by the Sponsored Conference. Deleted: IEA
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It is especially important that adequate transport be provided between the local airport, and rail or bus stations and the Sponsored Conference location or that delegates be aware in advance of the public transport facilities available. Deleted: IEA

(f) **Registration, Promotion, Publication:** An opportunity should be provided

In advance literature and the final program for a message from the President of the IEA. Announcements should be distributed to Federated Societies, and other related organizations, as appropriate, as well as at related conferences within a year prior to the Sponsored Conference. The IEA will assist in promotion and advertising. All promotional material and publications must state that the Sponsored Conference is a function of the IEA and display the IEA logo. The IEA logo may be integrated with other artwork, if desired.

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The organizers of the conference are responsible for publishing and issuing free of charge to delegates the proceedings of the Sponsored Conference, and, if possible, a list of the delegates including affiliations and full addresses.

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The organizing committee should consult with the Publication and Promotion Committee of the IEA in regards to matters related to the publication of invited or submitted papers in the proceedings or other publications following the Sponsored Conference.

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(g) Name Badges: Delegate badges should indicate the name of the delegate and affiliation using letters of size 20 points to ensure good readability. Badges for staff, IEA council members and officers, presenters and session chairpersons should indicate their role to facilitate recognition by delegates.

(h) Social Events: It is desirable to hold a welcome reception for all delegates and accompanying persons on the first evening of the IEA Conference to facilitate interpersonal contact. Theme evenings and other social functions are optional as are pre- and post-Sponsored Conference professional tours and sightseeing tours. A program for accompanying persons during the Sponsored Conference is desirable.

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(i) Reporting Requirements: Once approval has been obtained from Council for the Sponsored Conference, the organizers are required to submit reports to Council at its annual meetings describing progress to date and any difficulties experienced or foreseen.

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Following the Sponsored Conference, the organizers should submit a report to the IEA for the benefit of later conference organizers, giving information on such things as the organization of the Sponsored Conference, problems that had to be overcome, and unusual or outstanding difficulties encountered.

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(j) Recommended Planning Timeline: The precise planning timetable will, of course, reflect the specific requirements of the Sponsored Conference organizers and the circumstances surrounding the Sponsored Conference. However, the following plan might serve as a useful starting point:

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- First announcement and call for papers - 1 to 1 ½ years prior to the Sponsored Conference

- Brochures or posters distributed to societies, organizations, at conferences, etc. - 14 months prior to Sponsored Conference

- Second announcement and call for papers - 1 year prior to Sponsored Conference

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- Abstract deadline - 10 months prior to Sponsored Conference

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- Authors kits distributed - 7 months prior to Sponsored Conference

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- Provisional program and registration distributed - 6 months prior to Sponsored Conference

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- Paper deadline - 4 months prior to Sponsored Conference

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- Early registration deadline - 3 months prior to Sponsored Conference

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Article 4. Technical Program

The technical program should be developed in close cooperation with the Science and Technology Committee and its various Technical Committees. The success of an international conference depends not only on formal presentations, but on facilities for interpersonal contact and the interchange of ideas and views by discussion both formal and informal. In addition to ensuring that space is available for informal discussions, time should be allowed in the program for the exchange of ideas and views.

Advice should be sought from the Science and Technology Committee regarding the status of poster presentations, paper length for publication in proceedings, acceptance of papers, inviting speakers, selection of papers and themes, policy related to registration of presenters for purposes of inclusion in proceedings, etc.

(a) **Audio-Visual Guidelines:** Presenters should be provided a standard set of guidelines for the preparation of audio-visual aids, including slides and overhead transparencies. Facility for the on-site preparation of overhead transparencies would be desirable.

Instructions on the use of audio-visual equipment should be provided on-site to all presenters and session chairpersons to ensure the proper use of the equipment. A rehearsal room, complete with slide and overhead projectors, should be provided for use by presenters.

Audio-visual technicians should be readily available, ideally in each room, to operate audio-visual equipment and to assist with the presentations. A spare projection bulb and/or spare projector should be available.

(b) **Exhibits:** Exhibits may be arranged by the organizers providing they are not subsidized by registration income. Publications related to the exhibits must include a disclaimer stating that the IEA does not necessarily endorse the products or services being exhibited. Notwithstanding the disclaimer, the organizers must endeavor to ensure that the products and services being exhibited are of high quality and appropriate to the audience.

Article 5. IEA Council Meeting

In the event that an annual meeting of the IEA Council is to be held in conjunction with the Conference, the organizers shall make arrangements to provide the IEA the following facilities and services, insofar as possible, at no cost to the IEA.

(a) A meeting room should be provided for a period of two days for the Council meeting prior to the Conference, the exact dates to be set by the Executive Committee. This meeting room must accommodate 40 or more persons seated around a conference table, plus additional seating for invited observers. Refreshments (coffee and rolls) are to be provided during morning and afternoon breaks. Secretarial support (photo-copying, preparation of last minute documents, etc.) is also required.

(b) Additional meeting space may be required for meetings of the IEA Executive Committee, IEA committees and subcommittees during the Conference period. The requirement for this should be ascertained by the organizers through contact with the IEA Executive Committee a year prior to the Conference.

(c) Suitable facilities should be provided for use by the President of the IEA for a period spanning the Council meeting and the Conference.

(d) The IEA President should be given space in the printed program as well as be invited to give a 15 to 20 minute address at the opening ceremony.

(e) The registration fee should, if possible, be waived for all IEA Executive Officers, Standing Committee Chairs, and Council members. Consideration should be given to helping offset some of the travel expenses for these persons.

(f) IEA Executive Officers, Standing Committee Chairs, and Council members should be invited to chair technical sessions of the Conference.

(g) A table should be provided in the main exhibit hall or near the registration area exclusively for displaying IEA brochures, a slide show and other materials.

TITLE 7 – ENDORSED CONFERENCE

The IEA may endorse an international conference organized by academic institutions, a professional association or an individual when it is considered to be appropriate by the Executive Committee. Organizers of an endorsed conference have to pay IEA a fixed fee as stated in Title 2, article 2 of IEA Policy on the support of conferences in ergonomics. This fee is equal to two times the regular registration fee for the endorsed conference. The organizers of an endorsed conference are permitted to use the name of the IEA in promotional and other literature and to identify the IEA as follows : “endorsed and logo by the International Ergonomics Association”. The conference organizers should provide promotional opportunities to IEA, and/or other incentives such as reduced cost of registration for members of IEA federated societies.

Those wishing to submit requests should contact the Chair of the Science, Technology and Practice Committee for guidelines regarding the IEA endorsed conferences. All requests should be accompanied by the IEA Conference Endorsement Request Form and by a check equal to two times the regular registration fee for the endorsed conference), dated on the first day of the conference and to be cashed at that date. Information regarding the name and address of the Chair as well as the request form can be obtained on the IEA Website.

Deleted: TITLE 7 – JOINT CONFERENCE¶

Article 1. General¶

A Joint Conference is an international conference in ergonomics organized by a Federated Society of the IEA, jointly with one or more such societies, or in cooperation with a cognate international organization. The IEA will provide support in the form of active promotion and advertising, as well as advice and counsel on such matters as physical requirements, conference organization, themes, topics and suggestions for speakers. In addition, where applied for and approved by Council, the IEA will provide seed money to help defray initial expenses.¶

¶ Article 2. Submission of Request¶

The request must be formally submitted to the Council of the IEA by the governing body or bodies of a Federated Society or Societies or by an international organization in an applied field for consideration at a Council or Executive Committee meeting held at least 12 months before the proposed date of the Conference. Alternatively, the IEA may itself invite a Federated Society or other international group to organize a joint meeting. Normally, either the IEA or a Federated Society will take the active role in the organization of any conference where the main sponsor is an outside organization.¶

¶ Those wishing to submit proposals should contact the Chair of the Science and Technology Committee for guidelines, budget outlines, and the IEA Conference Meeting Request Form which must accompany all proposals.¶

¶ All proposals to sponsor a Joint Conference must be coordinated with, and approved by, the IEA Federated Society in whose jurisdiction the conference will be held, and, if applicable, approved by the local ergonomics society as well.¶

¶ Article 3. Scope of the Conference¶

The conference must be substantial and international in scope with speakers of international or high repute. It may be on a topic of interest to only a part of the total body of ergonomists or even on a topic of main interest to non-ergonomists but to which ergonomists are expected to make a major contribution.¶

¶ Article 4. Attendance¶

The conference must be open to all professionally qualified members of Federated Societies who wish to attend. Attendance at some conferences may be restricted because of limited facilities, or because the Conference is dedicated to an ergonomic topic primarily of interest to specialists. There must, however, be no restriction on the attendance of delegates, members or visitors by reason of national origin or political belief.¶

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6.9. EQUID

6.9.1. - Report

Pascale Carayon, Chair of the IEA EQUID SC

General Strategy and Objectives

The EQUID committee develops and manages activities related to the use of ergonomics knowledge and methods in the design process of products, work systems and services. This objective is accomplished through the definition of process requirements for the design of ergonomic products, work systems and services, and the establishment of a certification for ergonomics quality in design (EQUID) program.

At the IEA Council meeting in 2004, the definition, objectives and policies of the EQUID committee were approved.

For the 2004-2006 period, the main objectives of the EQUID committee were:

1. to revise and update the two texts on (1) ergonomic criteria of product design process, and (2) accreditation criteria and processes
2. to evaluate various scenarios for the Implementation of the EQUID program.

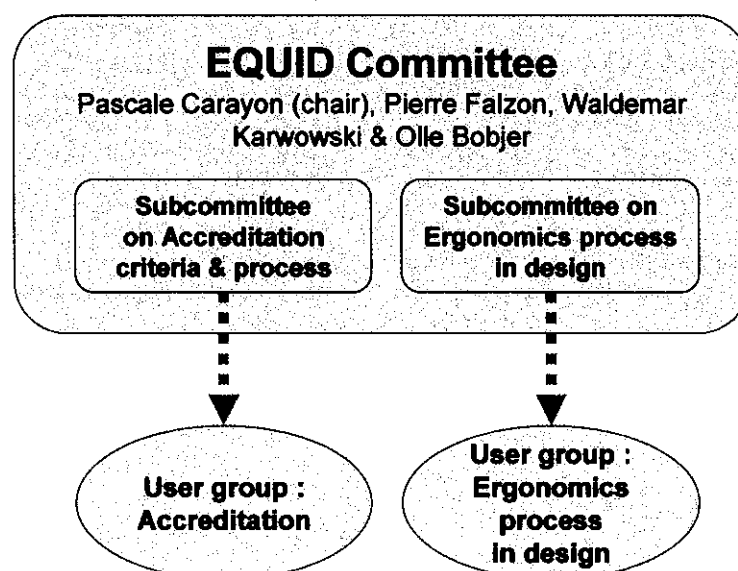
For the 2004-2006 period, the focus of the EQUID program is on product design. Issues related to the design of work systems and services will be addressed in a subsequent phase. At the IEA Council meeting in July'2006, the EQUID committee will present its conclusions regarding this first phase of the EQUID program.

The EQUID program contributes specifically to the subgoal C2/item 7 of the IEA strategic plan: "to develop program of certification of ergonomic quality in design". It also contributes to:

- Goal B of the strategic plan: "to advance the science and practice of ergonomics at an international level"; in particular subgoal B1: "to stimulate development of the ergonomics discipline";
- Goal C of the strategic plan: "to enhance the contribution of the ergonomics discipline to global society"; in particular the subgoal C1: "to promote recognition of ergonomics discipline" and the subgoal C2: "to promote applications of ergonomics in all aspects of life".

Structure of the EQUID Committee

The structure of the EQUID committee is as follows:



Subcommittee on Ergonomics process

- Chair: Waldemar Karwowski (US)
- Lina Bonapace (Italy)
- Pierre-Henri Dejean (France)
- Wolfgang Friesdorf (Germany)
- Sung Han (Korea)
- Francisco Rebelo (Portugal)
- Peter Vink (NL)
- Toshiki Yamaoka, Wakayama University (Japan)

**Subcommittee on
Accreditation criteria & process**

- Chair: Olle Bobjer (Sweden)
 - Michel Naël (France)
 - Yusakau Okada, Keio University (Japan)
 - Daniel Podgorski (Poland)
 - John Rosencrance (USA)
 - Yvonne Toft (Australia)
-

The User Group for the Subcommittee on Ergonomics process includes:

- Arnie Lund, Microsoft Corp.
- Luke Kowalski, Oracle
- Peter Budnick, Ergoweb
- Mark Hoffman, NCR Corp.
- Bill Muto, Abbott Labs
- Melroy E. De'Souza, Microsoft Corp.
- Martin Helander, NTU Singapore
- Christopher Nemeth, Consultant, USA
- Daniel Podgorski, CIOP, Poland
- Human factors engineer from Samsung Electronics, South Korea
- Roberto Montanari, Francesco Tesauri and Stefano Marzani, University of Modena and Reggio Emilia, Italy

In addition, effort is on-going to recruit companies to participate in and sponsor the development of the EQUID program.

Major Accomplishments

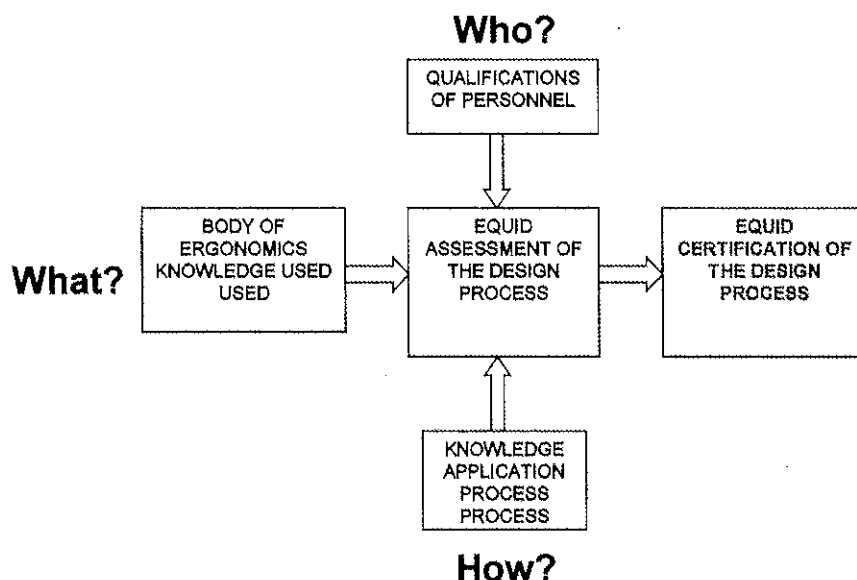
1. Meetings of the EQUID committee and sub-committees

During the 2005-2006 period, the EQUID committee and sub-committees met at the following times:

- June 3-4, 2005 in Berlin, Germany: meeting of the sub-committee on Ergonomics process
- July 19, 2005 in San Diego, California: meeting of the sub-committee on Ergonomics process
- October 28-29, 2005 in Compiègne, France: meeting of the two EQUID sub-committees
- January 25, 2006 in Warsaw, Poland: meeting of the sub-committee on Accreditation criteria and process
- February 23-24, 2006 in Hoofddorp, The Netherlands: meeting of the EQUID committee and the two EQUID sub-committees.

2. Sub-committee on Ergonomics Process (chair: Waldemar Karwowski)

The EQUID Sub-committee on Ergonomics Process has developed two documents on the (1) criteria and (2) process of the IEA Certification for Ergonomics Quality in the Design Process. The content of the documents is organized according to the following conceptual framework:



The development of the two documents involves the participation of international experts in ergonomics in product design in several meetings and email discussions. Input was sought from companies that design and manufacture products, as well as consulting companies involved in the design of products.

3. Sub-committee on Accreditation Criteria and Process (chair: Olle Bobjer)

The EQUID Sub-committee on Accreditation Criteria and Process has developed one document on the criteria for IEA Policy on Accrediting Certification Bodies for the Ergonomics Quality in Design (EQUID) Program. The sub-committee has reviewed many various accreditation and certification systems in various countries, such as ISO, JCAHO (Joint Commission for the Accreditation of Healthcare Organizations) and TCO. The sub-committee reviewed in particular the criteria for certification bodies according to the ISO/IEC Guides 62 and 65; these criteria are used to develop the content of the document on the criteria for accrediting certification bodies.

4. Toward the Implementation of the EQUID Program

The next phase of the EQUID program will move toward the implementation of the EQUID program. It will involve the following elements:

- Involvement of ergonomics professionals (e.g., ergonomics professionals involved in the ergonomics design process and the certification process)
- Cooperation, involvement and support of federated societies
- Partnering with companies and organizations. A document describing the EQUID partner program has been developed; companies are being approached for their participation in the partner program.
- Development of the infrastructure for EQUID program.

5. EQUID at the IEA'2006 Congress

Two sessions related to EQUID will be presented at the IEA'2006 Congress:

SESSION 1 – Ergonomics Quality in Design (EQUID) – History and Case Studies (chaired by Waldemar Karwowski and co-chaired by Wolfgang Friesdorf)

- Waldemar Karwowski, University of Louisville, USA, and Pierre Falzon, CNAM, France

Why do we need certification for Ergonomics Quality in Design (EQUID)?

- Yvonne Toft & Prue Howard, Central Queensland University, Australia

Nearly 700 years of learning yet we still make the same design errors: Slow learners or untapped resource?

- Francisco Rebelo, Technical University of Lisbon, Portugal

Integration of ergonomics in a product development process: A case study

- Claus Backhaus and Wolfgang Friesdorf, Technical University of Berlin, Germany

Ergonomics in product design – A case study to support medical device design by human factors engineering

SESSION 2 – Ergonomics Quality from the Design Viewpoint (chaired by Waldemar Karwowski and co-chaired Francisco Rebelo)

- Klaus Zink, University of Kaiserslautern, Germany

Product and production ergonomics as part of a newly defined product management - Life-cycle oriented product management and human factors

- Michel Nael, Ergonomics in Design, France

Teaching Human Factors to designers: What content? what techniques? what method?

- Yvonne Toft & Prue Howard, Central Queensland University, Australia

Rethinking educational paradigms in a ploy to encourage engineers to create designs 'fit' for people from original concept development

- Lina Bonapace, ErgoSolutions consultants in ergonomics for design and Politecnico di Milano Design Faculty, Italy

How designers can work the "human factor" into the design process. Teaching person-centered design in design schools

- Pierre-Henri Dejean, Jean-Pierre Caliste & Jean Marc Picard, Universite de Technologie de Compiègne, France

The challenge of connecting norms and creativity in product design

Two EQUID sessions will also be presented at the IEA'2006 Congress:

- Session on "Development of EQUID certification/accreditation programs for process requirements for product design" chaired by Waldemar Karwowski and co-chaired by Pascale Carayon
- Session on "EQUID certification program for process requirements in the design of consumer products" chaired by Waldemar Karwowski and co-chaired by Lina Bonapace.

6. EQUID Forum

A planning group was formed: Pascale Carayon (chair), Waldemar Karwowski, Olle Bobjer, Lina Bonapace, Pierre-Henri Dejean and Wolfgang Friesdorf. The planning group was charged with defining a plan for organizing the First Forum on Ergonomics in Design. The goals of the Forum on Ergonomics in Design are:

- to exchange information and share learning on ergonomics and human factors in design
- to bring together researchers and practitioners involved in EQUID-related issues

The first EQUID Forum will take place in Berlin, Germany, from May 30 to June 2nd, 2007:

- Co-chairs of the EQUID Forum: Waldemar Karwowski and Wolfgang Friesdorf
- Chair of the Organizing Committee: Wolfgang Friesdorf
- Chair of the Technical Program: Lina Bonapace
- Co-chairs of the Scientific Advisory Board: Pascale Carayon and Pierre Falzon
- Members of the Organizing Committee and of the Scientific Advisory Board: members of the two EQUID sub-committees.

7. New Technical Committee on Ergonomics in Product Design

Lina Bonapace, Pierre-Henri Dejean and Waldemar Karwowski are working on a proposal for a new TC on Ergonomics in Product Design.

6.10. Award

6.10.1. Report

Waldemar Karwowski, Chair of the IEA Award SC

Awards Committee Report 2005-2006

1. Mission of the Standing Committee

In accordance with the IEA Strategic Plan, the mission of the Awards Committee is to Promote Recognition of Ergonomics Discipline.

The Awards Committee (AC) recommends to IEA Council awards to individuals for their contributions to the field of ergonomics. Awards for which this committee is responsible include:

- IEA Distinguished Service Award
- IEA Outstanding Educators Award
- IEA Award for Promotion of Ergonomics in Industrially Developing Countries

- IEA Ergonomics Development Award
- The IEA/Liberty Mutual Prize and Medal in Ergonomics and Occupational Safety
- The IEA/K.U. Smith Student Paper Award
- IEA/JOSE Best Paper Award
- IEA Fellow Award
- IEA President's Award.

Note: Detailed description of all IEA awards is shown in the Appendix below. The current IEA President selects the winner of the IEA President's Award.

2. General objectives for 2003-2006

The main objective of the Awards Committee is to support the mission of IEA through recognition of outstanding ergonomists/human factors professionals throughout the world. The specific goals for AC in the 2003-2006 periods are to:

- Maintain and support current IEA awards making process
- Enhance the involvement of IEA federated and affiliated societies in making nominations for the various awards
- Improve the public-at-large awareness of the IEA awards by involving other IEA-collaborating and cooperating (international) bodies in publicizing IEA awards around the world

3. Outcomes: Progress report 2005-2006

3.1. The IEA/Liberty Mutual Prize and the IEA/Liberty Mutual Medal in Ergonomics and Occupational Safety

The deadline for submissions for the IEA/Liberty Mutual Prize was March 1, 2006. According to the changes adopted in 2003, The Review Committee (RC) for this Award is composed of 5 individuals, appointed by the AC Chair in consultation with the Liberty Mutual and Executive Committee.

The 2006 Review Committee for the IEA/Liberty Mutual Prize and the IEA/Liberty Mutual Medal in Ergonomics and Occupational Safety represents four continents and includes:

- Prof. Hal Hendrick, USA (RC Chair, 2006)
- Prof. Holger Luczak, Germany
- Prof. Pranab Nag, India
- Prof. Marcelo Soares, Brazil
- Prof. John Wilson, UK

This year there were a total of 5 submissions (in 2004 and 2005 there were 9 and 4 submissions, respectively).

The Committee is to make the recommendation to the AC Chair by June 1, 2006. The RC recommendation is subject to approval by IEA Executive Committee (in consultation with LM).

The official announcement will come from the joint statement by Liberty Mutual and IEA (represented IEA Awards Chair). The 2006 Prize and Medal will be presented at the Opening Ceremony of the IEA 2006 Congress.

3.2. IEA Fellow Award

The Nomination Form (see Appendix) is shown on IEA web site: www.iea.cc/awards

Based on the input from the federated societies, the deadline for Nominations was moved to April 15, 2006.

The Fellows Selection Committee (all current IEA Fellows), chaired by the AC Chair, vote on the received nominations. Two-third majority of those who voted is needed for election as the IEA Fellow.

All recommendations from the Fellows Selection Committee will be formally approved by the Executive Committee prior to IEA Council meeting.

The official presentations of the certificates for the 2004-2006 IEA Fellow Awards will take place at the Opening Ceremony of the IEA 2006 Congress.

3.3. Expansion of the IEA/ K.U. Smith Student Award

A proposal has been developed to expand the IEA/K.U. Smith Student Award.

3.4. Modification of the IEA Fellow Award

A proposal has been developed to expand the qualification criteria for the IEA Fellow Award.

3.5. IEA/Liberty Mutual Prize in Ergonomics and Occupational Safety

A proposal has been developed for revising the process of submissions / nominations of papers for the IEA/Liberty Mutual Prize in Ergonomics and Occupational Safety.

4. Plans for the IEA Triennial Awards to be presented at IEA Triennial Congress 2006:

- Awards Ceremony at the Opening of the Congress, press conference.
- Coordination with the IEA 2006 Congress organizers

Report of IEA Awards Committee 2006: APPENDICES

Appendix 1

Awards of the International Ergonomics Association

Recipients for the first four awards listed below are selected by the Awards Committee based upon nominations from federated societies.

The IEA President's Award is selected by the IEA President who may receive nominations from the Council and Executive Committee.

The Liberty Mutual Prize and Medal winners are selected by a special Review Committee of world-renowned researchers. The winner of the K.U. Smith Student Award is selected by the Student Awards Committee.

Except for the IEA/Liberty Mutual Prize and the IEA Fellow awards, which are presented annually, the IEA awards are presented during the IEA Triennial Congress.

IEA Distinguished Service Award

The IEA Distinguished Service Award is presented to individuals for outstanding contributions to the promotion, development and advancement of the IEA.

IEA Outstanding Educators Award

The IEA Outstanding Educators Award is presented to persons in recognition of outstanding contributions in the area of ergonomics education for having Developed ergonomics education programs Produced new methodology and/or materials for teaching ergonomics, or Graduated persons who have become outstanding ergonomists

IEA Award for Promotion of Ergonomics in Industrially Developing Countries

The IEA Award for Promotion of Ergonomics in Industrially Developing Countries is given to a person(s) who has made significant and outstanding contributions to the Development of Infrastructure of Ergonomics in an industrially developing country. This may be manifested through development of teaching/training programs, implementation of ergonomics design in industry, development of R&D programs, organization of ergonomics professionals, and extensive collaboration with international bodies such as United Nations.

IEA Ergonomics Development Award

The IEA Ergonomics Development Award is presented to persons who have had an international impact on ergonomics in terms of making a contribution or development which: Significantly advances the state of the art of existing ergonomics sub-specialty, or Opens up a new area of ergonomics research and/or application

IEA President's Award

The IEA President's Award is presented to persons who have made outstanding contributions to ergonomics or the furthering of ergonomics, and whose contribution does not clearly fall into one of the other award categories. Persons qualifying for this award do not necessarily have to be ergonomists. Nominations may come from the IEA Council or the IEA Executive Committee. Final approval of this award rests with the IEA President.

K.U. Smith Student Paper Award

The IEA K.U. Smith Student Award was launched in 1997 through an agreement with the St. Paul Foundation, which provides overall management of the Fund. The award provides a tangible means by which the IEA can encourage the development of the discipline, foster scholarship and recognize worthy achievements. The purpose of the award is to honor a deserving student responsible for an application of or contribution to ergonomics.

The award consists of a cash amount of US \$ 3,000. Any student enrolled in an accredited post-secondary institution (college, university, technical or vocational school) is eligible to apply for the award. All areas of ergonomics are eligible for consideration. Examples of applicable projects include an applied ergonomics project, a human performance study or analysis, a design project or product, a research project undertaken in the laboratory or field, or a theoretical/conceptual contribution to ergonomics. This study endeavor should be documented in a paper submitted to the IEA Congress.

The IEA/Liberty Mutual Prize in Occupational Safety and Ergonomics

The IEA/Liberty Mutual Prize in Occupational Safety and Ergonomics was instituted in 1998. The award and a cash prize of US\$ 5,000 recognize outstanding original research leading to the reduction or mitigation of work-related injuries and/or to the advancement of theory, understanding, and development of occupational safety research.

IEA Fellow Award

To be considered for IEA Fellow Award, one must meet two eligibility criteria: International Service and Membership in Society. In addition, a Fellow, an ergonomics professional, must have made outstanding contributions to ergonomics/human factors. There are many ways in which this contribution can be demonstrated. The candidate could have had the primary responsibility for the technical direction, supervision or management of a significant effort during a sustained period of time. The Candidate could be a renowned researcher, designer, or

consultant of great distinction.

IEA/JOSE Best Paper Award

This award is given on a triennial basis. The winner is selected by the Committee composed of representatives from Editorial Board of the international Journal of Occupational Safety and Ergonomics (JOSE) and representative of IEA Executive Committee.

Plaques are awarded to individuals for substantial service to IEA.

Appendix 2

Announcement and Call for Submissions

The IEA-Liberty Mutual Prize in Occupational Safety and Ergonomics

The IEA is inviting applications for the 2005 Liberty Mutual Prize

Submission deadline: March 1, 2006

Through this prestigious award, the IEA seeks to recognize outstanding original research leading to the reduction or mitigation of work-related injuries. The main criteria include significant advancement of theory and understanding, innovation and development of new directions or approaches.

The award recipient will receive a prize of \$5,000. In addition, the award recipient will be automatically competing for the 2004 Liberty Mutual Medal. The Medal, carrying an additional stipend of \$15,000, will be awarded during the IEA Triennial Congress in 2006 (Maastricht, The Netherlands) to the best of the 2004, 2005 and 2006 Prize winners.

Applicants need not belong to the IEA or any of its constituent groups. Relevant disciplines include ergonomics, epidemiology, biomechanics, cognitive and behavioural psychology, design, physiology, medical sciences, economics, engineering, etc.

Submission Requirements

To be considered for the Liberty Mutual Prize, the applicant must submit a letter of application and a research paper in the domain of accident prevention, injury reduction and/or early return to work, including rehabilitation by March 1, 2006.

The paper must:

- * be scholarly in nature such as an original paper describing laboratory, field, or intervention research (see Q&A for further elaboration)
- * contain non-proprietary data
- * be unpublished at the time of submission (but may be in press)
- * be thirty pages or less, single-spaced using point size 12 with 1 inch margins

The paper should address the following topics:

- * contributions of the research to theory, i.e., how the work had advanced the understanding of the causes of accidents and/or ability to mitigate occupational injuries or disability
- * aims of research
- * originality and creativity
- * study methodology
- * implications for risk reduction

The cover letter should highlight:

- * main innovative aspects of the study (e.g., approach, methodology, analysis, etc.)
- * anticipated contribution to occupational safety

An International Review Committee established by the IEA will select the winning contribution

The authors of the winning paper are expected to submit the paper to *Ergonomics* for publication. The authors may make a case to have the paper submitted to an alternative journal for publication.

Submission process:

Persons wishing to be considered for the 2006 prize should submit an application, including separate cover letter and paper, both in electronic format, to the IEA Awards Committee Chair at the following address:

Prof. Waldemar Karwowski
Chair, IEA Awards Committee
Center for Industrial Ergonomics
Lutz Hall, Room 445
University of Louisville
Warnock Street
Louisville, KY 40292, USA

Tel + 1 502 852 7173
Fax + 1 502 852 7397
karwowski@louisville.edu

6. Reports

The deadline for receipt of applications is March 1, 2006.

Applicants should be notified of the results by June 1, 2006.

Announcement of the award winner will be made public by June 15, 2006.

If you require additional information, please contact the IEA Awards Committee Chair at the above-noted address.

Appendix 3

The IEA-Liberty Mutual Prize in Occupational Safety and Ergonomics

Frequently Asked Questions

Q: What is the purpose of the prize?

The purpose of the prize is to recognize individuals whose efforts have contributed the reduction or mitigation of work-related injuries. In particular, the prize is awarded to recognize original research leading to a better understanding of avoiding or mitigating occupational accidents or injuries, or to rehabilitation and return to work of injured workers. The main criteria, therefore, include significant advancement of theory and understanding, innovation and development of new directions or approaches.

Q: What is the difference between the Prize and the Medal?

The prize is awarded each year and has a monetary value of \$5,000. The medal is awarded during the IEA Triennial Congress to the best of three most-recent prizewinners and carries an additional stipend of \$15,000.

Q: What is meant by scholarly work?

Originality is the key defining characteristic of scholarly work. Originality is to be interpreted broadly. One common form of scholarship is the discovery of new knowledge, which may take on many different forms and includes the generation of new concepts, ideas, principles and theorems. Another form of scholarship is the innovative coordination, synthesis or integration of knowledge. This type of scholarship seeks and promotes understanding in a broader context, by organizing knowledge in a new and useful way, by illustrating new relationships between the parts and the whole, by relating the past in a new way to the present and future, or by demonstrating new and significant patterns of meaning.

Q: Does the IEA endorse Liberty Mutual policy directions?

The establishment of the prize should not be construed as endorsement of Liberty Mutual. However, it is recognized that Liberty Mutual sponsors a variety of activities aimed at improving worker health and safety. The IEA shares the belief that the prize will stimulate efforts to combat the unacceptably high incidence of work-related injuries and raise awareness within the industrial, governmental and academic communities of the pervasive nature of the problem and its associated high social and economic consequences.

Q: Is this prize limited to ergonomics?

No. Significant contributions can come from a variety of disciplines such as ergonomics, epidemiology, biomechanics, design, cognitive and behavioral psychology, physiology and anatomy, economics, etc. Submission from any discipline that is consistent with the purpose of the award will be considered.

Q: Why is Liberty Mutual doing this through the International Ergonomics Association?

The IEA is the federation of ergonomics and human factors societies throughout the world. As such, it fosters an extensive network of experts in work sciences and related disciplines. This network will ensure that the selection of the winners reflects the best judgment of the international scientific community. Furthermore, the implementation procedures established by the IEA ensure that decisions are impartial.

Q: Who will select the winners?

A selection committee composed of the world-renown experts will oversee the selection process. External reviewers may be enlisted, as required.

Q: What does the prize comprise?

The annual Liberty Mutual Prize consists of a financial award of US\$ 5,000. Every three years, the best of the three most-recent winners will receive the Liberty Mutual Prize Medal, which consists of a further award of US\$ 15,000.

Q: When will the awards be made?

The annual prize will be awarded during an IEA-sponsored conference or a conference in the country of the recipient. The triennial medal will be given during the next IEA Congress 2006: see <http://www.iea2006.org/>.

Q: Who will pay for the travel expenses?

The award recipient is responsible for his/her travel expenses to attend the awards ceremony.

Q: Who is eligible to apply?

As indicated previously, applicants need not belong to the IEA or any of its constituent groups. Relevant disciplines include ergonomics, epidemiology, biomechanics, cognitive and behavioural psychology, design, physiology, medical sciences, economics, engineering, etc.

The prize will be awarded to individuals, not organizations. If the winning submission names more than one individual, the named individuals shall share the award.

Appendix 4

NOMINATION FORM FOR IEA FELLOW AWARD 2006

For use by IEA Societies to nominate an individual for the IEA Fellow Award

Deadline: April 15, 2006

Submission Instructions:

Please complete this form electronically and e-mail as an attachment
(together with other attachments such as CV, letters of support, etc.) to:
karwowski@louisville.edu

Nominee for IEA Fellow

Full Name (and title):

Address:

E-mail:

Fax:

Tel:

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Person submitting nomination

Full Name (and title):

Address:

E-mail:

Fax:

Tel:

The Nomination

Basis for nomination

To be considered for IEA Fellow Award, the nominee must meet both eligibility and distinction criteria. Please complete parts 1 and 2, below. Note that the eligibility criteria are used to screen candidates and do not hold much weight in the final decision.

1. Eligibility

Only candidates that meet the two eligibility criteria will be considered for the award. The candidate must have been a Full Member in good standing of a Federated or Affiliated Ergonomics Society for at least the preceding **10 years**, and the candidate must have served the ergonomics community at the national or international level. *Please type your response within the box and it will expand, as necessary. There is no space limit.*

The candidate has been a Full Member in good standing of the Federated or Affiliated Ergonomics Society named below for at least the preceding **10 years**.

6. Reports

International service includes such activities as service to the IEA, an extensive publication record in international journals, international consulting, service to the United Nations organizations, and similar. Describe below the nominee's service to the society, the IEA, or the ergonomics profession.

1. Distinction

Eligible candidates will be evaluated on the basis of demonstrated outstanding theoretical or applied contributions to ergonomics/human factors. There are many ways in which this contribution can be demonstrated. The candidate could have had the primary responsibility for the technical direction, supervision or management of a significant effort during a sustained period of time. The candidate could be a renowned researcher, designer, or consultant of great distinction.

Clear evidence of distinction should be supported by detailed descriptions and attachments. For example, for a researcher, the most significant publications authored or co-authored by the candidate should be attached to the application. For a consultant, the most important consulting contracts should be outlined, together with the outcome of the contracts. For a designer the most important design objects should be specified. Any other information to support or attest to the achievements of the candidate should be furnished to the IEA Awards Committee, in order to support their deliberation of the candidate's merits.

Summarize in the space below the candidate's qualification for the prestigious IEA Fellowship.

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Additional Information:

The nominee's curriculum vitae should be electronically appended to the nomination. Other supporting documents such as scientific papers or other evidence may also be attached.

Endorsement by a Federated Society

(Note that many nominees belong to several ergonomics societies. The endorsement can come from any of these societies)

Name of endorser:

Position held:

Name of Federated Society:

Letters of support (optional)

(Letters may be written by persons from the same society or other societies, but they are not required for the nomination. Supporting letters should be attached to the nomination submission. The names of individuals supporting the nomination should be listed below)

Deadline for submitting the nominations: April 15, 2006

ANNOUNCEMENT
INTERNATIONAL ERGONOMICS ASSOCIATION (IEA)
K.U. SMITH STUDENT AWARD 2006

The IEA K.U. Smith Student Award honors a deserving student responsible for an application of or contribution to ergonomics/human factors (E/HF). The next award will be presented during the IEA 2006 XVIth Triennial Congress, scheduled to convene July 10-14, 2006, in Maastricht, Netherlands.

The Award winner will receive of a cash award of US \$3,000. Depending upon need, an additional stipend for travel to the Congress also may be awarded to the winner. Certificates will be awarded to two runners-up.

Any student enrolled in an accredited post-secondary institution (college, university, technical, or vocational school) worldwide is eligible to apply for the award. All areas of E/HF are eligible for consideration. Examples of applicable projects include an applied E/HF project, a human performance study or analysis, a design project or product, a research project undertaken in the laboratory or field, or a theoretical/conceptual contribution to E/HF.

A student wishing to apply for the award should submit the following to the IEA Student Award Committee:

- (1) Five copies of the abstract for a paper that the student has authored, that documents an application of or contribution to E/HF on the part of the student.
- (2) A resume for the student, with the student's name, full address, e-mail and phone numbers, institution enrolled in, experience, list of publications, and a summary of accomplishments and/or contributions related to the field of E/HF. The resume should be limited to 4 pages in length.
- (3) A letter from the student's academic advisor on institutional letterhead certifying the following: (1) that the paper described in the abstract was written by the student; (2) that the student was enrolled in the academic program at the time that work described in the abstract was carried out; (3) when the work described in the abstract was carried out; and (4) that the abstract is being submitted for the IEA K.U. Smith Student Award.

The IEA Student Award Committee will select the awardee and two runners-up using a two-stage procedure:

- (1) review of abstracts and resumes; and
- (2) review of full paper.

Students who have successfully passed the first stage will be invited by the IEA Student Award Committee to submit full papers for final selection. Two selection criteria will be used to select the awardee and runners-up:

- (1) Quality of contribution to E/HF, as documented in the full paper; and
- (2) Other accomplishments in and contributions to E/HF, as described in the resume.

Deadlines for the award process are as follows:

Oct. 2, 2005:

Abstracts, resumes and advisor letters must be received by the IEA Student Award Committee.

Nov. 6, 2005:

Applicants eligible for submitting full papers will be notified by this date.

Jan. 8, 2006:

Full papers from eligible applicants must be received by the IEA Student Award Committee by this date.

Feb. 5, 2006:

Applicants informed of results of award evaluation by this date.

March 1, 2006:

Full paper by winner due to IEA 2006 Congress Program Committee by this date

(visit www.iea2006.org for details).

NOTE: The IEA 2006 Congress Program Committee will reserve a slot for the award winner to present her/his

6. Reports

paper. The winner does NOT have to meet the Oct. 1, 2005 deadline for submitting paper abstracts. However, the winner must submit her/his full paper to the IEA 2006 Congress Program Committee by March 1, 2006.)

Submissions should be sent to the Chair of the Student Awards Committee:

Chair: Prof. Michael Smith
Department of Industrial Engineering
University of Wisconsin, Madison
1513 University Avenue
Madison, WI 53706
Fax: 608-262-8454
Email: mjsmith@engr.wisc.edu

APPENDIX 5

Awards of the International Ergonomics Association

Past Receipients: 1982-2005

IEA Distinguished Service Award:

1982: Alphonse Chapanis, Etienne Grandjean
1985: M. Oshima, Alain Wisner
1988: P. Davis, N. Lundgren, W. Singleton
1991: Jan Rosner
1994: Harry Davis
1997: Hal W. Hendrick
2000: Martin G. Helander
2003: Y. Ian Noy

IEA Founders Award:

1991: J. Scherrer
1994: K.U. Smith
1997: W. Floyd
2000: Wesley E. Woodson

IEA/JOSE Best Paper Award:

2003: Ralph Lipsey Barnett
2006: Tien-I Liu, Akihiko Kumagai and Choungchan Lee (USA)
and
Marvin J. Dainoff (USA), Arne Aaras (Norway), Gunnar Horgen (Norway), Maria Konarska (Poland), Stig Larsen (Norway), Magne Thoresen (Norway), Barbara G.F. Cohen (USA): the MEPS Study Group

IEA Outstanding Educators Award:

1991: E. Nigel Corlett
1994: W. Rohmert
1997: M. M. Ayoub
2000: John Long
2003: Gavriel Salvendy

IEA Award for Promotion of Ergonomics in Industrially Developing Countries: (previously known as the IEA Ergonomics of Technology Transfer Award)

1991: Alain Wisner
1994: Houshang Shahnava
1997: R. Sen
2000: Najmedin Meshkati
2003: Patricia Ann Scott
2006: Adnyana Manuaba

IEA Ergonomics Development Award:

1991: Kazutaka Kogi
1994: Jaques Leplat
1997: David Meister
2000: Heinz Schmidtke; Shrawan Kumar
2003: Neville Moray

IEA President's Award:

1997: Tom Leamon
2000: Neville Moray
2003: Gavriel Salvendy
2006: Jens Rasmussen

K.U. Smith Student Award:

1997: Laurel Ritmiller
2000: Caren A. Wenner
2003: Seung-Kweon Hong; Honorable Mention: Ming Hou
2006: Joanna Zander, Miriam Mattison

The IEA/Liberty Mutual Prize In Ergonomics And Occupational Safety

1998: Andrew Imada
1999: Shirley Ann Gibbs, Australia
2000: Peter J. McAlindon
2001: Peter A. Hancock and Selma N. de Ridder
2002: H. Hsiao, B Bradtmiller & J. Whitestone
2003: William S. Marras, Sue A. Ferguson, Deborah Burr, Kermit G. Davis, Purnendu Gupta
2004: David M. DeJoy
2006: David M. Rempel, Niklas Krause, Robert Goldberg, Douglas Benner, Mark Hudes, and Gary U. Goldner

The IEA/Liberty Mutual Medal In Ergonomics And Occupational Safety

2000: Andrew Imada
2003: Peter A. Hancock and Selma N. de Ridder

IEA Fellows

Munehira Akita, Japan
Moh M. Ayoub, USA
Sebastiano Bagnara, Italy
Kenneth R. Boff, USA
Frederick Bonjer, The Netherlands (IEA President 1973-1976)
Ogden Brown, Jr., USA
Margaret Bullock, Australia
Alphonse Chapanis, USA (IEA President 1976-1979)
Nigel Corlett, UK
Min K. Chung, S.Korea
Harry Davis, USA (IEA President 1985-1988)
Annamaria de Moraes, Brazil
Luc Desnoyers, Canada
Colin Drury, USA
Jan Dul, The Netherlands
Daniel Gopher, Israel
Peter A. Hancock, USA
Martin Helander, Sweden (IEA President 1994-1997)
Hal Hendrick, USA (IEA President 1994-1997)
Andy Imada, USA
Stephan Konz, USA
Shrawan Kumar, Canada
Ilkka Kuorinka, Finland (IEA President 1988-1991)
Antoine Laville, France
Tom Leamon, USA
Holger Luczak, Germany
David Meister, USA
Bernard Metz, France (IEA President 1970-1973)
Hugues Monod, France
Maurice de Montmollin, France
Neville Moray, Canada/France
Mitsuo Nagamachi, Japan
Y. Ian Noy, Canada (IEA President 1997-2000)
Masamitsu Oshima, Japan
Takao Ohkubo, Japan
Leszek Pacholski, Poland
Raja Parasuraman, USA
Yves Queinnec, France

Kyung S. Park, Korea
 Jens Rasmussen, Denmark
 Walther Rohmert, Germany
 Pieter Rookmaaker, The Netherlands
 Gavriel Salvendy, USA
 Pat Scott, South Africa
 Reginald G. Sell, UK
 Robindra Nath Sen, India
 Stover Snook, USA
 Thomas Sheridan, USA
 Tom Singleton, UK
 Michael J. Smith, USA
 Tom Stewart, UK
 Helmut Strasser, Germany
 Sadao Sugiyama, Japan (IEA President 1982-1985)
 Mao-Jiun Wang, Taiwan
 John Wilson, UK
 Alain Wisner, France
 Michael Wogalter, USA
 Klaus J. Zink, Germany

A memo from Tom J. Smith re the IEA K.U. Smith Student Award Fund

Waldemar et al,

The IEA K.U. Smith Student Award Fund currently is capitalized at \$41,572. It has been growing at a faster rate than the \$3000 paid out every 3 years for the student award at the IEA Triennial Congress. Accordingly, Waldemar and I have had some brief discussions on the idea of expanding the scope of the award. I previously held similar discussions with Ian Noy.

The decision tree on this idea can be summarized as follows.

1. *Do nothing (let the fund capitalization continue to grow)*
2. *Do something (expand scope of fund in some manner)*

Options for doing something:

- *Increase amount and/or number of student awards*
 - *Increase size of winning student award higher than \$3000*
 - *Increase number of awards (i.e., make award to runner-up)*
- *Support some type of IEA Student Education initiative*

If any changes to how the award fund is allocated are to be finalized prior to the 2006 Congress, planning should begin now. The requisite steps are:

1. *Prepare and submit proposal to IEA Executive (I am prepared to assume this responsibility)*
2. *Approval by IEA Executive*
3. *Modify fund agreement with St. Paul Foundation*
4. *Publicity and implementation*

I would appreciate thoughts or ideas that any of you may have on what course to pursue.

In the interests of putting something on the table for you to chew on, let me offer the following preliminary proposal.

A proposal from T.J. Smith

EDUCATIONAL SUPPORT FOR ERGONOMICS STUDENTS IN DEVELOPING COUNTRIES

Purpose:

Annual funding shall be provided from the IEA K.U. Smith Student Award Fund to support the education of ergonomics students in developing countries.

Terms:

1. \$1000 shall be allocated annually from the IEA K.U. Smith Student Award Fund to support the education of ergonomics students in developing countries.

2. The IEA Professional Standards and Education Committee shall be responsible for allocation of these funds

3. The annual fund transfer process shall proceed as follows (specific schedule to be determined):

- IEA Professional Standards and Education Committee identifies fund recipient*
- Request transmitted to designated Fund administrator (currently members of the IEA Student Award Committee are so designated, under terms of the agreement with the St. Paul Foundation)*
- Fund administrator submits request to St. Paul Foundation*
- Check sent from St. Paul Foundation to Mike Smith's HF/E program in IE at the University of Wisconsin*
- Mike sends check to designated fund recipient*

4. The definitions of the terms 'supporting education of ergonomics students' and 'developing countries' remain to be defined. Some ideas for support are as follows:

- Supporting development of a library by a designated educational program through provision of books or internet access to publications*
- Supporting purchase of educational equipment/resources*
- Supporting a particular student research project*
- Supporting establishment of a new ergonomics training program for students*

As for which countries, and which programs in developing countries, might be eligible, that would be the decision of the Professional Standards and Education Committee. One obvious approach would be for the Committee to establish an application program for funding, and choose one worthy application each year for a fund award.

5. There should be some provision for adjusting the terms of the proposed award, based on the financial status of the student award fund

I look forward to your comments on this, or on any other ideas that you may have.

*T.J. Smith
School of Kinesiology
University of Minnesota*

6.10.2. Voting item

Motion to modify the K.U. Smith Student Paper Award as follows

K.U. Smith Student Paper Award

The IEA K.U. Smith Student Award was launched in 1997 through an agreement with the St. Paul Foundation, which provides overall management of the Fund. The award provides a tangible means by which the IEA can encourage the development of the discipline, foster scholarship and recognize worthy achievements.

The purpose of the award is to honor two deserving students responsible for an application of or contribution to ergonomics worldwide. At least one of the deserving students shall reside in the developing country. The award consists of a cash amount of US \$ 2,000 per each of the two students.

Any student enrolled in an accredited post-secondary institution (college, university, technical or vocational school) is eligible to apply for the award. All areas of ergonomics are eligible for consideration. Examples of applicable projects include an applied ergonomics project, a human performance study or analysis, a design project or product, a research project undertaken in the laboratory or field, or a theoretical/conceptual contribution to ergonomics. This study endeavor should be documented in a paper submitted to the IEA Congress.

6.10.3. Extract from IEA Basic Docs – IEA Fellow Award (Article)

Article 9. IEA Fellow

IEA Fellowship is to recognize extraordinary or sustained, superior accomplishments of an individual. To be considered for a fellowship two eligibility criteria must be satisfied. In addition, the candidate's distinction as an ergonomics professional must be demonstrated.

Eligibility Criteria

There are two eligibility criteria: International Service and Membership in Society :

- International Service : this includes such activities as service to IEA, an extensive publication record in international journals, international consulting, service to the United Nations, and similar.
- Membership in Society : the candidate must have been a full member in good standing of a Federated or Affiliated Ergonomics Society for at least the preceding 10 years. Student membership and Associated Membership do not confer eligibility.

Distinction Criteria

The candidate should have made outstanding contributions to ergonomics/ human factors. There are many ways in which this can be demonstrated:

- the candidate could have had the primary responsibility for the technical direction, supervision or management of a significant effort during a sustained period of time.
- the candidate could be a well renowned researcher, designer or consultant of great distinction. Clear evidence of distinction should be supported by detailed descriptions and attachments to the nomination form that is submitted by the person nominating the candidate. For example, for a researcher, the most significant publications authored or co-authored by the candidate should be attached to the application. For a consultant, the most important consulting contracts should be outlined, together with the outcome of the contracts. For a designer the most important design objects should be specified. Any other information to support or attest to the achievements of the candidate should be furnished to the IEA Awards Committee, in order to support their deliberation of the candidates merits.

Submission

The application should be submitted to the Chair of the Awards Committee.

Fellows Election Committee

The Fellows Election Committee consists of all fellows of IEA. The Chair of the Awards Committee serves as Chair of the Fellows Election Committee.

All former IEA presidents are named Fellows

Elections

The nominee's candidacy must be approved by two-thirds vote of the members of the Fellows Selections Committee. Those candidates so approved must be elected by a majority of the IEA Executive Committee.

Renomination

An individual may be nominated for Fellow several times.

7. IEA'Congresses

7.1. IEA'2006 Progress Report



2006 10-14 July
Maastricht
THE NETHERLANDS

16th triennial World Congress on Ergonomics

The year 2005-2006 was exciting. There were several important milestones. The deadlines for abstracts for sessions and full papers, and for posters were the first indicators of the number of participants. The receipt of 1600 abstracts, of which 350 for

posters and 30 for interactive sessions, was very encouraging. After reviews and full paper submission, the final program will consist of 240 sessions with 1,100 oral presentations, and 250 posters. Clustering papers was partly easy, as the moderators for sessions took care. On the other hand designing the full program is a complex task, in which compromises must be found for sequential versus parallel sessions; availability of speakers; preventing that people must be at two places at the same time; selection of session chairs; and so on.

The main activities consisted of: continuous communication; programming, including reviews; finances and sponsoring; practical arrangements.

Continuous communication is necessary to keep all potential participants informed. The congress' website has been updated almost monthly; newsletters of Federated Societies were feeded with texts. An important role for the congress chair was the assignment of financial support for participants from developing countries. This process was done in close collaboration with the IEA Chair International development, David Caple. We are happy and proud that IEA- and IEA2006-budgets allowed to help forty participants with support for their travel and lodging expenses.

The program chair has had a very busy year. Despite great help in the review process by moderators and other experts, the process took much time and effort. Unfortunate was the experience that the electronic registration and abstract module of our PCO could not adequately process such large numbers of abstracts and reviewers. Traditional administrative had to come into place.

The process towards the proceedings however is not too difficult in this electronic era. But a most disappointing percentage of authors (in the range of 25%) did not meet the publisher's lay out requirements, and/or met the deadline for full papers; this caused many tens of extra hours of work for the program chair and his staff.

Finances and sponsoring were ongoing. Organizing a large congress in a country like the Netherlands means high costs, while the congress fee level was set already in 1999. The introduction of the Euro had major effect on the price level, especially for catering and services. We are most grateful for the many companies and institutions that have decided to sponsor the congress. Eleven main sponsors donated a mean of Euro 25,000 each! And many other sponsors have helped to keep the congress fees at the level of previous IEA congresses (only correction for inflation was in 1999 incorporated; since then the rates were unchanged).

We also thank the board of the Foundation that was set up as a legal body to cover the financial risks of the congress; the board has followed the organization critically.

Practical organization has become more and more important. A day-to-day scenario was developed. Conference Agency Maastricht, our PCO, has been doing great work. Despite their experience of 15 years they were surprised by the complexity of an IEA triennial congress. The many IEA activities, the broad scope of the congress, the huge number of presentations, and the many exceptions on basic arrangement, are unique; reconsidering these could make the work for future organizers easier.

Thanks to tens of people who perform tasks in the organization, we are confident about the congress organization. We look forward to a most promising congress program. And, from the many reactions that we get we expect also a very warm atmosphere.

Ernst Koningsveld, Ruud Pikaar and Paul Settels
IEA2006 Congress Committee
6 April 2006

7.2. IEA'2009 Progress Report

Philosophy

IEA2009 will be another landmark of the discipline for a better world and better lives of the people around the world. All topics related to ergonomics/human factors will be included in the congress programs. The congress will be held in China, which brings specific futures to highlight the discipline. China is a country possessing both traditional cultural heritages and modern achievements. Beijing had been the ancient capital of China through several dynasties, now the capital of the People's Republic of China. It is a thriving center for political, scientific, and commercial endeavors, a place of global confluence and exchanges. Beijing is especially noted for its historical sites, such as the Great Wall, the Forbidden City, and the Temple of Heaven. The rich historical legacy of China reveals a long history of social changes and human interactions, providing a cultural environment especially suited for exchanges in the science of ergonomics. The congress will be one year after the 2008 Beijing Olympics and will share the advanced meeting and accommodation facilities, as well as the advanced city transportation systems, newly constructed for the Games.

Main topics:

- Cognitive ergonomics
- Human-Computer Interaction
- Manual work
- Product and system design
- Complex systems and human performance
- Safety and health
- Education and training

Congress Date:

August 9-14, 2009

Congress Venue:

Beijing International Convention Center

Working Language:

English

Size of the Congress:

about 3000 participants (2000 from outside of mainland China)

Congress Organizations:

IEA 2009 will be organized on behalf of the International Ergonomics Association by the Chinese Ergonomics Society, assisted by the Taiwan Human Factors and Hong Kong Ergonomics Society, China.

Congress Chair:

Sheng Wang, President of Chinese Ergonomics Society (CES)
Organizing Committee, Chaired by Professor Kan Zhang, Past President, Chinese Ergonomics Society
Program Committee, Chaired by Professor Sheng Wang, President, Chinese Ergonomics Society

Local organizing Committee:

Sheng Wang, Chinese Ergonomics Society
Kan Zhang, Chinese Ergonomics Society
Hui xiao, Chinese Ergonomics Society
Baoshan Liu, Chinese Ergonomics Society
Mao-Jlun J Wang, Ergonomics Society of Taiwan

Eric Ming-Yang Wang, Ergonomics Society of Taiwan
Yung-Hui Lee, Ergonomics Society of Taiwan
Yu Tak Sun, Ergonomics Society of Hong Kong
Alan H S Chan, Ergonomics Society of Hong Kong

Congress Meeting Agency:

The International Exchange Center, Chinese Association of Science and Technology

Registration Fee:

600USD for members; 700USD for none members; 200USD for students; 100USD for accompany persons (as early as March of 2009)

Time Line of Preparation:

2005/7	Preliminary Report to IEA
2005/10	Congress Website Opens
2006/3	Complete the Congress Organizations
2006/5	First call for papers on the Congress website
2006/7	First call for papers distributed during IEA2006
2006/8	Invitation of invited speakers mailed to members of IEA for nominations
2006/12	Invited speakers decided
2007/1	Second call for papers mailed to those responded to the first call
2008/10	Deadline for general submission
2008/12	Acceptation and invitation for visa issued
2009/3	Deadline for early birds registration
2009/8	Congress

7.3 IEA'2012

7.3.1 extract from Basic Docs (Policy on Conferences, Title)

POLICY ON THE SUPPORT OF CONFERENCES IN ERGONOMICS

INTRODUCTION

It is the policy of the IEA to support international scientific conferences organized by any of its Federated Societies or by other international bodies that have an interest in ergonomics or that are organizing a conference with a major ergonomics team. Support will be given for conferences of four major types:

- IEA Triennial Congress
- IEA Conference
- Joint Conference
- Endorsed Conference

The IEA Triennial Congress is organized and hosted by a Federated Society. The other three types of conferences will normally be organized by a Federated Society, IEA Technical Group, or by Societies representing the IEA in cooperation with other bodies as may be appropriate.

The IEA supports these conferences to varying degrees, depending upon the type, in three basic categories:

- providing "seed" funds as approved by the Council
- providing publicity through its member societies (also see note below)
- permitting the use of its name and logo to endorse the conference.

The IEA requires to receive eleven (11) copies of the conference proceedings, delivered to the Secretary General's address or to addresses designated by the Secretary General. This requirement applies to all types of IEA supported conferences (see table below). One copy will be retained by the IEA for archival purposes and the other ten copies will be distributed to industrially developing countries.

FINANCES

Article 1. General

No monetary remuneration or salary is to be afforded any individual involved in the organization and management of any type of IEA supported conference except for reimbursement of actual expenses incurred in performing the duties and activities of organizing and/or managing the conference. This requirement does not apply, of course, to compensation for the services of a professional meeting organizer if one is utilized.

Article 2. Capitation Fee

For all types of conferences, the IEA expects to derive some financial benefit from its support. This takes the form of a capitation fee and a pro-rated fee per part-time registrant, except for the "Endorsed Conference" (flat fee). The table indicates the level of support offered and capitation schedule for each conference.

Conference Type	Seed Funds	Publicity (P)	Endorsement	Capitation Fees
Triennial IEA Congress	X	X	X	28 US Dollars
IEA Conference	X	X	X	14 US Dollars
Joint Conference (JC)	X	X	X	10.50 US Dollars
Endorsed Conference (EC)		X	X	flat fee of twice the regular registration fee

For conferences organized by federations of societies, like the IEA, for organizations with which the IEA has an MOU, and for other requests to be reviewed on a case-by-case basis by the Executive Committee, there is no fee for IEA conference sponsorship. Eleven copies of conference proceedings are required.

To avoid excessive financial burden to conference organizers, the number of registrants to be used for assessing the capitation fee should be the sum of the number of delegates on each day divided by the number of days of the conference. Thus, for a four day conference, four delegates attending one day would be counted as one full delegate subject to a capitation fee.

Where the capitation fees constitute a significant concern to the applicant society or conference organizer, the capitation fees may be replaced by an alternative scheme to be negotiated on an individual basis. This will require a careful analysis of the conference budget. Alternative arrangements should provide a similar financial return to the IEA as the capitation fees.

The Executive Committee may waive, at its discretion, the capitation fees for conferences held in industrially developing countries or for delegates from industrially developing countries. Application for waivers will be considered for each conference on an individual basis.

In case of financial loss, capitation fees will be forgiven.

Article 3. Surplus

It is recommended that all of the surplus (money remaining after capitation fees and all other obligations have been met), or a minimum of 50% of the surplus, be donated to the IEA for the purpose of establishing an IEA fund in the name of the host society. The terms and conditions of the Fund shall be defined by the host society.

PROMOTION

The IEA will help promote IEA supported conferences (except Conference Endorsement) through the following means :

IEA will provide a package including checklists for organizing conferences and the IEA logo for use in promotional material scientific support from the IEA Technical Committees to organize sessions and promote subject area, if requested.

Listing the conference in IEA home page and providing a link, if available and appropriate advertising the conference in the IEA newsletter, Ergonomics International requesting IEA approved journals to advertise the conference, if appropriate Federated Societies agree to help promote all IEA supported conferences (except Conference Endorsement) through the following means:

- listing of the conference in the calendar section of their newsletter, including a description or call for participation in their newsletter,
- distributing promotional material such as call for papers and announcements to its members (or at their annual conference).

The organizers of IEA supported conferences are requested to provide exhibit space to the IEA at a prominent location at the conference site for the duration of the conference for the purpose of displaying IEA leaflets, printed or published materials, conference calendars and other promotional displays.

IEA SUPPORT LEVELS	Triennial	IEA	Joint	Endorsed
1. Seed Funds	x	x		
2. Publicity	x	x	x	
3. Endorsement	x	x	x	
4. Capitation Fee (US\$)	28	14	10.50	flat fee

General requirements for IEA Conference endorsement

Article 1. Procedure for IEA Conference endorsement

For all types of conference endorsement the organizers should submit the relevant IEA Request Form.

Forms for IEA Triennial Congress are available from the Secretary General. Forms for the other types of conferences are available from the Chair of the Science and Technology Committee or may be downloaded from the IEA home page. The chair Sc & T Cee takes care.

For IEA congresses, IEA conferences and Joint Conferences the IEA requires that comprehensive financial reports be completed and filed with the Treasurer of IEA within 4 months after the conference. For Approved Conferences, a report shall be submitted to the Treasurer of IEA indicating the final attendance details.

Any financial return to IEA shall be provided with these reports.

Article 2. Conference request forms

A. GENERAL INFORMATION	Triennial	IEA	Joint	Endorsed
1. Conference Title	x	x	x	x
2. Organizers	x	x	x	x
3. Type of Conference	x	x	x	x
4. Financial Sponsors	x	x		
5. Plans - Solicit Papers	x	x	x	x
6. Plans - Select Papers	x	x	x	x
7. Publications	x	x	x	x
8. Session Facilities	x	x	x	x
9. Accommodations / Housing	x	x	x	x
10. Exhibit Facilities	x	x	x	
11. Other Information	x	x		

B. INCOME AND EXPENSE SUMMARY

1. Income	x	x
2. Expenses	x	x
3. Net Surplus / Loss	x	x
4. Post Conference Distribution	x	x
Income Detail		
1. Registration	x	x
2. Site Proceedings Sales	x	x
3. Social Functions	x	x
4. Tours / Special Events	x	x
5. Tutorials / Workshops	x	x
6. Other Income	x	x
Expense Detail		
1. Printing / Mailing	x	x
2. Publicity	x	x
3. Registration	x	x
4. Facilities / Program	x	x
5. Social Functions	x	x
6. Tours / Special Events	x	x

7. Tutorials / Workshops	x	x
8. IEA Capitation Fees	x	x
9. Other	x	x
10. Contingency	x	x

C. APPROVAL

1. Conference General Chair	x	x	x	x
2. Chair Sponsoring Organization	x	x	x	x
3. President Local Society (if applicable)	x	x	x	x
4. President IEA Federated Society	x	x	x	x
5. IEA Treasurer	x	x		
6. IEA Council (President)	x	x	x	x

CONGRESS OF THE INTERNATIONAL ERGONOMICS ASSOCIATION

Article 1. General

The primary conference activity of the International Ergonomics Association (IEA) is the triennial congress (Congress). When a host society and a venue for a Congress have been selected, the IEA will give the organizers of the Congress all reasonable support. Support includes financial assistance at a level to be determined by the Council of the IEA. In addition, one or more representatives appointed by the IEA Council will actively participate in the organization of the Congress.

The officers of the IEA and the representative(s) of the IEA Council will hold periodic consultations with the organizers and provide advice on finances, physical requirements, Congress organization, themes, topics, scientific speakers and other matters.

Article 2. Selection of Congress Host Societies

The IEA Council will select the host society based upon proposals submitted by Federated Societies at least eight years prior to the proposed Congress. The IEA Council should invite societies to submit a formal proposal to the Council for its consideration, and should advertise for proposals at least one year prior to the decision. The following criteria will be employed by Council with respect to evaluation of the host society and its proposal:

Size of Society

A host society should have a minimum of at least two hundred paying members in order to adequately staff the Congress.

Degree of Risk

The organizational soundness and credibility of the host society, as well as capability and experience in conducting both similar sized and international conferences will be examined with respect to the degree of risk to IEA.

Location of Congress

The geographical location of the Congress will reflect the strength of ergonomics worldwide and - provided that other criteria are met - the location should be spread around the major geographical regions. Although no strict rotational order will be followed, Congresses shall not normally be held consecutively within the same geographical region.

Growth of Congresses

Host societies must be aware of the potential for the increasing size of triennial congresses and must be able to successfully cope with such growth.

Participation

Host societies or host countries may not place any restrictions on the attendance of delegates, members, participants or visitors to the Congress by reason of national or racial origin, political or religious beliefs, gender or age.

Advantages to IEA

An evaluation will be made to determine any strategic, scientific and political advantages to IEA.

Allocation of Gain

Preference will be accorded host societies which offer a portion of excess profits to be used to establish special IEA funds.

Assistance to Participants

Consideration will also be given to host societies which propose efforts to help fund delegates and participants from Central European and industrially developing countries as well as students.

Special Events and Tours:

Consideration will be afforded host societies which propose holding special events and/or technical tours of interest to delegates and participants.

Article 3. Submission of Proposal

The IEA Council will also decide upon the venue of the Congress based upon the proposals submitted by Federated Societies.

Proposal

A proposal to host the Congress must be formally submitted by the governing body of a Federated Society of the IEA in English. The proposed Congress will be formally entitled the "Xth Congress of the International Ergonomics Association" where X is the appropriate cardinal number. The proposal should acknowledge the IEA policies herein provided and should provide details relating to the organization and technical program similar to that used in this document. Federated Societies wishing to submit proposals should contact the Secretary General for conference manuals, checklists, and the IEA Congress Meeting Request Form which must accompany all proposals.

Scope of Congress

The proposed Congress must be international and intercontinental in its scope. In particular, theme speakers must be drawn from different national and continental backgrounds.

Length of Congress

The Congress is normally held over a five day period.

Attendance

The proposal should indicate the total expected, or planned, attendance.

Financial Support

The proposal should indicate agreement with the financial arrangements as described herein. The Society sponsoring the proposed Congress must carry the financial responsibility for the Congress. At the Congress prior to the proposed Congress, the sponsoring society must provide a preliminary budget to Council for approval. The IEA may provide a financial advance to the organizing committee, the amount to be determined by Council. Revenue sources in addition to registration fees (i.e., exhibits, sponsorships, etc.) are to be encouraged where feasible. Also, the use of professional organizers should be considered, particularly if they offer services in a variety of languages. The return to the IEA will be the financial advance plus 25 Swiss francs per Congress registrant. Surplus revenue from the Congress will be retained by the host society. Expenses of the IEA Council appointed representatives on the organizing committee will be the responsibility of the IEA.

Article 4. Congress Organization

Location of Congress:

The location of the proposed Congress should meet the following criteria

Venue:

The geographic site should be at, or close to, a major center, noted for its academic and/or professional affiliations, as well as for its social and historic attractions. It should be within easy access by air or land transportation from distant points.

Date:

The Congress is normally held during the third quarter of the year. The specific dates for the Congress should be selected so as to minimize conflict with other related conferences, academic terms, major holidays, etc. The proposed date should be cleared with the Executive Committee of the IEA.

Congress Center:

The Congress center should preferably be in one building, in which can be found administrative and logistic facilities, a major hall or auditorium for plenary sessions, conference rooms for lesser sessions, committee rooms and suitable places for casual informal discussion with easy access to a continuous service of light refreshments. Consideration should be given to accommodating the special needs of handicapped or elderly persons. Ideally, the Congress should have sole occupancy of the center or at least that part of the center in which the Congress is housed.

Audio-Visual Facilities:

Facilities must be available to permit the use of 35mm slides, overhead projectors, and, if requested, film projectors and video equipment.

Signage:

The number and placement of signs depends upon the complexity of the center and location of the meeting rooms. Sufficient numbers of signs should be posted in English and in the local language to direct delegates to all points of interest (e.g., registration, information, tours, meeting rooms, press room, audio-visual room, photocopying room, washrooms, etc.). It is desirable to post signs outside each room to indicate the session in progress.

Translation:

Every effort should be made to communicate with delegates in their own language (i.e., through enlistment of multi-lingual volunteers) and to provide interpretation services for on-site registration and information. Facilities must be available for simultaneous translation on plenary sessions and the General Assembly into at least English and the language of the country where the meeting is held. Translation must be available in the same conference room as the original presentation.

Accommodation:

Accommodations must be available at or close to the Congress center. Accommodations should be of good quality, in terms of that normally found in the area. Different levels of accommodations should be available to meet different budgets; allowance should be made for single, double or multiple occupancy as preferred.

Transportation:

Where it is not possible to arrange for accommodations within reasonable walking from the Congress center, free transportation should be available at frequent intervals during the day. Arrangements must be made by the sponsoring society for the provision of transportation to and from all events authorized by the Congress. It is especially important that adequate transport be provided between the local airport, and rail or bus stations and the Congress location or that delegates be aware in advance of the public transport facilities available. Consideration should be given to having an information desk at the airport and station or to providing full details of Congress to the normal information agencies.

Registration, Promotion, Publication:

The sponsoring society must ensure that arrangements are made for pre-registration, registration, promotion and advertising. An opportunity should be provided in advance literature and the final program for a message from the President of the IEA. Announcements should be included in all related journals and advertising material distributed to Federated Societies, ILO, WHO and other related organizations as well as at related conferences within a year prior to the Congress. The IEA will assist in promotion and advertising. All promotional material and publications must state that the Congress is a function of the IEA and display the IEA logo. The IEA logo may be integrated with other artwork, if desired. The sponsoring society is responsible for publishing and issuing free of charge to delegates the proceedings of the Congress, and, if possible, a list of delegates including affiliations and full addresses. The organizing committee should consult with the Publication and Promotion Committee of the IEA in regards to matters related to the publication of invited or submitted papers in the proceedings or other publications following the Congress.

Name Badges:

Delegate badges should indicate the name of the delegate and affiliation using letters of size 20 points to ensure good readability. Badges for staff, IEA council members and officers, presenters and session chairpersons should indicate their role to facilitate recognition by delegates.

Social Events:

It is normal practice to arrange a welcome reception for all delegates and accompanying persons on the first evening of the Congress to facilitate interpersonal contact. The cost of the reception is to be included in the registration fee. Theme evenings and other social functions are optional as are pre- and post-Congress professional tours and sightseeing tours. A program for accompanying persons during the Congress is desirable.

Reporting Requirements:

Once approval has been obtained from Council for the Congress, the organizers are required to submit reports to Council at its annual meetings describing progress to date and any difficulties experienced or foreseen. Following the Congress, the organizers should submit a report to the IEA for the benefit of later conference organizers, giving information on such things as the organization of the Congress, problems that had to be overcome, and unusual or outstanding difficulties encountered.

Recommended Planning Timeline:

The precise planning timetable will, of course, reflect the specific requirements of the Congress organizers and the circumstances surrounding the Congress. However, the following plan might serve as a useful starting point:

Booking of the Congress hotel and reserving blocks of rooms at a number of alternate hotels (offering high, medium and low rates) - as soon as possible after approval of Congress by Council

Preparation of preliminary budget - 3 years prior to Congress

Preliminary announcement - at Congress prior to proposed Congress

Announcements to relevant publications - sent regularly starting 3 years prior to Congress

First announcement and call for papers - 18 months prior to Congress

Brochures or posters distributed to societies, organizations, at conferences, etc. - 15 months prior to Congress

Second announcement and call for papers - 15 months prior to Congress
Abstract deadline - 12 months prior to Congress
Authors kits distributed- 10 months prior to Congress
Provisional program and registration distributed - 8 months prior to Congress
Paper deadline - 7 months prior to Congress
Early registration deadline - 3 months prior to Congress

Article 5. Technical Program

The technical program should be developed in close cooperation with the Science and Technology Committee and its various Technical Committees. The sponsoring society must ensure that during the period of the Congress, provision is made for a combination of superior quality technical sessions, both plenary and special interest, professional visits, if appropriate, and social events. The speakers at the plenary sessions will be selected with the advice of Council, will be of an international standing or of other high reputation, and in total will represent the international scope of ergonomics and emerging interests. Themes and topics must have the approval of the Council. The success of an international conference depends not only upon formal presentations, but also upon facilities for interpersonal contact and the interchange of ideas and views by discussion both formal and informal. In addition to ensuring that space is available for informal discussions, time should be allowed in the program for the exchange of ideas and views.

At least one and one half hours during the Congress must be scheduled for the IEA General Assembly, chaired by the President. No other activities are to be scheduled during this time block.

On the final day of the Congress, a "Futures Panel" shall be scheduled for one and one half hours. This panel discussion is organized by the Policy and Development Committee and addresses topics, trends, and forecasts concerning the future of ergonomics.

Advice should be sought from the Science and Technology Committee regarding the status of poster presentations, paper length for publication in proceedings, acceptance of papers, inviting speakers, selection of papers and themes, policy related to registration of presenters for purposes of inclusion in proceedings, etc.

In addition to advice from the Science and Technology Committee, two persons nominated by the IEA Executive Committee shall serve as members of a Scientific Advisory Committee which shall be formed by the organizers of a Triennial Congress and which shall meet at least twice to oversee the planning of the technical program.

Audio-Visual Guidelines:

Presenters should be provided a standard set of guidelines for the preparation of audio-visual aids, including slides and overhead transparencies. All audio-visual material should be examined by technical staff prior to their presentation to ensure reasonable compliance with the guidelines. Presenters should be advised well in advance that aids which do not conform with the guidelines may be rejected. A facility for the on-site preparation of overhead transparencies would be desirable. Instructions on the use of audio-visual equipment should be provided on-site to all presenters and session chairpersons to ensure the proper use of the equipment. A rehearsal room, complete with slide and overhead projectors, should be provided for use by presenters. Audio-visual technicians should be readily available, ideally in each room, to operate audio-visual equipment and to assist with the presentations. A spare projection bulb and/or spare projector should be available.

Exhibits:

Exhibits may be arranged by the organizers providing they are not subsidized by registration income. Publications related to the exhibits must include a disclaimer stating that the IEA does not necessarily endorse the products or services being exhibited. Notwithstanding the disclaimer, the organizers must endeavor to ensure that the products and services being exhibited are of high quality and appropriate to the audience.

Article 6. IEA

The host society shall make arrangements to provide the IEA the following facilities and services, insofar as possible, at no cost to the IEA.

a. A meeting room should be provided for a period of two days for the Council meeting prior to the Congress, the exact dates to be set by the Executive Committee. This meeting room must accommodate 40 or more persons seated around a conference table, plus some additional seating for invited observers. Refreshments (coffee and rolls) are to be provided during morning and afternoon breaks. Secretarial support (photocopying, preparation of last minute documents, etc.) is also required.

b. Additional meeting space may be required for meetings of the IEA Executive Committee, IEA committees and subcommittees during the Congress period. The requirement for this should be ascertained by the organizers through contact with the IEA Executive Committee a year prior to the Congress.

c. Suitable facilities should be provided for use by the President of the IEA for a period spanning the Council meeting and the Congress. These facilities, or, if not suitable, additional facilities should be provided for special receptions hosted by the IEA.

- d. The IEA President should be given space in the printed program as well as be invited to give a 15 to 20 minute address at the opening ceremony to welcome delegates.
- e. The registration fee should, if possible, be waived for all IEA Executive Officers, Standing Committee Chairs, and Council members. Defraying some of the travel expenses of these individuals paying their own way to attend the Congress should be considered.
- f. IEA Executive Officers, Standing Committee Chairs, and Council members should be invited to chair technical sessions of the Congress.
- g. A table should be provided in the main exhibit hall or near the registration area exclusively for displaying IEA brochures, a slide show and other materials.
- All delegates to the Congress who are members of IEA Federated Societies should be entitled to a reduced registration fee. They should be required to identify their affiliation to verify their eligibility for the reduced fee.

7.3.2 Proposal from ABERGO

The Brazilian proposal to host the IEA 2012 18th Triennial Congress on Ergonomics a joint conference with ULAERGO 2012 Congress of the Latin-American Union of Ergonomics, ABERGO 2012 Congress of the Brazilian Ergonomics Association Recife | Pernambuco State BRAZIL 2012

Recife, February 16th, 2006

Att. Dr Pierre Falzon
President of IEA – International Ergonomics Association

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Dear Dr Pierre Falzon,

It is with great satisfaction that, on behalf of the ABERGO the Brazilian Ergonomics Association, I propose Brazil to host the IEA 2012 18th Triennial Congress on Ergonomics, and moreover, that IEA 2012 be a joint conference with the ULAERGO Latin-American Union of Ergonomics and the Congress of the Brazilian Ergonomics Association. It is important to note that, if this proposal is accepted, it will be the first time that an IEA Triennial Congress is held in a Latin American country

Introducing the proponent: the Brazilian Ergonomics Association

The ABERGO Brazilian Ergonomics Association (www.abergo.org.br) was founded on 31 August 1983 with the aim of enriching and perfecting both studies and professionals in Ergonomics. It has currently about 500 members from all regions across the country, from diverse educational backgrounds: Business Administration, Architecture, Social Service, Biology, Industrial Design, Nursing Studies, various Engineering domains, Physiotherapy, Medicine, Psychology, Occupational Therapy etc. ABERGO has been affiliated with IEA International Ergonomics Association since 1991.

ABERGO has currently eight Technical Groups in the various domains of Ergonomics such as: Teaching and Graduation in Ergonomics; Product Normalization and Certification; Musculoskeletal Lesion Prevention/ Rehabilitation; Ergonomics Certification; Accessibility and Universal Design; Ergodesign and Product Usability; Information and Human-Computer Interaction; Occupational Biomechanics and Workplace Physiology; and Ergonomics of Built Environment.

ABERGO also has a Scientific Council, made up of twenty renowned senior-researchers, which is the assistant agency to the Executive Committee on the formulation and implementation of policies for education, accreditation and certification in Ergonomics.

The Brazilian Congress of Ergonomics has been gaining increasing prominence at national level since its inception. The 13th edition of this congress will be held this year from 29 October- 02 November in the city of Curitiba, capital of the state of Paraná.

We are hoping to bring together around 800 participants. This is probably the second largest congress of Ergonomics in the world, organized by an IEA federated society, coming behind only by the Human Factors and Ergonomics Society. Many worldwide recognized experts in Ergonomics have attended the congresses organized by ABERGO, such as: Hal Hendrick, Thomas Water and Tonya L. Smith-Jackson (United States); John Wilson, Magdalen Galer and Robert Feeney (United Kingdom); David Caple (Australia); Francisco dos

Santos Rebelo and Anabela Simões (Portugal); Inge Svedung (Sweden); Joan Stevenson and Shrawan Kumar (Canada); José Antonio Juncà Ubierna (Spain); Pat Scott (South Africa); David Caple (Australia); Tahar Hakim Benchekroun (France); Philippe Mairiaux (Belgium). Confirmed guests to the ABERGO 2006 are Waldemar Karwowsky and Pierre Falzon.

In 2002, ABERGO created the Certification System of Brazilian Ergonomists, which was the first experiment in certification of ergonomists in Latin America. In September 2004, the first Brazilian ergonomists were awarded the certificate. There are currently 83 certified ergonomists in Brazil. The certification of groups and companies and the accreditation of specialization courses in Ergonomics are scheduled to take place shortly.

Ergonomics in Brazil has had a continuous development over the past few years. The Brazilian agency for Science and Technology, CNPq (Conselho Nacional de Desenvolvimento Científico e Tecnológico), is responsible for financing scientific research in the country. CNPq has a database of all the research teams in the Brazilian universities and institutes, and in the beginning of 2006 it registered an increase in the groups working in Ergonomics, from 46 in 1995 up to 97. This indicates a significant increase of Ergonomics in Brazil. Brazil currently occupies a hegemonic position in Latin- America ergonomics, a renowned place compared to other Portuguese and Spanish speaking countries. An IEA Triennial congress in Brazil will certainly help consolidate its position.

Introducing the joint conference proponent: the Latin American Union of Ergonomics

The Latin American Union of Ergonomics (<http://ulaergo.ergonomia.cl/>) was founded in September, 3rd, 2002, in Santiago, Chile.

Established as a network of IEA, the ULAERGO has become a leader in scientific development, cooperation, dissemination, and implementation of Ergonomics in the Central and South American continent. Today, ULAERGO is comprised of five federated Latin American societies: Ergonomics Association of Argentina ADEA, Brazilian Ergonomics Association ABERGO, Chilean Ergonomics Society SOCHERGO, Colombian Ergonomics Society SCE and Mexican Society of Ergonomics SEMAC.

The ULAERGO has organised its first congress in Santiago, from 02-04 November 2004. The next ULAERGO congress is scheduled to be held in Cartagena, Colombia, in 2007.

In the future, ULAERGO may become a catalyst for change in Latin American ergonomics, assisting in the formulation of common policies among the country members, which in turn can trigger development and cater to diversity among peoples. Through ULAERGO and the cooperative work of the various Ergonomics associations the successful experiences may be replicated and good practice disseminated across the continent.

A joint conference with the Triennial IEA Congress will certainly contribute to the growing and advance of Ergonomics in Latin America.

Introducing the proposed host city: Recife

Recife, the capital of the state of Pernambuco, located in the Northeast of Brazil, in a tropical area, is the city that has been chosen to host the event due to numerous factors. The first of these is the city's events infrastructure, with one of the best Convention Centers in the country, an accessible hotel network with varying price ranges, easy access to all parts of the country, low cost of living, competent services providers with market experience as well as the support of the Federal and State Governments and the local Municipal Authorities. The Pernambuco Convention Center, the proposed congress venue, makes it possible that all activities can be held in one building, under one roof.

Recife has a wide range of natural, cultural and historical attractions to suit all tastes, and in addition, it is considered the second gastronomic centre of the nation.

Recife counts on excellent air travel infrastructure with regular domestic and international flights and charters which make access very easy. Flight time from Lisbon to Recife is seven hours, and there are regular daily flights to Portugal and France.

Another advantage of holding the event in Brazil is the great ease of access of the European community to the American continent, especially with the high value of the Euro in relation to the Real (Brazil), Peso (Argentina), Nuevo Sole (Peru) and other Latin American currencies.

I hereby propose the IEA 2012 18th World Congress on Ergonomics for the nine items below:

[I] Size of the proposal Society: ABERGO has currently about three hundred paying members, which can be considered a medium-sized Ergonomics society

[II] Degree of Risk: ABERGO has organized thirteen Brazilian congresses with an average of 500 participants each. The congresses have usually about eight international guest speakers and involve an international attendance from many countries of Latin America. It demonstrates the experience in conducting conferences

attended by a large number of people.

[III] Location of Congress: There has never been an IEA Triennial congress in any Latin American country until today. A congress in Brazil will strengthen the development of Ergonomics in this country and reflect the growth of Ergonomics in Latin America. Recife, the proposed host city, is an excellent geographical location with a number of direct flights from other cities from Brazil and Europe.

[IV] Growth of Congresses: The growing of ABERGO as a society can be observed with the increasing number of its membership and the role the society has performed in the Brazilian academic and professional scenario. Considering Brazil is a very attractive country in terms of potential for tourism, we believe an IEA congress will attract a large number of foreign visitors, mainly from Latin American countries, and therefore, a potential for the increasing size of triennial congresses. ABERGO is certainly able to successfully cope with such growth.

[V] Participation: Brazil is worldwide regarded as one of the most democratic country in terms of racial, political and religious tolerance. As a result, it has a significant number of immigrants, particularly from some countries of Europe and Asia, which in turn, makes for a very mixed population. All religions can be found in Brazil, they coexist without any kind of conflict or disagreement. We are a good example to the world in terms of tolerance and accepting differences. The biggest gay pride parade, gathering more than 1.8 million people, took place last June in the city of São Paulo. In Brazil there are no restrictions on the attendance of delegates, members, participants or visitors by reason of national or racial origin, political or religious beliefs, gender or age.

[VI] Advantages to IEA: Given that there has never been an IEA Triennial Congress in Latin America, this would be an excellent opportunity for IEA to carry out policies and strategies for the dissemination and development of ergonomics in the Central and South America continent.

[VII] Allocation of Gain: ABERGO is willing to negotiate that a portion of excess profits is used to establish special IEA funds.

[VIII] Assistance to Participants: Considering Brazil is a country with very low cost of living, it will be easy to attract delegates from a number of developing countries, in particular from Central, South America and Africa. The costs of the congress infrastructure in Brazil are cheaper than Europe and North America countries, and this will certainly reflect in the congress fees.

[IX] Special Events and Tours: Recife, and the neighbour city Olinda, are considered one of the best tourist destinations in Brazil. They are located in a rich coastline landscape of paradisiacal beaches with warm water, natural pools formed by reefs, besides islands, sandbanks, bays, coves, mangroves, coconut plantations, and many other natural attractions. Both cities have a strong historical and cultural heritage obtained from Portuguese and Dutch colonization. Recife has a strategic geographical location which permits access to many parts of Brazil, including Rio de Janeiro, São Paulo, Amazonia, Iguazu Falls and Pantanal. Olinda, the neighbour city has received in January 2006 the title of Cultural Capital of Brazil. Special events and/or technical tours of interest to delegates and participants can be arranged by the Organising Committee.

All in all it will be an enormous pleasure for the Brazilian ergonomists to host the IEA 2012 18th Triennial Congress on Ergonomics and the ULAERGO Latin-American Union of Ergonomics and the Brazilian Ergonomics Association joint conferences. A formal Bidding Book will be submitted before 01 May 2006.

Yours sincerely,

Prof. Marcelo Marcio Soares, Ph.D.
President of ABERGO The Brazilian Ergonomics Association

Support letters list

Authorities:

Ministry of Science and Technology
Governor of Pernambuco State
Mayor of Recife [In Portuguese]
Mayor of Recife [In English]
President of the Brazilian Tourist Board - EMBRATUR

Recife and Convention Bureau
VARIG - Brazilian Airway Company

Ergonomics Societies:

ULAERGO - Latin American Union of Ergonomics
Argentinian Association of Ergonomics

Asturian Ergonomics Society
Chilean Society of Ergonomics
Colombian Society of Ergonomics
Mexican Ergonomics Society
Spanish Ergonomics Society
Peruvian Ergonomics Association
Peruvian Ergonomics Society
Portuguese Ergonomics Society

Universities:

Federal University of Pernambuco
State University of Pernambuco
Federal University of Juiz de Fora
Federal University of Paraiba
Federal University of Sao Carlos
Federal University of Rio Grande do Sul
Sao Paulo University

Note: copies of these letters were included in the bidding book sent to IEA Secretariat.

8. Location of 2007' IEA Council

The minimal requirements are as follows. A meeting room should be provided for a period of three days for the Executive Committee meeting (one day) and for the Council meeting (2 days). The meeting room for the Council meeting must accommodate 50 persons seated around a conference table, plus additional seating for invited observers. A sound system should be available, as well as a video projector. Refreshments (coffee and rolls) are welcome during morning and afternoon breaks. Secretarial support (photo-copying, preparation of last minute documents, etc.) is also welcome.

9. Election of Officers

9.1. Extract of IEA Basic Documents

Extract of IEA RULES

TITLE 5 - EXECUTIVE OFFICERS

Article 1. Definition and responsibilities

The Officers of the Association are the President, the Secretary General and the Treasurer.

The Officers are responsible for the management of the IEA affairs, in accordance with the IEA mission and goals.

Article 2. Elections, eligibility and duration of tenure

Officers are elected by Council from members of Federated Societies. To be eligible for office, candidates must be members of a Federated Society and have either served previously on the Council or are the current representatives. Candidates should have demonstrated service to IEA and continuity of attendance at Council meetings. In addition, candidates for President shall have served a term on the Executive Committee. Elections are conducted at the Council meeting held in conjunction with IEA Triennial Congresses. The President is responsible for the election process as described in the IEA Operating Procedures.

The terms of office for Officers are three years, in phase with the Triennial Congress. The maximum service is one term for the President and two terms for the Secretary General and Treasurer.

Transition of leadership takes place at the closing ceremony of the Congress during which the Officers are elected. The term of the newly elected Officers begin after the closing of the Congress.

Article 3. Responsibilities of the officers

The main responsibilities of the Officers are as follows:

President

- * Represents the IEA
- * Chairs Council and Executive Committee
- * Oversees the work of Committees
- * Forms new Committees and restructures existing ones
- * Appoints Chairs to Committees.

Secretary General

- * Provides day to day administration of the IEA, including communication and documentation responsibilities.

Treasurer

- * Responsible for accounting of IEA Funds
- * Conducts budget analysis and projections
- * Provides financial management
- * Establishes new sources of revenue.

Extract of IEA OPERATING BODIES

TITLE 3 - OFFICERS

Article 1. Definition

The Officers of the Association are:

- President
- Secretary General
- Treasurer

Article 2. Election of Officers

At least nine months prior to the Triennial Congress, the President will invite all Federated societies to make formal (written) nominations (see #3) for the IEA Executive Officers to be received 60 days prior to Council meeting. This invitation will be sent to all Council members and the secretaries of the Federated societies. The Federated Societies nominating candidates must first determine their ability, availability and willingness to serve and attend the IEA meetings as necessary.

The prescribed nomination form, consisting of two parts (A: Nomination Form; B: Candidate Statement) must be used for making a nomination and submitted to the President at least 60 days prior to Council meeting.

Six weeks prior to the Triennial Congress, the President shall inform Council members and Secretaries of Federated Societies of all nominations received.

Further nominations from the representatives of the Federated Societies may be made prior to the elections for the specific office, upon submission of the completed 'Nomination Form for IEA Executive Office'.

Before voting for the particular office, all candidates for that office will be excused. Each candidate will then be called in a random order to make a presentation regarding his/her goals and suitability for the office (maximum time of 10 minutes will be allowed), and to answer questions from the Council. After presentation the candidate will be excused, and the next candidate will be called upon.

Voting shall be by secret ballot. Candidates for a given office must not be present during the vote for that office. Voting Council members may vote only for one eligible candidate. Election is decided by qualified majority (meaning: more than 50%). In the event that a qualified majority is not achieved, the candidate with the least votes shall be removed from the slate, and voting shall continue.

Officers shall be elected in the order provided below, unless Council votes to alter this order prior to the elections:

1. President
2. Secretary-General
3. Treasurer

After the election of an officer, the President may call for a short break in order to provide an opportunity for further nominations.

The IEA President is responsible for the entire election process, and must assure that the election is conducted according to these procedures. The President must control the number of eligible votes. The President can be supported in this task by ex-officio non-voting members.

Article 3. Duties of the President

According to the Rules, the President will represent the IEA, oversee the work of the Committees, form or restructure Committees and appoint Chairs to the Committees. Representation of the IEA by the President runs on an ad hoc basis. The President may delegate the representation to the other Officers or he/she may accredit member(s) of the Federated Societies to take care of the task. (In 1986 the Council adopted a recommendation that the Federated Society which is most conveniently located, with respect to any occasion, should help in organizing of the representation.) In any case, the authorization should be undersigned by the President.

The main part of the work of the IEA takes place in committees. Thus, overseeing their activities is an important part of the duties of the President. Because the distance between the office of the President and the committees may be important, the President may authorize other members of the Executive Committee to oversee some of the committees.

The forming of new committees or restructuring of the existing ones have two preconditions :

- a) Advice from the Executive Committee, and
- b) Consent from the Council.

Appointment of Committee Chairs is a duty of the President. Consequently, the President also has authority to dismiss or replace Committee Chairs.

The President has the responsibility to develop, set the policy and in general to govern the functions of the Association.

The term of office of the President is three years (in phase with the Triennial Congress). Maximum service is one term.

Article 4. Duties of the Secretary General

The Secretary General has the duty to provide daytoday administration of the Association. The tasks include:

- Keeping close connection to the President to receive advice and to formulate the policy of the Association in routine questions.
- Looking after the correspondence and requests and routing of the correspondence to the appropriate officers for response or action.
- Preparation of the Council meetings. The fixed time periods are as follows:
 - a) Information of the time and place of the Council meeting shall be sent at the latest three months prior to the meeting. This information should contain among others the updated list of the members of the Council.
 - b) Proposed agenda and eventual documentation shall be sent to the Council members at the latest six weeks prior to the meeting.
 - c) Information on the agenda should be sent in due time also to the Secretaries of the Federated Societies as well as societies having other types of liaison to the IEA than federation.
- Preparation of the General Assembly Meeting to be held in conjunction with the Triennial Congress. Preparation is in collaboration with the chairperson of the Congress.

Article 5. Duties of the Treasurer

The Treasurer is responsible for controlling and accounting the funds and for provision of the financial management. He/she makes analysis and projections of the budget and establishes new sources of revenue.

The Treasurer prepares yearly for the Council a summary of the financial condition of the Association and presents the balancing of the books as well as the projection (budget) for the coming period.

The Treasurer has the duty of invoicing the member societies, receiving their subscription dues, sending a final warning letter if subscription dues have remained unpaid for one year, and reporting this fact to Council if payment is still not received with the expectation of automatic termination of membership.

9.2. Nominations received on 16/06/2006

9.2.1. Nominations for President

a. David Caple

From: "Max Hely" <max.hely@safetyscience.com>

To: <falzon@cnam.fr>

Subject: IEA Nomination - President

Date: Tue, 7 Mar 2006 22:18:36 +1100

Dear Pierre,

Please find attached the HFESA's nomination for Professor David Caple to serve as IEA President.

David has our full support for this nomination and we are proud to be able to submit to you such a capable, committed and energetic candidate for this most important office.

Very best regards,

Max Hely

Federal President

Human Factors and Ergonomics Society of Australia Inc.

PO Box 7848

Baulkham Hills BC NSW 2153

Nomination Form for IEA Executive Office

Name of Federated Society proposing a candidate:

Human Factors & Ergonomics Society of Australia Inc.

Name and address (including telephone and email) of candidate:

Professor David C Caple
 Director
 David Caple & Associates Pty Ltd
 PO Box 2135
 Ivanhoe East
 Victoria 3079
 Australia
 Telephone: 61 3 9499 9011
 Email: davidcaple@pacific.net.au

Office for which candidacy is made (President, Secretary General, Treasurer):

President

IEA Executive Office Candidate's Statement

Affiliation to an IEA Federated Society:

Member of the HFESA

Office for which candidacy is made (President, Secretary General, Treasurer)

President

Name and address (including telephone and email) of candidate:

Professor David C Caple
 Director
 David Caple & Associates Pty Ltd
 PO Box 2135
 Ivanhoe East
 Victoria 3079
 Australia
 Telephone: 61 3 9499 9011
 Email: davidcaple@pacific.net.au

Candidate's Statement:

As Chair of the IEA Standing Committee on International Development from 2003-2006 I have enjoyed the challenges and opportunities to expand the IEA profile at an international level. This has involved a revitalized participation with the World Health Organisation and the International Labour Organisation. This role has provided me an opportunity to work with a large group of IEA delegates to work together to achieve many goals set for our committee. As IEA President, I see the role of communication with our delegates and encouraging their participation in IEA programs as an important role. I see that the role of President requires a strong plan that reflects the needs of Affiliated Societies to meet their goals and also to develop our links outside the IEA to promote ergonomics.

My involvement with the IEA spans more than 25 years with my first IEA Council meeting in Oslo, Norway in 1980. I have attended IEA Council meetings with my fellow Australian delegates when possible with the official delegate role for the HFESA over the last 6 years.

From a technical perspective, I have presented papers to IEA and HFESA conferences for the last 20 years. My main area of research work has related to musculo skeletal disorders and interventions with small and medium sized enterprises. I have consulted in this area in the USA, Europe, Hong Kong and Australia.

My employment has been as the Director of a private consulting company I founded in 1984. We have a team of ergonomics practitioner who conduct a wide range of services to Government, Industries and unions to address workplace issues. These range from macroergonomics projects involving entire industry sectors such as automotive or food manufacturing to research and develop programs that address emerging issues. We also undertake extensive programs in training managers and workers, as well as a range of microergonomic services

such as individual workplace assessments.

Over the last 5 years, I have been invited to participate as an independent member of various organisations overseeing Government policy and legislation in Australia. These appointments are made with the support of the Government, employer associations and unions. These are volunteer roles that enable a direct contribution to Government policy in a wide range of OHS and ergonomics areas.

In 1976, I joined the Ergonomics Society of Australia after returning from England where I completed the M.Sc in ergonomics at the University of Loughborough. I have been an active member and supporter of the HFESA holding many positions including President.

My consulting work not only involves regular travelling across Australia but also to other countries around the world. My participation with the IEA has complemented my interest and capacity to work at an international level.

I would look forward to again being part of the Executive Committee as an elected member. The role of IEA President provides opportunities to address the ongoing challenges of communication and engagement with Federated Societies. I would propose to work with the Executive members as a team in engaging with each of our Federated Societies as well as their Presidents and IEA delegates. The opportunity to engage with them and to support them in addressing their challenges and providing mentoring opportunities would be a great initiative.

An initial step as the IEA President would be to review the IEA Strategy Plan and to identify key projects for each of the three years of this Executive. A program of key projects with measurable performance indicators would be established. The members of the Executive Committee would be consulted about these projects and be accountable for delivering on the project outcomes. The IEA website would be upgraded as a primary medium for communication for IEA members and the general public. It would be utilized to provide all members of the IEA a scheduled update report on each of the key projects and their achievements. This would ensure a transparent and dynamic leadership for the IEA.

I would propose that linkages outside the IEA would be further developed. This would involve our established relationships with the WHO, ILO and other international societies such as ICOH and IOHA. It would also build relationships with other non health related business groups to develop joint initiatives to promote ergonomics.

My work commitments have enabled me to provide active and sustained contribution to the IEA Executive Committee for the last 3 years. These arrangements will be maintained if I am elected to the IEA President role.

Thank you for your consideration of this nomination and I would look forward to serving the IEA family for another 3 years if duly elected.

Yours sincerely,

David C Caple

b. Kenneth R. Laughery

Nomination Form for IEA Executive Office

Name of Federated Society proposing a candidate:

Human Factors and Ergonomics Society
Michelle Robertson, Chair of HFES/IEA delegate committee

Name and address (including telephone and email) of candidate:

Kenneth R. Laughery
Psychology Dept., Rice Univ.
6100 Main Street
Houston, TX 77005 USA
Phone: +1-713-348-4862
Fax: +1-713-348-5221
Email: laughery@rice.edu

Office for which candidacy is made (President, Secretary General, Treasurer):

President

IEA Executive Office Candidate's Statement

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Affiliation to an IEA Federated Society:

Human Factors and Ergonomics Society

Office for which candidacy is made (President, Secretary General, Treasurer)

President

Name and address (including telephone and email) of candidate:

Kenneth R. Laughery
Psychology Dept., Rice Univ.
6100 Main Street
Houston, TX 77005 USA
Phone: +1-713-348-4862
Fax: +1-713-348-5221
Email: laughery@rice.edu

Candidate's Statement:

As we reach the end of IEA's first half century, the Congress in Maastricht will serve as a forum for reviewing and celebrating progress. In recent years IEA has matured into an international body representing the ergonomics discipline. Our 42 federated societies exist on all continents, we interface with other international bodies such as WHO and ILO, and a variety of activities and programs have been developed or are being developed to promote our ergonomics mission. As we begin the second half century, it is important that we stay focused on two important IEA goals: to serve our member societies and to represent the discipline in the international community. One area of activity that should be given continued and increased emphasis during the tenure of the next IEA President is communications. Email and the internet are examples of tools that enable us to communicate with each other and with individuals and organizations external to IEA. We must make effective use of these and other means to better understand and serve the interests and needs of member societies and to represent the discipline externally. Following are some of my ideas and plans for implementing a more effective communications program:

Establish more regular email communications between the IEA leadership (officers and standing committee chairs) and federated societies (including Council representatives and officers).

As President, attend and participate in meetings of our federated societies.

Arrange for IEA representation at conferences of related disciplines and promote representation of related disci-

plines at the IEA Congress.

Appoint a webmaster to further develop the IEA website as a means of communicating with each other and for presenting IEA to others.

The goal of the above activities is to enhance two-way communications; for IEA to better communicate its goals and activities, and also for IEA to better understand the goals, needs and activities of our member societies as well as other related organizations. Of course, time and financial resources will place some constraints on how much can be accomplished on some of the above activities, but as President I will make an effort to promote them to the extent possible.

A second activity, and one that is related to the above communications efforts, concerns an opportunity and a challenge to IEA. It appears that a substantial amount of ergonomics is being practiced in our world by people who are not affiliated with our federated societies. In many instances they are affiliated with other professional/technical organizations such as engineering, psychology or computer societies. Indeed, many such societies have subgroups that focus on ergonomics. To the extent that these efforts are extending the practice of our discipline in ways consistent with the IEA mission, we can be pleased. But given that IEA represents the ergonomics discipline at the international level, it seems desirable to explore feasible and appropriate relationships between IEA and such ergonomic practitioners and organizational entities. A few years ago an IEA special committee on membership explored alternative or additional membership categories, an activity that in part was motivated by the desire to establish relationships and communications with people and organizations currently outside our federated society structure. I would like to explore the potential relationships between IEA and ergonomic activities that are currently "external" to IEA, but from a broader perspective than just alternative or additional IEA membership categories. Such an effort would, of course, involve close coordination with our existing federated societies. The goal would not be to create competition, but rather to create more effective relationships and communications between people and organizations practicing ergonomics. This, I think, is a meaningful role for IEA.

In addition to giving additional emphasis or priority to the above two activities, as President I would continue to support current IEA activities including:

address IEA's financial circumstances, including exploring additional sources of revenue and developing a more equitable dues structure;

promote ergonomics in developing countries;

support and promote our relationships with other international organizations such as WHO, ILO, IOHA and others.

development of ergonomic certification and accreditation programs for federated societies that have an interest in developing such programs;

development of the EQUID Program;

continue development and evolution of IEA Technical committees, including new committees where appropriate;

promote and support ergonomic conferences.

The role of the IEA President, of course, is to provide leadership; but the President is also a member of the leadership team that includes the other officers (Secretary General and Treasurer), the chairs of the standing committees, and the Council. To a considerable extent, the success of IEA depends on the ability of the leadership team to work together. The President plays a key role in promoting this teamwork.

Regarding my own background, I have been a university professor throughout my career. I am currently an Emeritus Professor at Rice University, having retired in 2002. I have degrees in both engineering and psychology and have been chair of the Industrial Engineering Department at the University of Buffalo and chair of the Psychology Departments at the University of Houston and Rice University. I held an endowed professorship at Rice. Human factors/ergonomics has been the focus of my interests and work.

What would I bring to the role of President in the way of IEA experience and credentials? First, of course, is a commitment to IEA, its mission and its goals. Second is a willingness to make the effort defined by the above priorities and activities. Third is some relevant experience. I have held officer positions in the Human Factors and Ergonomics Society, including Secretary- Treasurer and President. I have been directly involved in IEA activities for the past 12 years. I was an HFES representative to the IEA Council for six years; I chaired the IEA STP standing committee for six years (three years overlapping as HFES representative), and I have been IEA Treasurer the past three years. I have a good appreciation of recent IEA issues and opportunities. I have an appreciation of ergonomics in various parts of our world as well as the variety of challenges faced in various areas. Also, I get along with and work well with other people. If elected, I would look forward to the challenge of helping to lead IEA at the beginning of its second half century.

9.2.2. Nominations for Secretary General

a. Pascale Carayon

*Société d'Ergonomie
de Langue Française
(French Language
Ergonomics Society)*

Dr Michel Neboit

*to Pr Pierre Falzon, President of IEA
05- 21- 2006*

*Mr President,
Dear Pierre*

I am very happy to propose, on behalf of the SELF Council, our colleague and member Pascale Carayon, for the office of Secretary General of IEA.

We are sure that her exactness, her deep knowledge of IEA affairs, and her involvement in ergonomics international development will be excellent assets for our society.

With my best regards

*The President
Dr Michel Neboit*

Nomination Form for IEA Executive Office

Name of Federated Society proposing a candidate:

Human Factors and Ergonomics Society
Michelle Robertson, Chair of HFES/IEA delegate committee

Name and address (including telephone and email) of candidate:

Pascale Carayon, Ph.D.
Procter & Gamble Bascom Professor in Total Quality
Department of Industrial and Systems Engineering
Director of the Center for Quality and Productivity Improvement
University of Wisconsin-Madison
610 Walnut Street 575 WARF
Madison, WI 53726 – USA
Tel: +1-608-265-0503
Fax: +1-608-263-1425
Email: carayon@engr.wisc.edu

Office for which candidacy is made (President, Secretary General, Treasurer):

Secretary General

Nomination Form for IEA Executive Office

Name of Federated Society proposing a candidate:

SELF – French Language Ergonomics Society

Name and address (including telephone and email) of candidate:

Pascale Carayon, Ph.D.
Procter & Gamble Bascom Professor in Total Quality
Department of Industrial and Systems Engineering
Director of the Center for Quality and Productivity Improvement
University of Wisconsin-Madison
610 Walnut Street 575 WARF
Madison, WI 53726 – USA
Tel: +1-608-265-0503
Fax: +1-608-263-1425
Email: carayon@engr.wisc.edu

Office for which candidacy is made (President, Secretary General, Treasurer):

Secretary General

IEA Executive Office Candidate's Statement

Affiliation to an IEA Federated Society:

Human Factors and Ergonomics Society (HFES)
Société d'Ergonomie de Langue Française (SELF)

[Pascale Carayon is being nominated by both HFES and SELF; this double nomination reflects Pascale's position as a professor at an American university and her French background and education.]

Office for which candidacy is made (President, Secretary General, Treasurer)

Secretary-General

Name and address (including telephone and email) of candidate:

Pascale Carayon, Ph.D.
Procter & Gamble Bascom Professor in Total Quality
Department of Industrial and Systems Engineering
Director of the Center for Quality and Productivity Improvement
University of Wisconsin-Madison

610 Walnut Street 575 WARF
 Madison, WI 53726 – USA
 Tel: +1-608-265-0503
 Fax: +1-608-263-1425
 Email: carayon@engr.wisc.edu

Candidate's Statement:

IEA is celebrating its 50th anniversary at the 2006 congress in Maastricht, The Netherlands. We should be looking forward to another 50 years of growth and increasing impact of the HFE discipline. In beginning the next 50-year period, it is important that the IEA officers and the executive committee provide leadership, energy and vision for the international HFE community. We need to continue contributing to the improvement of well-being, health and safety of workers across the world and to participate in the social, economic, business and environmental developments critical to the 'health' of societies in both developed and developing countries.

The position of secretary-general (SG) is like the 'COO' (Chief Operating Officer) of the organization; it should provide the infrastructure and support to IEA activities and programs under the leadership of the IEA president. This position can provide the essential communication between the IEA executive committee and the ergonomics societies. Frequent communication between the SG and the ergonomics societies is critical in order to help ergonomics societies better understand the work of the IEA executive committee and to foster increasing participation of ergonomics societies in IEA activities and programs. In addition, the SG should lead and organize the communication activities of the organization, such as the IEA website and the newsletter. The SG should also work very closely with the president and the treasurer in defining the vision and the strategic directions of the organization. The SG should work with the president, the treasurer and the rest of the executive committee to ensure that the vision and strategic directions for IEA get translated into specific actions by the members of the executive committee. The SG should also provide consistent, effective support for the various activities of the IEA, the IEA executive committee and the IEA Council.

Given my experience in leading a multidisciplinary research center and my numerous international activities, including my recent participation in the IEA executive committee in charge of the EQUID program (2003-2006) and the STP Committee (2005-2006), I believe that I have the experience and the skills for the position of SG of IEA. As the chair of the EQUID committee, I have helped the development of a very ambitious long-term endeavor that will contribute to greater recognition of the ergonomics discipline and to strengthening of the ergonomics profession. In my position as chair of the STP committee, I have fostered and encouraged increased activity by the technical committees, supported the creation of several new technical committees, proposed changes to the structure of IEA conferences, and contributed to the creation of several IEA-sponsored conferences. In my position as a female professor of engineering at the University of Wisconsin-Madison, I have been very much involved in promoting the diversity of our students, staff and faculty. I am therefore very much committed to increasing the representation and contribution of diverse groups in IEA. I also have the enthusiasm and energy to help move IEA forward. I am very eager to working with the IEA executive committee, the IEA Council and all of the ergonomics societies across the world in leading the IEA while we celebrate its 50-year anniversary and look forward to the future.

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b. Shrawan Kumar

Date: Fri, 24 Feb 2006 21:32:06 -0500

To: "Pierre Falzon" <falzon@cnam.fr>

From: "Carscadden, Nat&Ron" <vdubluuv@personainternet.com>

Subject: IEA Executive Officers

Cc: "Kumar Shrawan" <shrawan.kumar@ualberta.ca>, Margo@cnam.fr,
 Fraser@cnam.fr, Linda@cnam.fr, Sagmeister@cnam.fr

M. Pierre Falzon,

Attached are the Candidate's Statement and Nomination Form for Dr. Shrawan Kumar, University of Alberta in Edmonton Alberta Canada. The Executive Council of the Association of Canadian Ergonomists (ACE) unanimously support and nominate Dr. Kumar for the position of Secretary General.

Regards,

Natalie Carscadden
 ACE President

Nomination Form for IEA Executive Office

Name of Federated Society proposing a candidate:

Association of Canadian Ergonomists/Association Canadienne d'Ergonomie
Suite 1003, 105-150 Crowfoot Cr. N.W.
Calgary, AB T3G 3T2
Canada

Name and address (including telephone and email) of candidate:

Shrawan Kumar
Department of Physical Therapy
University of Alberta
Edmonton, AB T6G 2G4
Canada
Tel: 1-780-492-5979
Email: shrawan.kumar@ualberta.ca

Office for which candidacy is made (President, Secretary General, Treasurer):

Secretary General

IEA Executive Office Candidate's Statement

Affiliation to an IEA Federated Society:

ACE (Association of Canadian Ergonomists/Association Canadienne d'Ergonomie)

Office for which candidacy is made (President, Secretary General, Treasurer)

Secretary-General

Name and address (including telephone and email) of candidate:

Shrawan Kumar
Department of Physical Therapy
University of Alberta
Edmonton, AB T6G 2G4
Canada
Tel: 1-780-492-5979
Email: shrawan.kumar@ualberta.ca

Candidate's Statement

Whereas the duties of the Secretary General are clearly described in Article 14 of Title 3 – Officers of IEA Operating Bodies - for day-to-day maintenance of the Association, preparing for meetings and communicating with the Federated Societies; I wish to bring a greater vigor to the office by generating ideas for discussion within the committees and streamline processes. Additionally, I want to make IEA more responsive in a timely manner. I have been an eternal advocate for ergonomics, which I will continue to be within the limitations and sphere of influence of the office. I will work cooperatively with other officers and the Committee Chairs to serve the cause and function of the IEA. Within the mandate of this office, I will be very effortful to raise the profile and visibility of IEA. In a more substantive manner, I will seek cooperative ways and means by which the IEA could make a meaningful impact on the professional communities and society at large. In a word, I will be active. I recognize that the ideas expressed above indicate the significant commitment. I am certain, I will be able to meet my commitments as I am a Professor Emeritus with a bundle of energy and time coupled with determination to do positive things.

9.2.3. Nomination of Treasurer

a. Marcelo Marcio Soares

Nomination Form for IEA Executive Office

Name of Federated Society proposing a candidate:

ABERGO – Brazilian Ergonomics Association

Name and address (including telephone and email) of candidate:

Marcelo Márcio Soares, Ph.D., EC
 ABERGO – Brazilian Ergonomics Association
 Federal University of Pernambuco | CAC
 Department of Design
 Cidade Universitária
 50.670-420 - Recife, PE - Brazil
 Phone: +81 2126 8909
 Email: marcelo2@nlink.com.br

Office for which candidacy is made (President, Secretary General, Treasurer):

Treasurer

IEA Executive Office Candidate's Statement

Affiliation to an IEA Federated Society:

ABERGO – Brazilian Ergonomics Association

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Office for which candidacy is made (President, Secretary General, Treasurer)

Treasurer

Name and address (including telephone and email) of candidate:

Marcelo Márcio Soares, Ph.D., EC
 ABERGO – Brazilian Ergonomics Association
 Federal University of Pernambuco | CAC
 Department of Design
 Cidade Universitária
 50.670-420 - Recife, PE - Brazil
 Phone: +81 2126 8909
 Email: marcelo2@nlink.com.br

Candidate's Statement

My name is Marcelo Márcio Soares. I am the current President of ABERGO – the Brazilian Association of Ergonomics and serving in my second mandate in this position. [2005-2007].

Background

I would like to state my academic background in brief. Since graduating in Industrial Design at the Federal University of Pernambuco - Brazil, in 1986, I have targeted my activities on ergonomics. After graduating, I took a specialization course in Ergonomics at the Fundação Getúlio Vargas, in Rio de Janeiro. Thereafter, I obtained an M.Sc. Degree in Production Engineering (slanted towards ergonomics) at the Federal University of Rio de Janeiro. That was in 1990. Then, in 1998 I was awarded a Ph.D. in Ergonomics by Loughborough University, in the United Kingdom.

Currently, I am the Deputy Director of the Department of Design and vice-coordinator of the Master's course in Design at the Federal University of Pernambuco [UFPE] – Brazil. Besides teaching ergonomics on under-graduate, master's and doctoral courses at this university, I have also been a guest lecturer at other universities in various of the states of Brazil and also at the Technical University of Lisbon, Portugal.

Currently I am the coordinator of the Laboratory for Ergonomics and Usability of Products, Systems and Production of the Federal University of Pernambuco and, through this laboratory I have carried out various consultancy studies for companies in Brazil.

I have published three books on Ergonomics, as the author and co-author, and have had about one hundred articles published. I have also presented scientific papers in congresses and events in several countries. I have attended IEA Congresses presenting papers since 1991, in Paris. I received the Student Prize from the UK Ergonomics Society, arising from my being chosen from among post-graduate students in the British Community in 1997.

I have acted as a member of the board of the Liberty Mutual-IEA Prize during the period from 2004-2006. I also act as a member of the board of various congresses and scientific journals in Brazil and abroad.

Experience as executive of a federated society

As President of ABERGO, I was the Chair of the Brazilian Congresses on Ergonomics held in 2002 and 2004. I am currently organizing the 14th Brazilian Congress on Ergonomics, which will take place from 29 October to 2 November 2006, in the city of Curitiba, state of Paraná, in the south of Brazil. We are expecting about 800 participants at ABERGO 2006, which ranks this event as one of the largest congresses of ergonomics in the world.

I am also putting Brazil forward as a candidate to host IEA 2012 – the 18th Triennial Congress on Ergonomics. Should our candidature be approved by the Council, I shall act as Chair of the Congress.

I would also like draw attention to the fact that, as President of ABERGO, I was one of those responsible for conceiving and implementing the System for the Certification of Brazilian Ergonomists in 2004. This is the first certification process for ergonomists to have been implemented in Latin America. Currently there are 83 certificated ergonomists in Brazil.

I have taken part in the activities of ULAERGO – the Latin American Union for Ergonomics which has given me the opportunity to discuss actions with colleagues from the Latin American continent for the broadcast, greater knowledge of and application of ergonomics on our continent, taking into account the differences and needs of each country.

Goals

As a candidate for Treasurer, on the Executive Board of IEA, I intend to use my experience in ABERGO to collaborate with IEA not only in controlling and accounting for the funds and by providing financial management, but also in the mission of IEA including advancing the science of ergonomics and its practice.

Towards this, I believe that, as the first candidate to the Executive Board of IEA, to come from an emerging country, I might be able to contribute to the continuous achievement of IEA goals by drawing up plans and actions which assist:

- In developing more effective communication and collaboration with federated societies, particularly those of the so-called Third World.
- In advancing the science and practice of ergonomics at an international level.
- In enhancing the contribution of the discipline of ergonomics discipline to global society.

Finally, I would like to declare my willingness, if nominated, to devote the time necessary to carry out the duties of IEA treasurer.

10. Networks

10.1. Minutes of FEES Executive meeting 31st March 2006 between 9.15 and 16.45, at TNO, Hoofddorp, the Netherlands (1/2006)

Delegates:

Pieter Rookmaaker (chair)

Clas-Håkan Nygård (secretary)

Dirk Delaruelle (treasurer)

Dave O'Neill (Meeting Committee)

Lina Bonaparte (Communication and promotion Committee)

Kamiel Vanwortghem (EUTF)

Christophe Maes (EUTF)

Excused:

Dietmar Gude (Web-site Committee)

1. Minutes of the October executive meeting

The minutes were accepted without any changes.

2. Finances and financial plan for FEES

Treasurer Dirk Delaruelle reported the financial situation in detail and the conclusion was that FEES may become into financial problems shortly due to, the indeed positive matter, that the activities has increased remarkably, especially the work of the EUTF committee. Because FEES is depending on the societies duties we have to either get new members or decrease the costs. Delaruelle presented also an action plan to tackle the situation. Discussions of new memberships are ongoing. Sustaining membership can be an option but it has first to be prepared (Dirk and Lina) and approved by council.

In the discussion several things was mentioned to try to save money. Searching for lowest prices of flights and hotels could be done by special companies. Dirk will work out if this gives lower costs for meetings. Meetings should be scheduled as early as possible to be able to book flight tickets early to a lower price. Try to have meetings in connection to other occasions for example during IEA 2006 in Maastricht.

3. EUTF

Kamiel Vanwongerghem presented the main activities in the EUTF since the last meeting. See minutes from EUTF meeting in Hoofddorp 30.3.2006 for details. During the discussion in the Executive the following decisions for actions were taken:

- Dave O'Neill will prepare a questionnaire where we ask different EU organizations about their need for information about ergonomics. Dave will send Executive a draft in two weeks for comments, which should be back again in another two weeks.
- EUTF will meet several "EU-people" during the next weeks i.e. Representatives for the ESF (European Social Fund), DG 5 and DG 12.
- evaluator's experts in ergonomics should be launched. FEES need still more experts from the societies.
- EUTF plans for a seminar around the call for Framework Programme 7 (FP 7) for the national ergonomics societies at the end of this year. Dave and Christophe will explore this possibility. Kamiel will discuss this also when he meets officers from DG 12.
- contacts with the following organizations could be of importance: the Foundation in Dublin, EIT (European Institute for Technology), ENWHP (European network for work place health promotion), ENSHPO (European network for safety and health), ESF.
- Clas-Håkan Nygård presented a draft for a common research project to EU (FP 7). Executive supported this suggestion and Clas will make a preliminary draft by the end of May to be commented by the Executive during June.
- we will continue to explore the Internet about ergonomics related EU projects and activities.

4. Communication and promotion

Lina Bonaparte presented the main activities in the communication and promotion committee.

- FEES activities during IEA 2006 in Maastricht. FEES corners will be planned more in detail by Lina later on when more information about the programme and activities are available. Corners are planned to be set up in each of the three floors. FEES will invite to a Networking lunch on Tuesday 11th July from 12.15 to 13.30 in a separate room. Society presidents, council and executive will be invited to the lunch, which will be announced

in due time before.

- the Web-site calendar is almost ready for the web-site and should be soon announced to the societies. It was discussed who could announce in the calendar. Clear commercial announcements should be avoided. Lina and Dietmar will prepare a proposal to be discussed in council.
- the updating of FEES flyers was discussed and more comments of small changes should be sent to Lina at latest 15th May. The updated flyer should be printed to be ready for distribution at IEA 2006.
- a suggestion about a European Ergonomics month was discussed. Ideas about this should be sent to Lina, who will prepare a proposal for council.
- more members to the committee should be found.

5. Standards committee

The suggestion from Martin Schuette about the intention that FEES should try to get a formal liaison with CEN/TC122 "Ergonomics" was discussed. The Executive accepted this proposal and agreed that this gives FEES a good possibility to be involved in an important part of the standardization process. Pieter will ask Martin to take the chair for FEES Standardization committee.

6. Web-site committee

Web manager Dietmar Gude was excused from this meeting but it was once again stressed that we all should give more input to him and keeps up the communication to achieve an even better site.

7. Meeting Committee

Dave O'Neill reported about activities in IEA 2006 and how the committee supports EUTF. The FEES session about Ergonomics in EU-funded projects at the congress includes 6 oral presentations, which requires in all about 150 minutes in the programme. Dave has prepared a questionnaire together with the EUTF for EU organizations (see item 3). Dave tries to meet meeting committee members during IEA 2006.

Dirk reported about the FEES endorsed Ergonoma Tradeshow in Brussels. FEES leaflets were distributed in a stand. This year there was no research part of the Tradeshow. The Ergonoma Journal wanted to have an article about FEES. It was suggested that a reporter from the journal should be invited to interview Pieter Rookmaaker.

8. Activities during IEA 2006 in Maastricht

FEES corners (see item 3). No other stands will be planned for the congress.

FEES session (see item 7).

Meeting with the presidents of the societies (item 3).

Clas prepares a short report for IEA council about FEES activities.

9. FEES council meeting in Maastricht

Council meeting will be held on Friday 7th July between 9 and 15.30 at Hotel Vaeshartelt. A closed meeting is to be held with MP Véronique de Keyser between 16.00 and 17.30. A walking dinner with Véronique de Keyser is planned to be held from 19 hrs. together (if possible) with CREE delegates. Also FEES council and executive members will be invited. It was suggested that people from EU or with EU contacts should be invited to the dinner. Kamiel and Dave will make a draft proposal in two weeks for the afternoon closed session with de Keyser and for the walking dinner - also with de Keyser

- with invited guests. Suggestions for whom to invite for the dinner should be sent to Pieter.

The following voting items should be prepared for the council:

- elections of the officers. Pieter and Dirk are available as candidates for a second period, whereas Clas is not available for a second period. A reminder of the elections and the dead-line (7th May) of proposals for candidates will be sent to the society by the secretary.
- sustaining membership (Dirk and Lina prepares a proposal (see item 2)).
- the mandate for the executive to prepare a proposal for an European Ergonomics Month
- termination of the membership of a society who do not pay their duties (see IEA rules)
- possible new members

It was also discussed how to get the council meeting more dynamic and involve the members. A proposal of a work shop about the "Ergonomics Month" will be prepared by Lina. FEES committees are asked to send their annual reports at latest 15th may to the secretary. The date and place for the council meeting 2007 was discussed but no decisions were made yet.

10. Miscellaneous

- No proposal for a new ergonomics SCI-index has been received from GfA.
- Contacts with possible new member societies in FEES should be kept (Polish Society, SELF etc). Pieter will contact the Austrian society.
- Information to the societies about the proceeding of the EUTF meetings, nominations for officers and activities by FEES in IEA 2006 shall be sent by the secretariat in two weeks.

11. Next FEES Executive meeting 6th July in Maastricht

Next Executive meeting is scheduled to start around 14 o'clock at Hotel Vaeshartelt depending on the arrival time by the majority of the Executive members but an agenda etc. with a more precise schedule will be sent later. Pieter will contact Maria Niesen from CREE to discuss a possible common dinner on Thursday 6th or Friday 7th July.