

IAN-LISBON

**IEA TRIENNIAL REPORT
1997-2000**

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International Ergonomics Association

FOURTH DRAFT, v 4.0
April 1, 2000

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International Ergonomics Association

IEA TRIENNIAL REPORT 1997 -2000

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Published by the IEA Press

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The IEA Address

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.

The principal address of the IEA is that of the Secretary General in office at the time.

The 'poste restante' address of the Association is as follows:

REFERENCES

Message from the President

President of the International Ergonomics Association
Y. Ian Noy

It is my great pleasure to present this Triennial Report of the International Ergonomics Association for the period 1997-2000. This is the first triennial report to be widely disseminated. For this reason, in addition to highlighting the major accomplishments during the reporting period, we provide supplementary information concerning the IEA - its mandate, organization and main areas of activity. We hope that you will find this report informative and that it will stimulate your interest and perhaps your participation in future IEA activities. We also invite persons or organizations interested in sponsoring IEA activities to contact us for further information.

I am proud to have been associated with the IEA during this period of intense activity. I use the word "associated" to emphasize that the Executive Committee together with members of the various standing committees deserve the credit for the great amount of work that was undertaken. I thank those who have been actively involved for their contributions. The IEA is richer and stronger as a result of their efforts. It does not cease to amaze me how much activity this organization undertakes and supports and how much influence it holds, despite its very modest resources. When I was Treasurer, I used to be embarrassed by how little financial resources we had. As President, I am proud of how much we accomplish with what we have.

Our strength is based on dedicated, talented people and an ability to leverage our efforts through international cooperation. For example, the triennial Congress is a large, complex undertaking with a budget which is nearly 20 times the annual budget of the Association. During the reporting period, the IEA has pursued a variety of important initiatives aimed at promoting the discipline within the developed world and in industrially developing countries while at the same time modernizing the way we function. We have also begun the important task of documenting the history of the IEA and establishing formal archives. I invite you to carefully read the report to learn the full scope of our on-going activities and accomplishments.

A number of important milestones have been achieved through a heightened synergy between the IEA Executive and Council. Together, we have reached consensus on definitions for the discipline of ergonomics and its domains of specialization - definitions that are concise, succinct, and unambiguous. This apparently small feat belies the complexity of the task we faced and the controversy that such a task sparks. While there exist regional differences in focus and approach to ergonomics, Council responded to the need to promote understanding and communication within the ergonomics community as well as with professionals and lay people outside the field. The IEA definitions will be instrumental in communicating the essence of ergonomics, its unique knowledge content, and how the discipline is bounded and differentiated from related disciplines. The definitions will no doubt be elaborated in the future as the discipline continues to evolve.

Together we also completed a strategic plan which will position the IEA to respond effectively to the needs of federated societies, the discipline and society as a whole. In producing the strategic plan we had to re-examine our priorities and develop a shared vision of the IEA in the future. I am especially pleased that we did this in a transparent and participatory manner involving IEA member societies. The result is that our plans and priorities reflect an international consensus, representing the range of interests and views within the ergonomics community. The strategic plan, reproduced as an Annex to this report, is a living document and will require periodic review. However, it is an important first step and I am confident that it will serve to guide us well as we enter the new millennium.

It is clear that the scope and nature of IEA activities has increased considerably in recent years. This has placed an increasing burden on individuals who serve the IEA and who face similarly increasing demands associated with employment, family and other community service responsibilities. While we believe strongly that policy and program initiatives must continue to be formulated and implemented by prominent ergonomists on a voluntary basis, it is clear that much of the routine work involved in day-to-day administration could be contracted out to professionals who would provide the requisite support services and off-load Executive officers and committee members to provide direction and leadership. We have begun to plan for this eventuality. We have also embraced information technologies (IT) where it has proved an effective alternative to traditional business practices. We will continue to explore IT opportunities to conduct business, deliver services, promote ergonomics, and advance international cooperation in scientific and professional matters.

This triennial report coincides with the transition to a new century, and a new millennium, at a time when ergonomics should prepare itself to assume a key role in shaping the future of our society. We face a number of formidable

challenges as well as important opportunities, as we learned during a special IEA symposium on this subject in Santorini, Greece, August 31- September 1, 1999. Our discipline is very young and faces the normal challenges of maturation, including institutional, academic, political. These challenges are exacerbated by profound changes now taking place that touch all aspects of society - changes in the nature of work and play, changes in global commerce and communication, changes in science and technology, changes in world demographics. These profound changes cannot but influence the future course of the field since they relate to how people interact in an increasingly dynamic and complex world. However, these very changes also beckon ergonomics to play a more direct and vital role in shaping the society of the future.

National and regional ergonomics societies will need to assume an increasing role in responding to societal needs, in connecting professionals and providing the means for sharing knowledge. The IEA as the federation of ergonomics societies must be ready to support these societies in meeting local challenges.

As scientific and engineering innovations enable new solutions to problems arising from human enterprises, ergonomics will be called upon to furnish the means to navigate through this ever expanding solution space, to guide designers, managers and decision-makers to destinations that are human-friendly, supportive and meaningful. But, for ergonomics to fulfill its promise it must be true to its namesake. The emphasis of ergonomics in the twentieth century was on "ergon", meaning work. That is, ergonomics of the past can be characterized by the following key words; empirical methods and data, post-hoc descriptive models, results of case studies and design guidelines. The emphasis in the twenty first century must shift to "nomos", meaning laws. Ergonomics of the future must build a comprehensive body of knowledge based on theories of human-system interactions supported by generalized, quantitative, predictive models that can be readily applied to design.

To the extent that we can deliver the 'nomos', ergonomics will be a key science of the future.

THE DISCIPLINE OF ERGONOMICS

Ergonomics (or human factors) is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theoretical principles, data and methods to design in order to optimize human well-being and overall system performance.

Ergonomists contribute to the design and evaluation of tasks, jobs, products, environments and systems in order to make them compatible with the needs, abilities and limitations of people.

Domains of specialization

Derived from the Greek *ergon* (work) and *nomos* (laws) to denote the science of work, ergonomics is a systems-oriented discipline which now extends across all aspects of human activity. Practicing ergonomists must have a broad understanding of the full scope of the discipline. That is, ergonomics promotes a holistic approach in which considerations of physical, cognitive, social, organizational, environmental and other relevant factors are taken into account. Ergonomists often work in particular economic sectors or application domains. Application domains are not mutually exclusive and they evolve constantly; new ones are created and old ones take on new perspectives.

There exist domains of specialization within the discipline, which represent deeper competencies in specific human attributes or characteristics of human interaction.

Domains of specialization within the discipline of ergonomics are broadly the following;

Physical ergonomics is concerned with human anatomical, anthropometric, physiological and biomechanical characteristics as they relate to physical activity. *(Relevant topics include working postures, materials handling, repetitive movements, work related musculoskeletal disorders, workplace layout, safety and health.)*

Cognitive ergonomics is concerned with mental processes, such as perception, memory, reasoning, and motor response, as they affect interactions among humans and other elements of a system. *(Relevant topics include mental workload, decision-making, skilled performance, human-computer interaction, human reliability, work stress and training as these may relate to human-system design.)*

Organizational ergonomics is concerned with the optimization of sociotechnical systems, including their organizational structures, policies, and processes. *(Relevant topics include communication, crew resource management, work design, design of working times, teamwork, participatory design, community ergonomics, cooperative work, new work paradigms, virtual organizations, telework, and quality management.)*

PART I: ABOUT IEA

The International Ergonomics Association is the federation of ergonomics and human factors societies around the world. The mission of IEA is to elaborate and advance ergonomics science and practice, and to expand its scope of application and contribution to society to improve the quality of life.

The IEA is governed by the Council comprising representatives of federated societies. Day-to-day administration is performed by the Executive Committee that consists of the elected Officers and Chairs of the Standing Committees.

The IEA elected officers are President, Secretary General and Treasurer are elected by Council at the Triennial Congress to serve for a period of three years.

GOALS AND OBJECTIVES

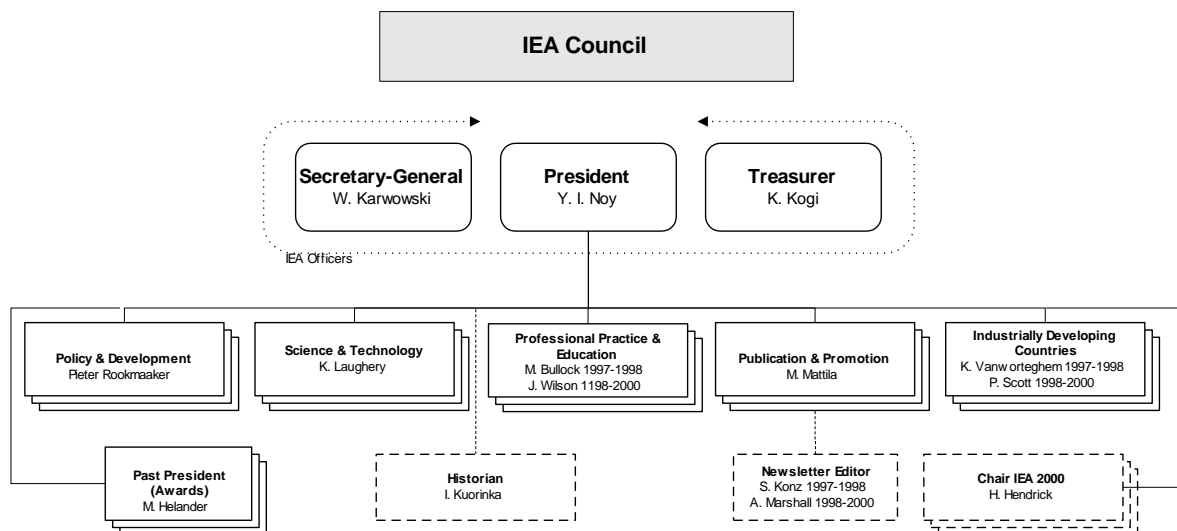
IEA aims to promote the knowledge and practice of ergonomics by initiating and supporting international activities and cooperation.

The following principal goals reflect the IEA mission:

- To develop more effective communication and collaboration with federated societies
- To advance the science and practice of ergonomics at an international level
- To enhance the contribution of the ergonomics discipline to global society

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.

IEA ORGANIZATIONAL CHART



IEA STANDING COMMITTEES

Much of the work of the IEA is accomplished through its Standing Committees. The following are the Standing Committees, some of which have subcommittees responsible for specific functions or activities:

Policy and Development Committee

This committee explores and coordinates new policy options and proposals, and assists in development and implementation of new programs and initiatives relevant to the function and effectiveness of IEA. The committee develops and coordinates plans and proposals concerning IEA policies, operation, and structure, and assists in development of policy recommendations to better serve Federated Societies and the international ergonomics community.

Professional Practice and Education Committee

This committee compiles and disseminates information relevant to offerings in ergonomics at educational institutions, educational materials, including instructional methods, aids and standards

Formerly known as an *Education and Training Committee*, this committee has been renamed as the Professional Practice and Education Committee, to reflect its responsibilities. New goals for the Committee have been developed, in line with the IEA Strategic Plan, as follows:

- To develop internationally accepted guidelines for accreditation of ergonomics educational programs, including guidelines for ergonomics curricula, which satisfy IEA Competency Standards.
- To provide a process for the IEA endorsement of certifying systems, and certifying bodies, according to IEA Guidelines.
- To review the Directory of Ergonomics Education programs and develop firmer guidelines for inclusion of courses within the Directory; to encourage updating via the IEA home-page.
- To provide a resource in relation to educational programs available on the internet.
- To explore strategies to enhance support of ergonomics education programs.

Science and Technology Committee

This committee promotes and coordinates the exchange of scientific and technical information at the international level. There are presently twenty one subcommittees (known as Technical Committees) which address specific areas of technical interest.

There are five major objectives of the Science and Technology Committee

- Identify and promote important research and application areas
- Promote and coordinate the exchange of scientific and technical information at the international level
- Advise and assist in the development of the technical program of IEA Triennial Congresses
- Advise and assist in the organization and conduct of IEA sponsored meetings
- Assist industrially developing countries in the assimilation of ergonomics practices and knowledge

Publication and Promotion Committee

This committee develops and distributes a variety of publications, including the IEA annual reports, a newsletter, Ergonomics International, Directory of Educational Institutions, Directory of Resources Centers, and promotional brochures. The committee manages the *IEA Press*, which serves as the publishing house of IEA. The committee also coordinates donations of educational materials to libraries in industrially developing countries through the IEA Book Fund.

Industrially Developing Countries Committee

This committee promotes, coordinates, and implements ergonomic activities in industrially developing countries by supporting local and regional initiatives concerning research, development, training, and conferences. The committee implements ergonomics development programs in industrially developing countries and collaborates with other IEA committees with interests in industrially developing countries.

The global and long term goals of the Committee are:

1. Improve working conditions throughout IDCs
2. Develop universal guidelines to assist local experts to identify problems, and to suggest appropriate intervention strategies.
3. "Help others help themselves"
4. Consolidate a global network of communication between key international and regional figures in IDCs.
5. Support and encourage educational and training programs specifically focused on ergonomics in IDCs.

Awards Committee

This committee recommends to Council awards to be given to individuals for their contributions to the field of ergonomics. Awards for which this committee is responsible include: IEA Distinguished Service Award, IEA Founders Award, IEA Outstanding Educators Award, IEA Ergonomics of Technology Transfer Award, IEA Ergonomics Development Award, The Liberty Mutual Prize and Medal in Ergonomics and Occupational Safety, The K.U. Smith Student Award, and IEA Fellow Award.

IEA MEMBERSHIP STRUCTURE

Federated Societies

Federated Societies are professional societies in ergonomics/human that have been admitted by the Council having met and continue to fulfill the eligibility criteria as provided by the IEA Rules. They have voting rights and appoint representatives to Council based on the size of their membership.

Affiliated Societies

Affiliated Societies are those societies that that are not eligible for federated membership status.

IEA Sustaining Members

Sustaining Members are organizations or individuals who support the work of IEA through annual financial contributions. There are several categories of sustaining membership.

MEMBER SOCIETIES*PUT INA BOX*

As of June 2000, the International Ergonomics Association has 35 federated societies, 1 affiliated society and 2 sustaining member organizations.

Federated Societies:

All-Ukrainian Ergonomics Association
 Asociación Española De Ergonomia (Spain)
 Belgian Ergonomics Society
 Associação Brasileira de Ergonomia (ABERGO)
 Association of Canadian Ergonomists/ Association Canadienne d'Ergonomie
 Chinese Ergonomics Society
 Sociedad Colombiana De Ergonomía (Colombia)
 Croatian Ergonomics Society
 Czech Ergonomics Society
 Ergonomics Society (UK)
 Ergonomics Society of Australia
 Ergonomics Society of the Federal Republic of Yugoslavia
 Ergonomics Society of Korea
 Ergonomics Society of South Africa
 Ergonomics Society of Taiwan
 Gesellschaft für Arbeitswissenschaft (Germany)
 Hellenic Ergonomics Society
 Human Factors and Ergonomics Society (USA)
 Hungarian Ergonomics Society
 Indian Society of Ergonomics
 Inter-Regional Ergonomics Association / IREA (Russia)
 Irish Ergonomics Society
 Israel Ergonomics Society
 Societa' Italiana di Ergonomia (Italy)
 Japan Ergonomics Society
 Nederlandse Vereniging voor Ergonomie (Netherlands)
 New Zealand Ergonomics Society
 Nordic Ergonomics Society
 Österreichische Arbeitsgemeinschaft Für Ergonomie (Austria)
 Polish Ergonomics Society
 Associação Portuguesa de Ergonomia (APERGO) (Portugal)
 Slovak Ergonomics Association
 Société d'Ergonomie Langue Française (SELF)
 South East Asia Ergonomics Society (SEAES)
 Turkish Ergonomics Society

Affiliated Societies:

Human Ergology Society (Japan)

Sustaining Members:

Bureau of the Hungarian Council of Industrial Design and Ergonomics
 Research Institute of Human Engineering for Quality Life (Japan)

A MAP OF THE WORLD WITH MAREKED IEA SOCIETIES

SELF -LUC

NORDIC denamrk, Iceland, Norway, Sweden, finaldn

SEAES – Hali (more then 10)

IEA HISTORY

Send to Ilkka for modifications

Founding of IEA

The roots of the International Ergonomics Association originate in a project initiated by the European Productivity Agency (EPA), a branch of the Organization for European Economics Cooperation. The EPA established a Human Factors Section in 1955, and in 1956 visited the United States to observe human factors research. The next phase of the EPA project was a technical seminar on "Fitting the Job to the Worker" at the University of Leiden in 1957. It was at this seminar that a set of proposals was presented for the formation of an international association of work scientists.

A Steering Committee was appointed to develop the proposals and to organize an international association. The members of that committee were: Prof. H.S. Belding, Prof. G.C.E. Burger, Prof. S. Forssman, Prof. E. Grandjean, Prof. G. Lehman, Prof. B. Metz, Prof. K.U. Smith and Mr. R.G. Stansfield. There was some reluctance to use the term "ergonomics" in naming the new association even though British scientists had founded an Ergonomics Research Society in 1949. The committee decided to adopt the name "International Ergonomics Association" on a preliminary basis until a better name could be found.

A preliminary set of bylaws for the proposed international association was prepared and distributed to the Steering Committee. A special meeting was held in Paris in September 1958, and it was decided to proceed with organizing an association and to hold an International Congress in 1961. The Steering Committee then designated itself as the "Committee for the International Association of Ergonomic Scientists", and elected Prof. G.C.E. Burger, President; Prof. K.U. Smith, Treasurer; and Prof. E. Grandjean, Secretary. On April 6, 1959, at the meeting in Oxford, England Prof. Grandjean has declared the founding of the International Ergonomics Association.

The Committee for the International Association of Ergonomic Scientists met in Zurich during the last phase of the EPA project in March 1959, and decided to retain the name "International Ergonomics Association". The Committee also met again in Oxford later in 1959 to formally agree upon the set of bylaws or statutes drawn up by the Secretary with the help of committee members and the EPA staff. These statutes were later approved by the Association membership at the First Congress of the IEA in Stockholm in 1961.

PART II: MAJOR IEA ACTIVITIES AND ACCOMPLISHMENTS

THE IEA STRATEGIC PLAN

A major activity undertaken during 1997-2000 was a review of the IEA mission and the development of a strategic plan that will position IEA to respond effectively to the needs of federated societies, the discipline and society as a whole. An initial outline was developed by the Executive Committee in Kuala Lumpur, Malaysia (1997) to be used as a basis for discussion and comment by member societies. It was also the subject of focus group discussions by Council in 1998 and 1999 to ensure that it reflects an international consensus. The revised strategic plan formed the basis of specific implementation plans that are being formulated by the IEA Standing Committees. The process adopted for the development of the plan ensured that our priorities are focused on our mission. An equally important objective was to accomplish this task in a transparent and participatory manner. The complete proposal for implementation was presented at the 2000 Council Meeting in San Diego.

The IEA strategic plan is attached as Appendix ____.

IEA DEFINITIONS

Several studies have documented the existence of a diversity of definitions for ergonomics, which may hinder efforts to advance and promote ergonomics. There is a compelling need to promulgate an authoritative definition that can be widely referenced and that will help project a message and image that is professional and informative to the outside world. The IEA undertook to define the discipline of ergonomics and its branches in a way that is concise, succinct, and unambiguous. Definitions help clarify the field and promote understanding and communication within the ergonomics community as well as with professionals and lay people outside the field.

The task of the Executive Committee was to initiate and manage a process that engaged the international community in defining the discipline and its main domains of specialization. A consensus was reached at the IEA Council meeting in Santorini (1999) and the final version was presented to Council for approval at the IEA2000 Congress in San Diego.

PROFESSIONAL PRACTICE AND EDUCATION ACTIVITIES

BACKGROUND

The work of the Professional Practice and Education Committee has been taking place against a background of considerable activity as regards the recognition of the profession of ergonomics, and of ergonomics practitioners, across the world. Academic programmes are under threat in some countries but are expanding rapidly in others. Certification bodies attached to some Federated Societies or groupings have reached some maturity of operation in the last three years whereas other Federated Societies are just beginning to set certification processes in motion. Equally, academic and legal requirements have accelerated the drive to produce criteria for ergonomics competencies and for accreditation of educational programmes.

Given this background the Committee has had to be extremely sensitive in its activities, and to move forward relatively slowly so as to ensure that the whole international ergonomics community is broadly in agreement with IEA proposals and, subsequently, guidelines and criteria.

Committee membership

This Committee largely works with a Chair, and sub-committees set up on an ad hoc basis. The Chair for 1997 to 1998 was Professor Margaret Bullock who retired by rotation, and from 1998 to 2000 has been Professor John Wilson. Currently there are three relevant sub-committees: Accreditation sub-committee (Chair: Professor Margaret Bullock); Certification Endorsement sub-committee (Chair: Professor Hal Hendrick); and Directory of Ergonomics programmes sub-committee (Chair: Dr. Leon Straker).

Membership of the first of these committees is drawn from nominated educators within a number of the Federated Societies. For the second committee, sufficient members of different Federated Societies have been appointed to a pool such that a sub-committee of experts with no potential conflicts of interest can be activated each time a body applies for approval. For the work of the third sub-committee we are still waiting for sufficient volunteers to enable us to first list, and then carry out quality screening of the various ergonomics education programmes worldwide.

1997- 2000 Activities

The activities of the committee over the past three years have largely been dictated by the mandate given to them at the IEA 1997 Congress and Council meeting. At this meeting a series of documents to do with core competencies in ergonomics, guidelines for a certification process and IEA endorsement of certification processes were provisionally approved for further discussion amongst the Federated Societies. Subsequently, the 1998 Council Meeting approved the documentation as “living documents”; that is, the documents should appear as IEA guidelines and/or procedures (where relevant) but that they are open to amendment by the Federated Societies on an annual basis at the Council Meetings. The mechanism agreed was that Societies should communicate any objections or suggested amendments via their Council representatives or their Secretariat to the Professional Practice and Education Committee Chair over each 12 month period. Any such comments would be compiled and where there was a strong case made (either by weight of argument or weight of numbers) new proposals would be brought forward to Council Meetings. In the event there have been a number of requests for changes in the documents but these have been communicated informally. Therefore such changes as have been made have been made by the Committee itself, largely in an attempt to integrate the various policies and documents and to ensure that their thrust and content are acceptable to all Federated Societies.

Articles about the certification and competencies documents have been written by the Chair and have appeared in Ergonomics International, The Ergonomist and the HFS Bulletin.

Professional Recognition documentation

Approval (but living) documents to do with the recognition of professionalism, competency and quality of ergonomics have been loaded onto the IEA web site. These are:

1. **Core Competencies for Practitioners in Ergonomics** [short name: Competencies]
 - a. Summary version
 - b. Full version
2. **Minimum Criteria for the Process of Certification of an Ergonomist** [short name: Certification Criteria]
3. **Criteria for IEA Endorsement of Certifying Bodies** [short name: Certification Endorsement]
4. **Guidelines for the Process of Endorsement of Certifying Bodies** [short name: Endorsement Process]

During 1999 to 2000, the Federated Societies and their Council representatives have again been formally asked to feedback comments to the Chair of the Committee about all the Professional Recognition documentation. All such comments were summarized and debated at the 2000 Council meeting.

The inter-connections between the documents and other current initiatives are shown in the following diagram.

PUT DIAGRAM HERE

Certification Endorsement sub-committee

In 1998, Hal Hendrick was appointed by the IEA Executive Committee as Chair of the Certification Endorsement Sub-Committee. He worked with the Chair of the Education and Training Committee, Margaret Bullock, in developing a draft set of criteria and procedures for endorsing professional certification agencies and programs.

A Certification Endorsement Sub-Committee was formed by the Education and Training Committee Chair in late 1998. In addition to Hendrick, the members are: Harvey Cohen and Jerry Duncan (USA); Manfred Rentzsch (Germany), Francois Danniellou (France), Carol Slappendel (New Zealand), and Elizabeth Bunker (Australia).

The Certification Endorsement Sub-Committee recently received approval from the IEA Executive Committee to proceed with an initial certification endorsement pilot of its procedures. Hal Hendrick now is working on a draft set of more detailed procedures that will be circulated to the full committee for review and comment early in 2000. As soon as those procedures are set, one or two well-recognised certification agencies will be invited to submit an application for endorsement. The Committee already has been contacted by the BCPE in the US and the New Zealand Ergonomics Society indicating interest in applying for endorsement as soon as the IEA is ready.

Hal Hendrick has been monitoring the development of a similar endorsement programme by the Human Factors and Ergonomics Society in the US, and IEA Committee member Jerry Duncan, is participating directly in that development process. Because the HFES Committee is using the IEA draft procedures and criteria as a starting point for their own detailed procedures, Hendrick anticipates that some of the HFES committee's work will be useful to the IEA Committee in fleshing out its procedures. The HFES procedures and criteria are expected to be available to the IEA's Committee in late January or early February, 2000.

Accreditation sub-committee

Following approval at IEA 1997 an Accreditation Sub-Committee was set up, chaired by Margaret Bullock (Australia) and with membership Herb Collie (USA), Bill Moroney (USA), Karen Piegorsch (USA), Tim Galwey (Ireland), David Stubbs (UK) and with Hal Hendrick (USA) and Bill Green (Netherlands/Australia) as consultants. They have communicated electronically for about 30 months and taken soundings from colleagues in other countries or societies where possible. The outcome is that a set of guidelines for the accreditation of ergonomics educational programmes have been produced. These represent current ergonomics practice and an evaluative approach which is relevant to competency standards. The guidelines are presented at the IEA 2000 Council Meeting; Council will be asked to gather opinions on their content and value from the Societies and to accept them as acceptable guidelines from the IEA at the 2000 or (at latest) 2001 Council Meeting.

Directory of ergonomics educational programmes

A 4th edition of the IEA International Directory of Ergonomics Programmes in Ergonomics/Human Factors is being produced, in electronic form. Leon Straker (Australia) was appointed Chair of the Sub-Committee in 1998 and he has convened a task force comprising Moh Ayoub (USA), Rachel Benedyk (UK), Rabindra Sen (India) and Annabel Cooper (student representative). Guidelines have been produced based on the 3rd edition and a skeleton electronic version has been designed. The form of this and proposals for

operation of the Directory – identification, selection, approval, quality assurance procedures etc – were discussed at IEA Council 2000.

Relationship to the Strategic Plan

The work of the Professional Practice and Education Committee is central to the elements of the Strategic Plan defined in the strategies of objective B3. In particular, over the past three years, the committee has contributed to:

- a) Iterative development of the whole Strategic Plan (the Chair of the Professional Practice and Education Committee is also a member of the Policy and Development Committee).
- b) Development and maintenance of Professional Recognition Documentation and Procedures (strategies B3.7, B3.8 and B3.9).
- c) On-going development of guidelines for accreditation of ergonomics educational programmes and of a directory of approved ergonomics educational programmes (strategies B3.5 and B3.6).

Once all the PRD components are in place the Committee will be in a position to support outreach into international standards and best practice and the promotion of ergonomics education and practice (strategies B3.3 and B3.4).

Accreditation sub-committee

Directory of Ergonomics Educational Programmes

CERTIFICATION AND ACCREDITATION OF ERGONOMISTS

List of all documents (titles, short description)

SCIENCE AND TECHNOLOGY ACTIVITIES

There are several types of activities that serve as a focus of the work of the Science and Technology Committee and the IEA Technical Committees. These activities include:

- i. Arranging and promoting scientific and technical conferences and meetings
- ii. Assisting in developing the program for the IEA Triennial Congress
- iii. Serving as a review body for IEA endorsement of conferences, journals and special publications
- iv. Providing information for the IEA web site regarding the organization and activities of the Technical Committees

IEA Technical Committees COORECT

There are currently 21 IEA Technical Committees.
PUT IN THE BOX- ONLY COMMITTEE NAMES

**Aging-
Agriculture
Building & Architecture
Consumer Products**
Professor William S. Green
Faculty Design Engineering and Production
Delft University of Technology
Jaffalaan 9
2628 BX Delft
THE NETHERLANDS
Email: W.S.Green@io.tudelft.nl

Control Rooms
Mr. John Wood, Managing Director
CCD Limited
Allen House, Station Road
Egham
Surrey, TW20 9LB - UNITED KINGDOM
Phone: 01784 472234
Fax: 01784 470949
Email: ccdegham@dial.pipex.com

Cost-Effective Ergonomics
Mr. David C. Alexander
Auburn Engineers, Inc.
P.O. Box 3038
Auburn, Alabama 36831-3038
USA
Phone: 334-826-8600
Fax: 334-826-7601
Email: davealex@auburnengineers.com

Hospital Ergonomics
Prof. Francois Daniellou
Laboratoire d'Ergonomie des Sys. Complexes
Univesite de Bordeaux 2 Victor Segalen
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F-33076 Bordeaux Cedex
FRANCE
Phone: 33 5 57 57 10 42
Fax: 33 5 56 90 08 73
Email: Francois.Daniellou@ergo.u-bordeaux2.fr

Human Aspects of Advanced Manufacturing

Prof. Waldemar Karwowski, PhD, PE
 Center for Industrial Ergonomics
 University of Louisville
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 Louisville, KY 40292
 USA
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 Fax: (502) 852-7397
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Human-Computer Interaction

Susumu Saito, Ph.D.
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 JAPAN
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 Fax: 81 44 865-6116
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Human Reliability

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 Lehrstuhl für Ergonomie der Technischen Universität München
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 Fax: (089) 289 15387
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Industrial Design

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Musculoskeletal Disorders

Prof. Antonio Grieco
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 I-20122 Milano
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 Phone: 39 02 5511610
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 Email: occupmed@imiucca.csi.unimi.it

Organizational Design and Management

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 Fax: (516) 344-3957
 Email: ohara@bnl.gov

Scott Malcolm (co-chair)
 Email: malcolms@candu.aecl.ca

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Quality Management

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 Institute of Industrial Ecological Sciences
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 Kitakyushu, 807
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 Phone: 81-93-691-7458
 Fax: 81-93-692-0392
 Email: m-kuma@med.uoeh-u.ac.jp

Standards

Mr. Nico J. Delleman
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 P.O. Box 75665

1070 AR Amsterdam
 THE NETHERLANDS
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 Fax: 31 20 644 14 50
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Work Environment Design

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 Department of Design and Environmental Analysis
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 Martha Van Rensselaer Hall
 Ithaca, NY 14853-4401
 USA
 Phone: (607) 255-1957
 Fax: (607) 255-0305
 Email: ah29@cornell.edu

Work Psychodynamics

Prof. Jean Pierre Brun
 Laval Université
 Québec City
 CANADA
 Email: Jean-Pierre.Brun@fsa.ulaval.ca

IEA Sponsored Conferences and Meetings

Each year IEA supports many 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 is given for conferences of five major types:

1. IEA Triennial Congress
2. IEA Conference
3. Joint Conference
4. Approved Conference
5. Endorsed Conference

Since the 1997 IEA Triennial Congress in Finland, the following conferences and meetings have been approved/endorsed by the IEA:

| | | |
|------|------|---|
| Jul | 1997 | INTERACT '97: Sixth IFIP TC13 Conference on Human-Computer Interaction. Sydney, Australia. |
| Jul | 1997 | Pacific Workshop on Distributed Multimedia Systems. Vancouver, Canada. |
| *Aug | 1997 | Seventh International Conference on Human-Computer Interaction jointly with the 13th Symposium on Human Interface. San Francisco, CA USA. |
| Sep | 1997 | Fifth European Conference on Computer Supported Cooperative Work. Lancaster, UK. |
| Oct | 1997 | Re-Visiting the Allocation of Functions Issue: New Perspectives. Galway, Ireland. |
| Nov | 1997 | WWDU '97: Work With Display Units. Tokyo, Japan. |
| Nov | 1997 | The ASEAN Ergonomics Society (SEAS) Conference. Kuala Lumpur, Malaysia. |

- Jun 1998 XIIIth Annual International Occupational Ergonomics and Safety Conference. Ann Arbor, MI USA.
- Jul 1998 Sixth International Conference on Human Aspects of Advanced Manufacturing: Agility & Hybrid Automation. Hong Kong, China.
- Jul 1998 First World Congress on Ergonomics for Global Quality and Productivity. Hong Kong, China.
- Jul 1998 The 5th Pan-Pacific Conference on Occupational Ergonomics. Kitakyushu, Japan.
- Aug 1998 Sixth Congress on Human Factors in Organizational Design and Management. The Hague, The Netherlands.
- Sep 1998 Global Ergonomics Conference. Capetown, South Africa.
- Mar 1999 Work, Stress, and Health 1999: Organization of Work in a Global Economy. Baltimore, MD USA
- May 1999 International Conference on Computer-Aided Ergonomics and Safety. Barcelona, Spain.
- Jun 1999 International Conference on TQM and Human Factors: Towards Successful Integration. Linkoping, Sweden.
- Jun 1999 The XVI International Seminar of Ergonomics Teachers: Certification and Accreditation of Ergonomics, Labour Protection and Work Safety Education. Leszno, Poland.
- Aug 1999 Eighth International Conference on Human-Computer Interaction. Munich, Germany.
- Aug 1999 Strengths and Weaknesses, Threats & Opportunities of Ergonomics in front of 2000. Santorini, Greece.
- Oct 1999 International Conference on Safety of Industrial Automated Systems. Montreal, Canada.
- Feb 2000 First International Conference on Occupational Risk Prevention. Tenerife, Spain.

CONFERENCE HIGHLIGHTS

ODAM 1998

The IEA conference on Organizational Design and Management, ODAM VI, held August 19-22, 1998 was very successful. Overviews by Peter Vink, Steven Dhondt, Marc Peters and Ernst Koningsveld were titled: Balancing Organizational, Technical and Human Factors. The IEA is deeply indebted to the organizers for their hard work in continuing this excellent series of conferences.

GLOBAL ERGONOMICS CONFERENCE 1998

The Global Conference held in Cape Town, South Africa, September 1998, was a resounding success, thanks to the work of Pat Scott and conference organizers. A large part of the program was devoted to ergonomics issues in industrially developing countries, primarily in Africa. A forum was held to explore ways in which the IEA could help promote ergonomics in IDC's. The IEA network of people interested in ergonomics in IDC's was created.

SUPPORT OF THE IEA 2000 TRIENNIAL CONGRESS

The IEA Technical Committees played an important role in the program for the Triennial Congress 2000 in San Diego. In addition to reviewing and selecting submissions for the technical program, many of the committees organized multiple-session symposia on topics central to the committee's ergonomic focus. Following is a list of these Symposia:

| | |
|-----------|---|
| Topic: | Ergonomics and TQM |
| Convenor: | Ram Bishu (US) |
| Topic: | Ergonomic Design by Means of Human Models |
| Convenor: | Heiner Bubb (Germany) |
| Topic: | Inclusive Design and Usability |
| Convenor: | William S. Green (Netherlands) |
| Topic: | Musculoskeletal Disorders for Upper Extremities |
| Convenor: | Antonio Grieco (Italy) |
| Topic: | Applications of Psychophysiology in Macroergonomics |
| Convenor: | Robert A. Henning (US) |
| Topic: | Macroergonomics Methods and Tools for Improved Performance and Well-Being in Various Environments |
| Convenor: | Brian M. Kleiner (US) |
| Topic: | Rehabilitation Ergonomics |
| Convenor: | Shrawan Kumar (Canada) |
| Topic: | Ergonomics in Agriculture and Food Production |
| Convenor: | Kurt Landau (Germany) |
| Topic: | Human Factors in Power Systems |
| Convenor: | John M. O'Hara (US) |
| Topic: | Control Room Ergonomics |
| Convenor: | John E. Wood (UK) |

PUBLICATION AND PROMOTION ACTIVITIES

PUBLICATION ACTIVITIES

The IEA activities in the area of publication and promotion focus on development and distribution of a variety of publications, including the IEA Newsletter, Ergonomics International, the IEA Journal of Ergonomics, Directory of Educational Institutions, Directory of Resources Centers, and the IEA promotional brochures.

IEA has developed an effective system for coordination of donations of educational materials such as books and journals to libraries in developing countries through the *Information Distribution Centers*.

IEA Endorsed Journals

Official Journal of IEA

Ergonomics, published by Taylor & Francis, is the official journal of the International Ergonomics Association. Ergonomics was utilized to publish proceedings of the First IEA Congress in 1961.

Journals published in cooperation with IEA

The following journals are being published in cooperation with IEA:

1. International Journal of Human-Computer Interaction
2. Human Factors and Ergonomics in Manufacturing
3. International Journal of Occupational Safety and Ergonomics
4. International Journal of Cognitive Ergonomics
5. International Journal of Industrial Ergonomics
6. Applied Ergonomics
7. Theoretical Issues in Ergonomics Science

IEA Journal of Ergonomics Research

Beginning in 1999, IEA is publishing in electronic form the IEA Journal of Ergonomics Research, a Web-based peer-review journal that publishes empirical studies reporting original research, evaluative reviews of the literature, and articles dealing with development and evaluation of methods and theories. Articles will deal human use of systems, machines, tools, computers, and products in various environments and for different tasks. IEA Journal of Ergonomics Research also publishes special issues on important topics.

Subscription to the journal is free. Three types of articles are published: regular articles, review articles and brief articles.

Regular articles. These are articles of 15-40 pages of length (double-spaced) and represent original contributions to ergonomics / human factors research. An article may be appropriate to report a major research effort, such as a series of experiments. This format is also appropriate for reporting methodological or theoretical developments.

Review articles. A review article represents a synthesis of published literature on a topic of interest to the readers. A review article must present an original perspective or integration of the literature, which will extend the understanding or knowledge in the field.

To submit papers or for more information please contact Editor-in-Chief, Martin G. Helander at: **e-mail**

IEA/ILO Ergonomics Checkpoints

Ergonomics Checkpoints

The IEA has authored a book published in conjunction with the ILO, entitled the '*Ergonomics Checkpoints: Practical and Easy to Implement Solutions for Improving Safety, Health and Working Conditions*', ISBN 92-2-109442-1, ILO: Geneva, 1996. This book has received widespread and enthusiastic acceptance, and due to high demand it was translated and published in several other languages, including French, Spanish, Chinese, Polish, ...

CHECK THE LANGUAGES

INSERT IMAGE OF THE FRONT COVER

Ergonomic Checkpoints for Agriculture

An agreement in principle with ILO has been reached to develop and publish the next book '*Ergonomics Checkpoints for Agriculture*'. Dr. Kazu Kogi (Japan) has invited potential authors to contribute to this project. The book is being developed by IEA and the International Labour Office (ILO) through its Occupational Safety and Health Branch. This collaboration reflects the urgent need for ergonomic guidelines in agriculture and would complement ILO's efforts to establish new standards in safety and health in agriculture.

The target groups will include agricultural workers, farmers, farm managers, extension workers and trainers, tool and machine designers, occupational safety and health personnel and others concerned with ergonomic aspects of agriculture. Each checkpoint will be expressed as a practical improvement action from the ergonomics point of view.

The IEA History Book

The IEA History Book: "*Half A Century Of International Ergonomics*", edited by the IEA Historian, Ilkka Kuorinka, is underway and will be published in 2000.

IAN TO SEND ME A PRAGRAPH

IEA NEWSLETTER: ERGONOMICS INTERNATIONAL

Ergonomics International (EI) is published four times a year on the internet, in the journal *Ergonomics* and as a separate pamphlet mailed to 400 individuals in over 60 countries throughout the world. It is also emailed directly to over 50 newsletter editors and others. EI contains news from the federated societies, book reviews, IEA statistics, conference announcements and reviews and other articles related to ergonomics.

The publishers, Taylor and Francis, Ltd., print and mail the EI magazine at no charge to the IEA.

The role of EI in communicating with IEA members and other stakeholders is being enhanced to make more efficient use of the existing and new media.

A three year schedule has been devised as indicated in the table below.

| | Year 1 | Year 2 | Year 3 |
|------------|-------------------------------------|-------------------------------------|---|
| Feb | Membership statistics | Membership statistics | Membership statistics |
| May | EC meeting report | EC meeting report | EC meeting report |
| Aug | Committee report(s) | Committee report(s) | Committee report(s) |
| Nov | Conference report Council report | Conference report Council report | Triennial congress report Council report |

Ergonomics International is freely available on the IEA web site, including the back issues up to 1996.

EI has started to carry some longer articles than previously published in the newsletter. These include reports on IEA endorsed conferences and meetings, the work of the standing committees and the chairman, and the history of the IEA. The interest in these articles has been demonstrated by feedback from readers and the reproduction of the articles in federated societies' newsletters.

Examples of the main or significant articles from each issue from the last three years are given below:

PUT INTO TH BOX

| Production Date | Significant Feature |
|------------------------|--|
| May 97 | Ergonomics in Finland Ergonomics in Germany |
| Aug 97 | New IEA officers IEA 97 Congress |
| Nov 97 | Dutch Ergonomics Association |
| Feb 98 | 20 years of the Polish Ergonomic Association |
| May 98 | Ergonomics in Mexico El boletin de factores humanos |
| Aug 98 | Steve Konz's last issue as editor |
| Nov 98 | IEA Guidelines on core competencies and certification |
| Feb 99 | Ergonomics in Chile |
| May 99 | History of the IEA |
| Aug 99 | President's report to Council |
| Nov 99 | Human Factor exhibition report (UK) |
| Feb 00 | New Zealand Conference Report |

The IEA continues to maintaining and develop relationships with contributors from around the world. In the last three years many articles have arisen from outside Western Europe and North America. Contributions have been provided from a wide range of countries including Africa, Brazil, Chile, Indonesia, Japan, Korea, Mexico, Poland and New Zealand. These diverse sources make EI a truly international publication.

BOOK DISTRIBUTION IN IDC

Proceedings of the IEA sponsored conferences are provided on a complimentary basis to libraries and resource centers. A full list of these distribution centers is available on the IEA web site for use by individuals wishing to donate educational materials.

During 1997-2000, proceedings of the following conferences have been distributed to the Information Distribution Centers and to the IEA Library:

1. 1st International Conference on Computer-Aided Ergonomics and Safety CAES'92
2. 13th Triennial Congress of the International Ergonomics Association, IEA '97
3. Allocation of Functions ALLFN'97
4. 5th International Symposium on Human Factors in Organizational Design and Management ODAM'96
5. ASEAN Ergonomics '97 – 5th SEAES Conference
6. 4th International Conference on Computer-Aided Ergonomics and Safety CAES'99
7. Global Ergonomics Conference, Cape Town, South Africa, 1998

The following comments from the center coordinators have been received concerning this program.

Some of the comments from the coordinators of the above centers are as follows:

Ricardo Montero, Cuba

...very useful and contributing to the dissemination and development of ergonomics in Cuba

Kamiel von Vanwonderghem, Belgium

... distribution centers need basic material to follow the evolution in ergonomics and/or to find material to instruct or to help people looking for such surveys or basic texts. The centers are situated in a region where they could have contacts with those who may need this information. India, Indonesia and Thailand have contacts with organizations and individuals (students and experts) interested.

Algis Vegys from Kaunas , Lithuania

...the activities of the centers are very important as they distribute literature that is important for researchers and teaching. In their center the books are in the University library and they are easily accessible for scientists, teachers and students. These books are also often used by the persons of their Ergonomic department.

Alexander Burov, Ukraine

... this kind of activity is very important help for them. They have organized a mini-library on ergonomics and collect relative publications from members of their Association, books and journals. Their current needs are international journals on ergonomics, especially the main journal, Ergonomics.

Adnyana Manuaba, Indonesia

... until now collecting material and references for himself, his staff and post graduate students depended mostly on his opportunity to go abroad and participate congresses. He continues that he is managing a postgraduate course on ergonomics since 1995, and their first Master Degree students graduated already this year as they start practically April 1996. Their library consists mostly of his private collection and books owned by the other staff members. He states that this information center contribution is a good input for this library, and this procedure greatly supports the learning process of their students.

Donations to the Book Fund

Individuals and institutions interested in donating such materials are requested to contact either the Secretary General or Chair of the Publication & Promotion Committee directly..

IEA ARCHIVES

Ilkka Kourinka, the IEA Historian, is preparing IEA archives to be held at the major university library.

IEA PROMOTIONAL ACTIVITIES

The IEA promotes awareness of ergonomics on a global basis through various interactions with other international and national organizations as well as media and news agencies.

IEA home page on World Wide Web

The IEA home page address on the World Wide Web and the registered domain name is:
<http://ergonomics-iea.org>

IMAGE OF THE HOME PAGE HERE OR BACKGROUND-

EXPO 2000

The IEA was represented by Prof. Heiner Bubb on the Advisory Board at the World Engineers Convention at the World Exposition EXPO 2000, Hannover, Germany. The IEA participation on the Advisory Board of the Expo offered an exciting opportunity to promote ergonomics within the engineering community.

At the EXPO 2000, five professional congresses have being organized under the following themes: information and communication; environment, climate and health; mobility; energy; and future of work. Further information about these events can be found on www.expo2000.de.

Presentations by the IEA President

Ian Noy has met with various societies and presented opening or closing remarks at national and international conferences, including:

1. Opening Plenary at the XXXIV^{ème} Congrès of the Societe d'ergonomie de langue française (SELF), Caen, Freance, September 1999.
2. Plenary Address at the Annual Meeting of the Association of Canadian Ergonomists/Association canadienne d'ergonomie, Hull, Canada, October 1999.

OPENING PLENARY AT THE APERGO SECOND CONGRESS, LISBON, PORTUGAL, APRIL 2000.

CLOSING REMARKS AT THE SEAES CONFERENCE, KUALA LUMPUR, NOVEMBER 1997.

APERGO SECOND CONGRESS, LISBON, PORTUGAL, APRIL 2000.

3. Board of the Japan Ergonomics Society, Tokyo, May 1999
4. Dr. Hatiar, Head of Ergonomics Department at the Institute of Preventive and Clinical Medicine and representative of the Slovak Ergonomics Society, Bratislava, June 1999
5. Dr. J. Formánek of the National Institute of Public Health, Centre for Industrial Hygiene and Occupational Diseases, and past president of the Czech Ergonomics Society, and Dr. Miloš Palecek, Director of Research Institute of Occupational Safety, Prague, June 1999.

ACTIVITIES FOCUSING ON THE INDUSTRIALLY DEVELOPING COUNTRIES (IDC)

It is the mission of IEA to inculcate an awareness of the theoretical principles, practical application and benefits of ergonomics in industrially developing countries (IDCs), and to facilitate practical interventions designed to ameliorate the conditions of work in the sub-optimal labour intensive environments that characterise IDCs.

The Industrially Developing Countries Committee (IDCC) was in a state of transition during 1998, significant amount of work was accomplished by ergonomists around the globe. Most of the work was done in Asia, with others working in India, South America, Africa and China.

At the "Global Ergonomics Conference" held in Cape Town, Pat Scott took over as Chairperson of the IDCC. The first task was to acknowledge the work done by her predecessor, Kamiel Van Wonterghem, and to thank him for his efforts in initiating international communications, and for his continued efforts in motivating for financial assistance in order to run various projects. The IDC meeting in Tampere was well attended. One of the main goals during 1999 was to set up an international communication network.

International Communication Network

Due to the physical extent of IDCs, the primary communication mode is Internet and world wide web.

IDC Homepage on WWW:

Ergonomics Workshops

Two successful workshops based on the "Ergonomic Checkpoints" have been run by Houshang Shahnava; one in Swaziland (Southern Africa) and the other in Mumbai (India). In both cases local ergonomists were involved in the running of these workshops and should now be able to conduct similar workshops in local regions of their respective countries.

Kamiel Van Wonterghem ran a successful four-day *Ergonomics Workshop* in South East Asia, which was sponsored by the European Union. Consultancies and seminars have been conducted in several companies within South Africa with the '*Ergonomics Teams*' being initiated to establish an ongoing awareness and commitment to ergonomics.

As Chairperson of the IDCC Pat Scott was invited to address two meetings in South America in November 1999. The first of these was in Rio de Janeiro where there was a group workshop on *Ergonomics at the Production Engineering Conference*, and the second was at the *Annual ABERGO 99 Ergonomics Conference* in Salvador. These conferences were well attended by local people plus representatives from North, Central/West and South Africa, Cuba, Columbia and Argentina and offered a wonderful opportunity to discuss plans for cross-continental collaborative work.

(Diags of S Africa and S America egs).

PAT to PROVIDE PICTURES FROM ROVING SEMINARS

IDCC Cooperation with the ILO and WHO

Over the years there has been an ongoing liaison with the two international organizations most closely related to ergonomics, viz the ILO and WHO. It is one of the IDCC priorities to reinforce these associations through personal meetings in Geneva to discuss mutual areas of interest and reciprocal benefits. As both the ILO and WHO already have regional bases in many IDCs it is our intention to try to work through these centers to establish relevant contacts.

IDC Publication

The IDC in conjunction with the *Ergonomics SA*, the journal of the Ergonomics Society of South Africa has undertaken to publish papers with primary focus on ergonomics in the IDC.

African Focus

Due to the magnitude of the tasks faced by the IDCC it is impossible to cover all countries in need at once. Due to limited resources, a decision was made to focus in 2000 on Africa. A main objective of "Africa 2000" is to culminate the IDCC with an African Conference. The principal coordinators for this activity are Hakim Benchechroun, Morocco, Karim Meckassoua, Republic of Central Africa and Pat Scott, South Africa.

The main objective for 2000 is to establish a good working knowledge of ergonomics principles and practical applications within as many areas as possible throughout Africa. Information has been distributed wherever contacts are available and seminars and workshops will be conducted whenever possible.

In close cooperation with SELF, through its commission on Central Africa headed by Karim Meckassoua, an *Ergonomics Conference* in Bourkina Fassa is being planned for 2001. The emphasis will be on IDC ergonomics problems, with IDC solutions presented by IDC ergonomists.

IEA RELATIONS WITH OTHER INTERNATIONAL BODIES

Memorandum Of Understanding (MOU)

The IEA cooperates with other international bodies with common or similar goals. In some cases, the Memoranda of Understanding have been established to facilitate information exchange and joint activities.

At present time, MOUs have been signed with the International Commission on Occupational Health (ICOH), International Association of Applied Psychologists (IAAP), and others are in preparation.

An example of collaborative undertaking was publication of the “*Consensus Document on Upper Body Musculoskeletal Disorders*”, developed by IEA Technical Committee on Musculoskeletal Disorders in collaboration with ICOH.

Official liaisons

The IEA maintains close liaison with the with the following world bodies:

1. United Nations (UN)
2. World Health Organization (WHO)
3. International Labour Office (ILO)
4. International Standards Organization (ISO)
5. International Social Science Council (ISSC)

Recently, Markku Mattila (Nordic Ergonomics Society) represented the IEA Executive Committee at the meeting of World Health Organization Collaborating Centres in Occupational Health, held in Helsinki, June 7-9, 1999. The main focus of the meeting was implementation of the *Global Strategy on Occupational Health for All*. The discussions explored the relationship between the occupational health and sustainable development. Accompanying scientific meeting discussed the issue of psychological stress at work.

POLICY & DEVELOPMENT ACTIVITIES

DEVELOPMENT OF IEA POLICIES

IEA is continuously adapting and developing its rules and policies in order to continuously improve its organizational effectiveness. Due to its global character, such rules and policies aim to reflect the diversity of IEA and stimulate development of its member societies.

The changes adopted during 1997-2000 included:

1. Amendment to IEA policy on the support of conferences in ergonomics (Triennial IEA Congresses, IEA Conferences, Joint Conferences, Approved Conferences, and Conference Endorsements), including finances, promotional support, and required procedures to enhance the value of these meeting to IEA members.
2. A new policy for IEA endorsement of variety of technical documents to ensure the merit and value of the IEA endorsed documents.
3. A new policy for IEA endorsement of scientific journals, which would provide for discounted subscriptions to members of the IEA societies, and distribution of free copies of endorsed journals to the IEA distribution centres located in developing countries.

IEA TRIENNIAL CONGRESSES

IEA CONGRESS 1997

The IEA '97 Congress held in Tampere, Finland attracted more participants than ever with a total of 1600 professionals and students from 59 countries. The size of the Congress can be judged from some statistics. There were 20 parallel sessions, 21 keynote speakers, 20 symposia, 73 special sessions and 259 regular sessions (293 chairs, 1582 presentations with 1178 oral presentations and 404 posters).

The special sessions proved to be especially fruitful. The technical groups of the IEA, encouraged and coordinated by the Chair of the Science and Technology Committee, Prof. Holger Luczak, coordinated well with the local program committee chaired by Dr. Pentti Seppälä of the Nordic Ergonomics Society.

An essential part of IEA '97 successful promotion was the Internet. There were over 22 000 visits to the IEA '97 home page and many of abstracts and registrations were received through the Internet.

The IEA '97 Congress Technical Program listed a total of 233 sessions, each with about 5-6 papers.

PUT IN THE BOX

Most popular sessions and topics of the iEA 1997 Congress

| No | % | Topic |
|----|----|--|
| 42 | 18 | Organizational design/management and manufacturing |
| 29 | 12 | Designing and standards |
| 26 | 11 | Musculoskeletal disorders |
| 15 | 6 | Ageing |
| 12 | 5 | Occupational safety |
| 12 | 5 | Complex systems |
| 12 | 5 | Traffic / transportation |
| 12 | 5 | Occupational fields |
| 11 | 5 | Rehabilitation. |

A special *Student Program* was organized with the main objective to teach the students how to find and acquire the knowledge and ideas from the scientific congress, and learn how to present his/her own study. The primary target group were graduate and postgraduate students. The number of students who participated was 83. There were also 9 tutors, one coordinator and one program assistant. In general, the students were very satisfied with this new program. The perceived benefits included the possibility to meet various presenters well in advance of their presentation times, and discuss with them specific issues and problems of interest, especially in case of the first-time attendees.

IEA Congress 2000

The 14-th Triennial Congress of the International Ergonomics Association is being held in conjunction with the Human Factors and Ergonomics Society's 44th Annual Meeting. The Congress is scheduled for July 30 through August 4 in San Diego, California at the Marriott Hotel on the downtown San Diego waterfront. The official theme of the Congress is "Ergonomics for the New Millennium".

The IEA 2000/HFES 2000 Congress is the fourteenth triennial gathering of an international audience composed of human factors/ergonomics professionals from around the world. Represented are 37 IEA

Federated and Affiliated societies representing more than 50 countries. It is by far the largest ergonomics conference ever held. Over 2200 presentations are scheduled. A special feature is the 33 international symposia of from two to eight sessions each. These symposia cover research and applications of ergonomics in a broad spectrum of industries and topic areas. They should prove highly useful to practitioners as well as researchers. Another special feature is the inclusion of 24 plenary speakers who are leading experts in their respective areas of specialization. The plenary speakers are also scheduled to meet informally during box lunch seminars for students and others who wish to attend. The topics and speakers selected for the plenary talks were suggested by the Congress International Scientific Advisory Board of over 80 distinguished ergonomists from around the world. In addition to a half-day grand opening session and 12 plenary sessions, 388 parallel sessions and 9 half-day poster sessions of approximately 40 posters each are scheduled.

A unique feature of this Congress is the 21 technical area informal meetings/receptions during the late afternoon on Tuesday and Wednesday of the Congress week. These social gatherings were organized by the HFES Technical Groups. They are an exceptional opportunity for ergonomists from around the world having similar professional interests to meet and network.

Twenty-four full and half-day professional development workshops also were scheduled. Continuing education credits are provided through Rice University. Many of these workshops are held on the weekend immediately prior to the Congress. A few are held during the congress.

A World Wide Web site was established early on for the Congress and was updated regularly. Electronic forms for submitting abstracts, registering for the meeting, and reserving accommodations were provided. The full schedule for the Congress also was posted so attendees could plan on what to attend in advance.

A major goal for the congress was to encourage participation and attendance by our colleagues in Central and South America. That goal influenced the location of the venue adjacent to Mexico. One outcome of this effort was that Brazil had more submissions to the Congress than any other Country outside of the US.

A special edition in English of Wojciech Jastrzebowski's classic 1857 paper, 'An Outline of Ergonomics or the Science of Work' is provided to each Congress participant as a commemorative gift prepared for the Congress by the Central Institute of Labour Protection in Warsaw, Poland in cooperation with Congress Organizing Committee.

In addition to electronic submission of proposals, another first for this Congress is publication of the proceedings on compact disk. The proceedings also are available in hard copy for those wishing to purchase them.

Special arrangements for economical housing for students and participants from industrially developing countries are provided at the University of San Diego.

The organizational structure for the Congress consisted of an Organizing Committee, IEA Scientific Program Committee, HFES Technical Program Committee, a Host Committee, International Scientific Advisory Board, International Scientific Advisory Committee, the HFES Central Office staff, and Prestige Accommodations, our professional conference organizer.

Those aspects of the technical program that were identical to a typical HFES Annual Meeting were handled by the HFES Technical Program Committee which was assisted 21 HFES Technical Groups and IEA Technical Committees. Approximately 2/3rds of the technical program was handled by this group, including single session symposia, panel sessions, paper sessions, colloquia, demonstrations, poster sessions and workshops. The remainder of technical program was handled by the IEA Scientific Program Committee, which organized 33 multi-session symposia, 24 plenary speakers, and the noontime box lunch seminars.

A number of pre- and post-conference tours were arranged by the professional conference organizer, Prestige Accommodations.

San Diego offers an exceptional vacation venue for the families accompanying Congress attendees. In addition to its Mediterranean-style climate, beautiful seaside location, the San Diego Zoo, Sea World, numerous cultural activities, and outstanding restaurants, Congress participants and families could visit Mexico, only 30 minutes away.

Next IEA Congress 2003 *ASK FOR SPECIFIC DATES*

Seoul, Korea



The XVth Triennial Congress of the International Ergonomics Association will be held in Seoul, Korea in 2003. The Congress will offer the exciting opportunity to discover the wonder of Korean tradition and culture. Referred to as the hub of Korean politics and economy, Seoul is international city and yet uniquely Korean as well. It has a successful blend of tradition, keeping her a 5,000-year-old history with the cutting edge in technological and economic progress, which makes Seoul an exciting international city and popular tourist destination.

Proposals for paper presentations, panel sessions, multiple-session international symposia, demonstrations, single-session symposia, poster sessions, debates, research/review/case study papers, colloquia, and workshops are welcomed. The deadline for abstracts will be announced later. Contributions are invited in any of the subject areas listed below or in other related areas.

Paper submissions are invited in all areas of ergonomics, including – but not limited to – the following topics:

| | |
|---|----------------------------------|
| ? Advanced manufacturing | ? Information technology |
| ? Aerospace systems | ? Learning organizations |
| ? Aging and gerontechnology | ? Macroergonomics |
| ? Biomechanics | ? Materials handling |
| ? Cognitive ergonomics | ? Medical systems |
| ? Communications | ? Mobile networking |
| ? Community ergonomics | ? Musculoskeletal disorders |
| ? Computer-aided ergonomics and safety | ? Nuclear Power Plant Design |
| ? Consumer products | ? Participatory ergonomics |
| ? Cost-effective ergonomics | ? Power systems |
| ? Cultural ergonomics | ? Professional standards |
| ? E-business & Internet | ? Psychophysiology in ergonomics |
| ? Ecological ergonomics | ? Rehabilitation ergonomics |
| ? Education and qualification of agronomists | ? Research, test and evaluation |
| ? Ergonomics and the Internet | ? Safety and accident prevention |
| ? Ergonomics quality | ? Standardization |
| ? Forensics | ? Stress and mental load |
| ? Human-computer interaction | ? System development |
| ? Individual differences in performance | ? Technology transfer |
| ? Industrial ergonomics and design | ? Theories and methodologies |
| ? Industrially developing countries | ? Training and training systems |
| ? Industries and applications, including: aerospace, agriculture and food, building and construction, forestry, hospital and health care | ? Transportation and traffic |
| military, mining, and office. | ? Universal design |
| ? Occupational well-being, health and safety | ? Virtual environments |
| ? Organizational change and development | ? Visual performance |
| ? Organizational design and management | ? Work psychodynamics |
| | ? Work Physiology |
| | ? Special issues |

Please send all inquires to:

Secretariat of IEA 2003

#37-12, 6F, Nonhyun Bldg.
Jamwon-dong, Seocho-gu
Seoul, Korea 137-030
Tel) 82-2-3446-2451
Fax) 82-2-3446-2465
E-mail: papers@iea2003.org

PART III. AWARDS OF THE INTERNATIONAL ERGONOMICS ASSOCIATION

Categories of IEA Awards

The objective of the IEA Awards is to provide formal recognition to individuals who have made outstanding contributions to the field of ergonomics on an international level. The immediate Past President of IEA serves as Chair of the Awards Committee.

More detailed information can be found on the IEA web page: <http://ergonomics-iea.org>.

The IEA awards are:

1. IEA Distinguished Service Award
2. IEA Founders Award
3. IEA Outstanding Educators Award
4. IEA Ergonomics of Technology Transfer Award
5. IEA Ergonomics Development Award
6. IEA President's Award
7. The Liberty Mutual Prize and Medal in Ergonomics and Occupational Safety
8. K.U. Smith Student Award
9. IEA Fellow Award

Recipients for the first five awards following are selected by the Awards Committee based upon nominations from federated Societies. Recipients for the IEA President's Award are nominated either by IEA Council or by the IEA Executive Committee: final approval for this award rests with the IEA President. Recipients for the K.U. Smith Student Award are 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 given during the IEA Triennial Congress.

DESCRIPTION OF IEA AWARDS CURRENT DURING 1997- 2000

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. In 1997 it was given to Past President Dr. Hal Hendrick, USA.

IEA Founders Award

The IEA Founders Award is presented to persons who were highly influential in founding either of IEA or of an IEA Member Society. In 1997 the recipient was Dr W. Floyd, U.K.

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:

1. Developed ergonomics education programs
2. Produced new methodology and/or materials for teaching ergonomics, or
3. Graduated persons who have become outstanding ergonomists

In 1997 this award was given to Dr. M.M. Ayoub, USA.

IEA Ergonomics of Technology Transfer Award

The IEA Ergonomics of Technology Transfer Award is presented to a person, persons or organization, which has:

1. Developed methodology for facilitating technology transfer
2. Developed effective ergonomic programs for technology transfer, or
3. Contributed significantly to the development of human-machine systems in developing countries

The award was in 1997 presented to Prof. Rabindra Sen, India.

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:

1. Significantly advances the state of the art of existing ergonomics sub-speciality, or
2. Opens up a new area of ergonomics research and/or application

This award was given in 1997 to Dr. David Meister, USA.

IEA Presidents Award

The IEA Presidents Award is presented to persons who have made outstanding contributions to ergonomics or the furtherance 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. In 1997, the recipient was Dr. Tom Leamon, USA.

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 further its objectives to encourage the development of the discipline, to foster scholarship and to 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 should be documented in a paper submitted to the IEA Congress.

In 1997 this award was given to Ms. L. Ritmiller, Penn State University, USA.

The IEA/Liberty Mutual Prize In Ergonomics And Occupational Safety

The IEA/Liberty Mutual Prize in Ergonomics and Occupational Safety was instituted in 1998. The award of US \$ 5,000 seeks to 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.

In addition, every three years, the IEA/Liberty Mutual Medal in Ergonomics and Occupational Safety, is given to the best of the three awardees during the last three years. This award consists of a medal and US\$ 15,000 and will be handed out for the first time at the congress in San Diego year 2000.

This prize provides an excellent vehicle for the IEA to promote ergonomics within private and public sectors, academia and the general public. We hope that it will stimulate other organizations to find similarly creative ways to express their support for the science of ergonomics.

The award of US \$ 5,000 seeks to 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.

To be considered for the Liberty Mutual Prize, the applicant must submit a letter of application and a research paper. The paper must be:

- An original report of laboratory, field, or intervention research
- Relevant to the field of occupational safety and ergonomics
- Non-proprietary
- Unpublished at the time of submission
- Thirty pages or fewer, single spaced.

Relevant disciplines include: ergonomics, epidemiology, biomechanics, cognitive and behavioral psychology, design, physiology, economics and optimization, etc.

The Liberty Mutual Medal in Ergonomics and Occupational Safety, is given to the best of the three awardees during the last three years. This award consists of a medal and US\$ 15,000.

The 1998 recipient was Dr. Andrew Imada, USA

The 1999 recipient was Dr. Shirley Ann Gibbs, Australia.

IEA Fellow Award

To be considered for IEA Fellw Award, two eligibility criteria must be satisfied: International Service and Membership in Society. In addition, a Fellow must, as ergonomics professional, 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.

1997 was the first time IEA Fellowships were bestowed. At this time all living Past Presidents of IEA received this honor.

Professor Bernard Metz, France (1970-1973)
 Professor F. Bonjer, The Netherlands (1973-1976)
 Professor Alphonse Chapanis, USA (1976-1979)
 Professor Sadao Sugiyama, Japan (1982-1985)
 Mr. Harry Davis, USA (1985-1988)
 Dr. Ilkka Kuorinka, Finland (1988-1991)
 Professor Hal Hendrick, USA (1994-1997)
 Professor Martin Helander, Sweden (1994-1997).

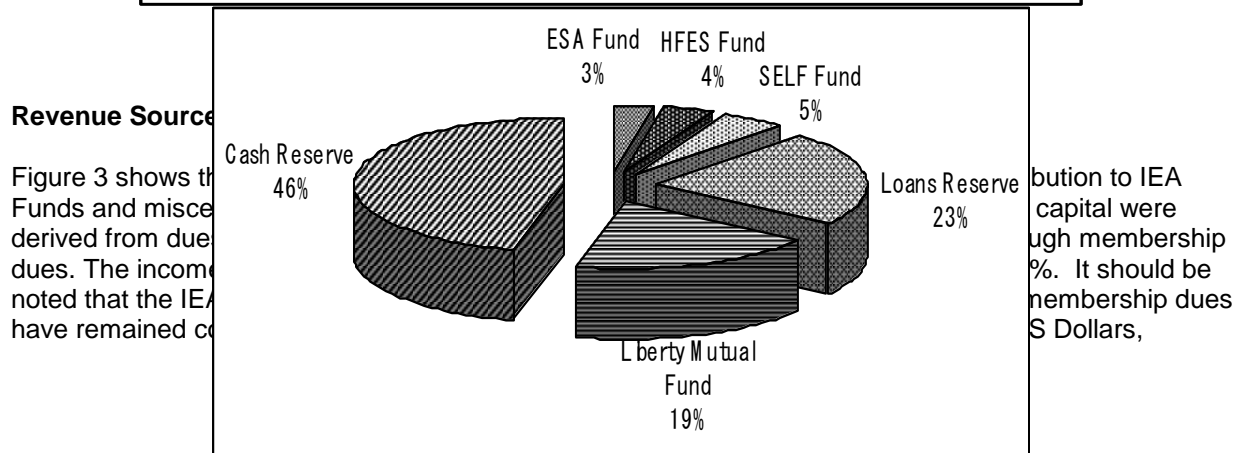
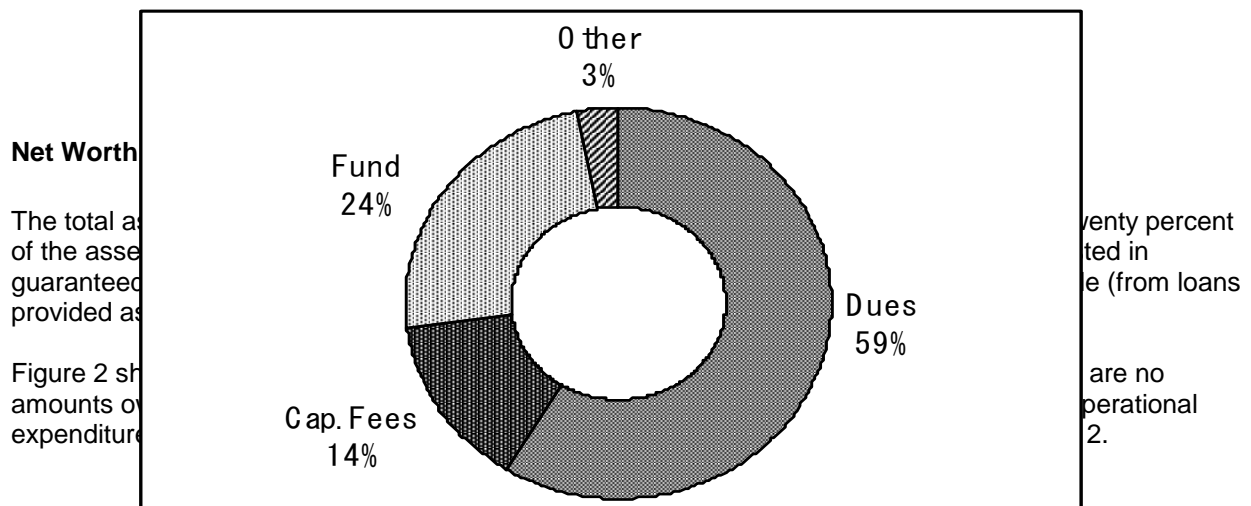
Plaques are awarded to individuals for substantial service to IEA.

Part IV. FINANCIAL REPORT

As a non-profit organization of ergonomics and human factors societies around the world, the IEA finances its activities by membership fees of its members, capitation fees, donations and other income. The IEA operates accounts in U.S. Dollars (USD). The fiscal year-end is December 31. Financial statements are prepared using the cash basis of accounting; i.e., revenues are recognized when received and expenses are recognized when paid. The balance sheet and the Statement of Operations for the report period are attached.

The growth of IEA equity components since 1984 is indicated in Figure 1. The total assets at the start of 1997 were equivalent to USD \$ 129,270. At the end of 1999, the total assets were equivalent to USD \$153,233. The total assets, however, include Funds which are created and used for specific purposes and are thus not expected to remain stable. The loans reserve of \$35,000 was established to ensure that adequate funds are available to provide seed money for conferences as approved by the Council from time to time. It should be noted that the amount of the assets is affected by changes in currency exchange rates.

The IEA's financial performance has been stable over the period. The financial health of the IEA is indicated by the Cash Reserve since this is the amount available for discretionary spending. The cash reserve at the start of 1997 was equivalent to USD \$55,925. At the end of 1999, the cash reserve was equivalent to USD \$70,070, keeping the similar level over the three year period. The cash reserve is sufficient for our current level of activity and it is normal for non-profit organizations to keep on hand a reserve equal to their annual budget. For planning more expanded activities and programs, however, new sources of revenues will have to be found.

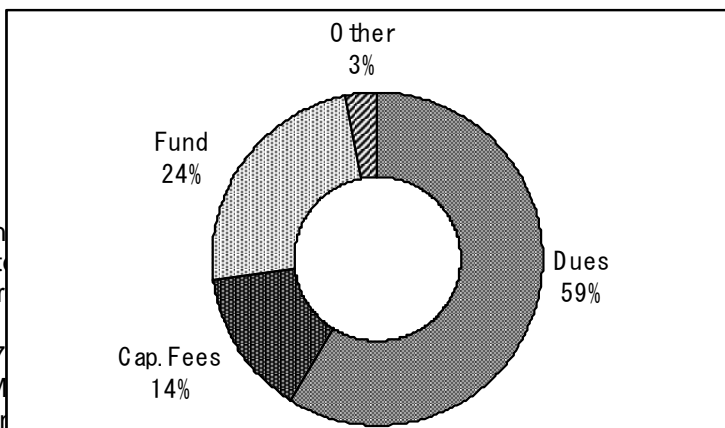


capitation fees and other sources have become increasingly important in defraying increased operating expenses.

Capitation fees

The new capitation schedule is expected to be adopted. The new period 1997-2000, capitation fees were

- IEA'97
- ODAM
- Human
- Psychophysiology in Ergonomics Conference \$353
- CybErg99 \$562



en adopted. The new period 1997-2000,

Operations

The main categories of expenditures included executive and administrative expenses, committee expenses, provision of grants, the publication of *Ergonomics International*, the printing of brochures, meeting costs, and miscellaneous other expenses. The expenditures for the three-year period amounted to USD \$151,541, on the average about USD \$50,500 per year. The executive expenses including travel costs and administrative expenditures accounted for 35% and the expenses by the committees accounted for 49%. The relative proportion spent in these main areas during the period 1997-2000 is depicted in Figure 4.

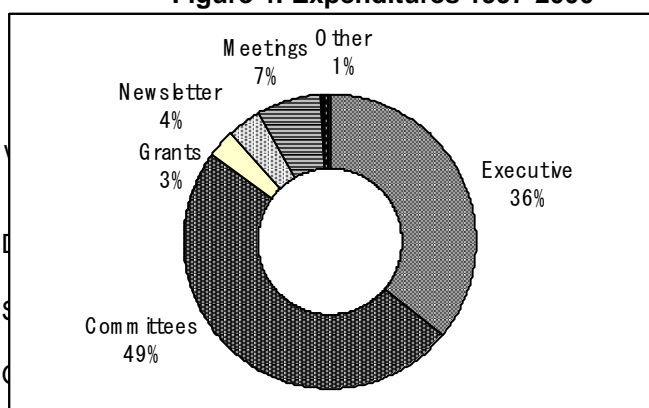
Figure 4: Expenditures 1997-2000

Grants

The following grants

Purpose

- ODAM'98 \$1,000



Funds Administered by the IEA

At the present time, the IEA manages four special funds. Three of these funds have been established from surplus income by societies that have hosted IEA Congresses. The ESA Fund for Southeast Asia, the HFES Fund for Ergonomics in Developing Countries and the SELF Fund are used to promote

ergonomics in industrially developing countries and to support the organization of conferences, seminars and meetings in these countries. The ACE Fund was closed during the period, with a small remaining amount transferred to the HFES Fund. The fourth fund, the Liberty Mutual Fund, has been created for operating the Liberty Mutual Prizes accorded to individuals for an original activity leading to a better understanding of preventing or mitigating occupational accidents. It is expected that more funds will be created in the future. A policy was established for the creation and management of funds which ensures that funds will be managed in accordance with the wishes of the organizations that have created the funds.

Bequests and Endowments

The policy regarding bequests and endowments has been created to facilitate this form of fund raising. Individuals who wish to donate to a discipline that has given them the opportunity to make a meaningful contribution to society through their teaching, research, and practice can consider making general or specific gifts to the IEA. No tax receipts are available at the present time since the IEA is not registered as a charity in any country. Such gifts will help the IEA to develop professional societies in new regions, promote educational programs in industrially developing countries, participate in the activities of UN organizations, harmonize professional standards for certification, develop strategic directions for the discipline, facilitate the exchange of scientific and technical information and promote international collaboration.

Sustaining Memberships

There are three categories of sustaining membership established for international corporations. These are Gold Level, Platinum Level and Diamond Level. The Bureau of Hungarian Council of Industrial Design and Ergonomics is a Gold member. The Japanese Research Institute of Human Engineering for Quality Life (HQL) contributes to the IEA as a Platinum member. Efforts are being made to increase the number of sustaining members as their support is vital for extending the IEA activities.

| BALANCE SHEET COMPARISON FOR 1997, 1998 AND 1999 | | | |
|---|-----------------|-----------------|-----------------|
| | 1999 | 1998 | 1997 |
| | Total \$ | Total \$ | Total \$ |
| ASSETS | | | |
| Current Assets | | | |
| Cash Accounts | 31,229 | 35,961 | 38,550 |
| Term Deposits | 114,969 | 79,015 | 79,505 |
| Seed Funds Receivable | 7,035 | 13,035 | 12,035 |
| Total | 153,233 | 128,011 | 130,090 |
| EQUITY | | | |
| ESA Fund for South East Asia | 4,968 | 4,825 | 4,957 |
| HFES Fund for Erg. In IDCs | 6,467 | 5,081 | 5,733 |
| SELF Fund | 7,727 | 7,505 | 8,178 |
| Loans Reserve | 35,000 | 35,000 | 35,000 |
| ACE Fund | - | - | 119 |
| Liberty Mutual Fund | 29,001 | 21,603 | 15,000 |
| Cash Reserve | 70,070 | 53,997 | 61,102 |
| Total | 153,233 | 128,011 | 130,089 |
| State of Operations | | | |
| Comparison for 1997, 1998 and 1999 | | | |
| | 1999 | 1998 | 1997 |
| | Total \$ | Total \$ | Total \$ |
| REVENUE | | | |
| Membership Dues | 35,042 | 36,447 | 40,541 |
| Capitation Fees | - | - | 26,195 |
| Interest | 1,940 | 2,853 | 153 |
| Contribution towards HFES Fund | 1,236 | - | 1,459 |
| Contribution towards Liberty Mutual Fund | 15,000 | 15,000 | 15,000 |
| Miscellaneous | 83 | 305 | 92 |
| Total | 53,301 | 54,605 | 83,440 |
| EXPENDITURES | | | |
| Executive & Administrative Expenses | | | |
| Office-related expenses | 2,190 | 3,547 | 11,370 |
| Travel | 10,486 | 9,275 | 9,238 |
| Clerical | 2,250 | 4,400 | 1,095 |
| Committees | | | |
| Awards | 8,437 | 8,997 | 5,165 |
| Policy and Development | 1,664 | 1,678 | 4,954 |
| Futures Task Force | - | - | 3,522 |
| Science and Technology | 1,120 | 3,913 | 2,367 |
| Professional Practice and Training | 1,954 | 5,295 | 6,521 |
| Industrially Developing Countries | 1,648 | 1,171 | 6,307 |
| Promotion and Publication | 1,680 | 3,776 | 4,721 |
| Newsletter | 1,161 | 3,923 | 1,694 |
| Meeting costs | 4,048 | 3,252 | 3,307 |
| Fees and bank charges | 475 | 497 | 443 |
| Grants | - | 2,000 | 2,000 |
| Total | 37,113 | 51,724 | 62,704 |
| OPERATING SURPLUS (DEFICIT) | 16,188 | 2,881 | 20,735 |

PART V. IEA FUNDS

The IEA is pursuing ways to promote ergonomics in industrially developing countries (IDC's) as a matter of priority. Recent accomplishments include preparation, jointly with the International Labour Organization (ILO), of the book, *Ergonomics Checkpoints*, organization of local conferences, provision of grants to various groups and individuals, and the organization of roving seminars involving IEA experts/lecturers. The IEA Funds described here represent an important element of the program of knowledge transfer to industrially developing countries.

Purpose of the IEA Funds

The IEA manages a number of Funds, which have been established through donations from individuals, member societies and other organizations. These funds help promote ergonomics training and practice in industrially developing countries by providing seed money for local conferences, subsidizing special projects, awarding scholarships and supporting other activities. Different Funds have different objectives and criteria as described herein.

Applications

Applications for grants should be sent to the IEA Treasurer (address below) and include the following information:

- objective of the event
- program description
- expected audience
- qualifications of organizers of event
- organization structure and milestones
- detailed budget
- estimate of financial needs and status of applications to other funding sources

Contributions

Individuals or organizations wishing to create or contribute to an IEA Fund are urged to contact the IEA Treasurer for additional information.

DESCRIPTION OF IEA FUNDS AND RELATED PROGRAMS

ESA FUND FOR SOUTHEAST ASIA

This fund promotes ergonomics in IDC's, primarily in Southeast Asia.

Created by the Ergonomics Society of Australia in 1988, this Fund provides grants and seed funds to eligible societies or groups. This Fund has supported roving seminars in Southeast Asia.

SELF FUND

This fund supports the organization of conferences, seminars and meetings in ergonomically less underdeveloped areas such as Africa and South America.

This Fund was created by the Societe d'Ergonomie de Langue Francaise in 1993. It provides grants and seed funds to societies or groups. This Fund has supported local conferences in Southeast Asia and has helped provide travel grants to participants of the IEA 1994 Congres.

HFES FUND

This fund promotes ergonomics in IDC's.

Established in 1992, this Fund is maintained through annual voluntary contributions from members of the Human Factors and Ergonomics Society. This Fund has supported roving seminars.

PART VI. SUSTAINING MEMBERSHIP

IEA is a non-profit organization based on volunteer work. Currently about 250 individuals, all distinguished professionals from all parts of the world, participate in realizing the goals of IEA. The international network is extensive and keeps expanding. No funds are wasted since there are no salaries to employees or organizational overhead expenses. This implies that 100% of IEA funds support the chosen mission.

SUSTAINING MEMBERSHIP FUNDS

The funds support the work of IEA:

1. IEA reaches out to countries where ergonomics is not well known and represented. It is important that professional associations be created, since they organize ergonomist and support future work.
2. IEA is also helping educational programs in industrially developing countries by sending textbooks and journals.
3. IEA is an accredited Non-Governmental Association (NGO) of United Nations, and provides input to the various organizations of UN to inspire the use of ergonomics methodology, for example in assessing the usability of computer systems, to examine the prevalence of occupational injuries and accidents and how they can be prevented, and to improve effectiveness and safety in process control.
4. IEA aims to harmonize professional standards for *Minimum Criteria for the Process of Certification of an Ergonomist* and *Accreditation of Teaching Programs*. Such worldwide coordination is extremely important to enhance the professional standing of ergonomist and human factors professionals.
5. IEA organizes a triennial Congress and in addition sponsors several international conferences every year.
6. IEA stimulates an international debate and understanding of new developments in the field. IEA strives to be at the forefront of technological development, and assess the appropriateness of technology in its organizational and cultural environment.

Levels of Support for International Corporations.

There are three levels of support, and each level offers several benefits. The membership fee is paid yearly.

Gold level / US \$ 1,000

Benefits:

1. Complementary subscription to *IEA International*
2. Listings in printed IEA Directories as well as World wide web listings.
3. Sustaining Member Plaque with company name inscribed

Platinum Level / US \$ 5,000

Benefits:

1. All benefits at the Gold level.
2. Official listings in the programs of IEA Congresses and Conferences.
3. Two complementary registration fees for the forthcoming IEA Congress
4. Company logo on IEA home page with active links

Diamond Level / US \$ 10,000

Benefits:

1. All benefits at the Platinum level
2. Free space at exhibitions organized at IEA congresses, subject to approval by congress organizer
3. Access to the IEA International Data Bank of Individuals in Ergonomics.
4. Exposure of company logo at IEA conferences and congresses
5. Other benefits such as a speech by an IEA officer can be negotiated

Individual Sustaining Member

Individuals can support IEA activities by becoming Sustaining members. There is only one class of membership.

Individual IEA Sustaining Member / US \$ 200

Benefits:

- * Complementary Subscription of *Ergonomics International*
- * Listing in IEA directories.
- * Sustaining Member Plaque with name inscribed.

PART VII. BEQUESTS

The International Ergonomics Association, as a federation of societies, is dedicated to the advancement of the discipline of ergonomics and human factors. The mandate of the IEA is to promote the knowledge and practice of ergonomics by initiating and supporting a wide variety of international activities and cooperative programs. Because no remuneration is paid to the members of the IEA Executive Committee or its many working committees, all donations are used to support various IEA initiatives and programs.

Additional information about the IEA and its programs can be obtained by contacting Secretary-General of IEA

The Purpose of Bequests

Gifts, such as bequests, have greatly benefited the development of disciplines such as engineering and medicine. In recent years, there has been an increase in the number of individuals who have expressed an interest in making a bequest for ergonomics. Benefactors wish to donate to a discipline that has enriched their lives and given them the opportunity to make a meaningful contribution to society through their teaching, research, and practice.

There are essentially two types of bequest: general and specific. The general bequest permits the IEA to pursue initiatives that will further its fundamental objectives of increasing the body of ergonomics-related knowledge, promoting the teaching and practice of ergonomics, and sponsoring international activities. Specific bequests are used to support ergonomics-related programs in industrially developing countries,, promote particular branches of the discipline, and provide scholarships and prizes to stimulate research and recognize significant achievements in the field.

Individuals or organizations who wish to support the IEA through other means, such as sustaining membership or donations, should contact the IEA Treasurer for information.

Making a Bequest

Making a bequest to the IEA is not difficult. If you have named the IEA in your will or are contemplating giving this type of gift, suggested wording for making your bequest is provided below. Since countries have different legal traditions, donors are urged to obtain legal advice when naming the IEA as a beneficiary and to contact the IEA Treasurer to ensure their wishes can be properly carried out. Members of IEA Federated societies may wish to direct their bequest to their national society

Donors

Individuals may also make financial gifts to the IEA during their lifetime. Annual donations entitle individuals to be listed in the IEA brochure and other material. Like bequests, donations may also be general or specific. Financial support helps the IEA to develop professional societies in new regions, promote educational programs in industrially developing countries, participate in UN organizations, harmonize professional standards for certification, develop strategic directions for the discipline and facilitate the exchange of scientific and technical information and promote international collaboration.

Example of a General Bequest

I give and bequeath to the International Ergonomics Association (IEA) the sum of ____dollars (or x% of my estate), to be used for the purposes and benefit of the Association in such manner as the Executive Committee may decide.

Example of a Specific Bequest

I give and bequeath to the International Ergonomics Association (IEA) the sum of _____ dollars (or x% of my estate), to be used for the purposes of _____.

If, in the opinion of the Executive Committee, it is at any time impractical or inadvisable to use the said sum for the purposes specified above, the sum may be used for the purposes and benefit of the Association in such manner as the Executive Committee may decide.

INQUIRIES

For more information regarding IEA activities, please contact the Secretary General.

INVITATION TO PARTICIPATE IN THE IEA ACTIVITIES

The IEA is constantly in search of volunteers/leaders for new and existing committees. If you are interested in contributing actively to an existing committee or would like to initiate a new activity please let us know of your interests. Similarly, if you are aware of individuals in your society who are willing and able to serve the international ergonomics community contact me or another Executive member. Service at the international level is rewarding and meaningful.

APPENDIX I. IEA STRATEGIC PLAN

Purpose

The IEA Strategic Plan is a living document that aims to guide the IEA in establishing new initiatives and priorities for action. The current plan reflects many of the ideas generated during the focus groups held during the Cape Town 1999 Council meeting, and the extensive consultations with the IEA Council in 1999 and 2000.

IEA Mission Statement

The International Ergonomics Association is the federation of ergonomics and human factors societies around the world. Working closely with its constituent societies and related international organizations, its mission is to elaborate and advance ergonomics science and practice, and to expand its scope of application and contribution to society to improve the quality of life.

IEA GOALS

GOALS: THE FOLLOWING PRINCIPAL GOALS REFLECT THE IEA MISSION

- A. To develop more effective communication and collaboration with federated societies**
- B. To advance the science and practice of ergonomics at an international level**
- C. To enhance the contribution of the ergonomics discipline to global society**

A. GOAL: TO DEVELOP MORE EFFECTIVE COMMUNICATION AND COLLABORATION WITH FEDERATED SOCIETIES

OBJECTIVE: A1. Support The Work Of Member Societies

Strategies:

1. Facilitate visibility of each member society through the IEA home page and other means of communication
2. Facilitate joint events between member societies where this will not conflict with the operations of these societies
3. Support member societies in taking proactive and reactive positions on major public issues and in their use of the media
4. Support member societies to disseminate ergonomics knowledge at various levels
5. Support participation of the industrially developing countries in IEA activities (e.g., support for travel to conferences)
6. Support the continuing growth of ergonomics in industrially developing countries by training and education {IDC}
7. Provide industrially developing countries with ergonomics knowledge by stimulating the existing IEA mechanisms (e.g. book fund, expert consultants)
8. Show best practices in order to stimulate the growth of ergonomics

OBJECTIVE: A2. Improve IEA Operational Effectiveness

Strategies:

1. Develop mechanisms for effectively involving member societies in IEA activities (e.g. possibilities for strategic discussions)
2. Improve communication with member societies (e.g. through consultation, exchange of action plans and soliciting feedback)
3. Facilitate the exchange of views and experiences among the leaders of member societies (e.g., through workshops, sessions, special interest groups)
4. Initiate campaign to increase the numbers of sustaining IEA members where this will not conflict with the operations of member societies
5. Increase revenues from donations, endowments and funds where this will not conflict with the operations of member societies (e.g. from international bodies)

B. GOAL: TO ADVANCE THE SCIENCE AND PRACTICE OF ERGONOMICS AT AN INTERNATIONAL LEVEL

OBJECTIVE: B1. Stimulate Development And Acceptance OF Ergonomics

Strategies:

1. Define and clarify the field of ergonomics
2. Elaborate and promote the benefits of ergonomics to improve the quality of life for individuals, organizations and society
3. Identify and elaborate cultural and economic differences on ergonomic design
4. Identify future needs for development of ergonomics (e.g. through the Technical Committees of the Science & Technology Committee)

OBJECTIVE: B2. Facilitate Knowledge Exchange And Collaboration

Strategies:

1. Support and promote specialized conferences and workshops in collaboration with member societies.
2. Provide appropriate support of regional groups in ergonomics (e.g. FEES) where this will not conflict with the operations of member societies.
3. Promote IEA publications suited to knowledge dissemination by IEA

OBJECTIVE: B3. Enhance The Quality Of Professional Practice And Education In Ergonomics

Strategies:

1. Continue to promote a broad view of ergonomics and its aims
2. Consider development of procedures for the IEA endorsements of various activities, in particular journals and books
3. Develop international professional standards and guidelines and promote best practices in ergonomics (code of ethics, code of professional practice, etc.)
4. Encourage educational institutions to offer ergonomics programs consistent with "IEA Core Competencies for Practitioners in Ergonomics" criteria
5. Promote sharing of quality ergonomics education programs available on the Internet through the IEA home page

6. Develop IEA guidelines for accreditation of ergonomics educational programs
7. Maintain the IEA Criteria for Endorsement of Certifying Bodies and implement a system for such endorsement
8. Maintain the IEA Core Competencies for Practitioners in ergonomics
9. Maintain and disseminate IEA minimum criteria for the process of certification of an ergonomist

C. GOAL: TO ENHANCE THE CONTRIBUTION OF THE ERGONOMICS DISCIPLINE TO GLOBAL SOCIETY

OBJECTIVE: C1. Promote Recognition Of Ergonomics Discipline

Strategies:

1. Identify specific areas where greater international exchange of information is needed, and develop appropriate means for dialogue
2. Promote ergonomics in geographical regions where particular support is needed
3. Increase public awareness of the benefits of ergonomics through mass media communications
4. Provide information about ergonomics/IEA for listing in international directories and reference publications
5. Expand and strengthen links with other international bodies and form alliances with affiliated societies in the related fields (e.g., industrial design and engineering, psychology, safety, health care, economics)
6. Expand IEA prizes to reward and publicize ergonomics innovations
7. Develop more effective use of IEA conferences to promote added value of ergonomics to society

OBJECTIVE: C2. Promote Applications of Ergonomics in All Aspects of Life

Strategies:

1. Promote ergonomics as a means to improve the quality of human life, work effectiveness and economic benefits
2. Mobilize ergonomics profession to address major global challenges
1. Promote collaboration in ergonomics projects among government and international bodies
2. Stimulate the involvement of ergonomics in the emerging fields of application (e.g. management sciences and mass communication).

APPENDIX II: IEA Executive Committee (1997-2000)

(pictures on the left)

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APPENDIX III

Past Officers of The International Ergonomics Association

The following individuals served as elected Officers of the International Ergonomics Association:

| | |
|---------------------|--------------------------|
| 1961-1964: | |
| President | S. Forssman |
| Secretary-Treasurer | E. Grandjean |
| 1964-1967: | |
| President | G. Lehman |
| Secretary-Treasurer | E. Grandjean |
| 1967-1970: | |
| President | P. Ruffell-Smith |
| Secretary General | E. Grandjean |
| Treasurer | A. Wisner |
| 1970-1973: | |
| President | B. Metz |
| Secretary General | F. Bonjer |
| Treasurer | A. Wisner |
| 1973-1976: | |
| President | F. Bonjer |
| Secretary General | R. Sell |
| Treasurer | J. de Jong |
| 1976-1979: | |
| President | A. Chapanis |
| Secretary General | R. Sell |
| Treasurer | H. Scholz |
| 1979-1982: | |
| President | J. Rosner |
| Secretary General | H. Davis |
| Treasurer | H. Scholz |
| 1982-1985: | |
| President | S. Sugiyama |
| Secretary General | H. Davis |
| Treasurer | J. Rutenfranz/B. Shackel |
| 1985-1988: | |
| President | H. Davis |
| Secretary General | I. Kuorinka |
| Treasurer | B. Shackel |
| 1988 -1991: | |
| President | I. Kuorinka |
| Secretary General | H. Hendrick |
| Treasurer | B. Shackel |
| 1991-1994: | |
| President | H. Hendrick |
| Secretary General | P. Rookmaaker |
| Treasurer | I. Noy |
| 1994-1997: | |
| President | M. Helander |

| | |
|-------------------|---------------|
| Secretary General | P. Rookmaaker |
| Treasurer | I. Noy |

| | |
|-------------------|--------------|
| 1997- 2000: | |
| President | I. Noy |
| Secretary General | W. Karwowski |
| Treasurer | K. Kogi |

Past Recipients of the IEA Awards

IEA Distinguished Service Award:

| | |
|-------|-------------------------------------|
| 1982: | A. Chapanis, E. Grandjean |
| 1985: | M. Oshima, A. Wisner |
| 1988: | P. Davis, N. Lundgren, W. Singleton |
| 1991: | J. Rosner |
| 1994: | H. Davis |
| 1997: | H. Hendrick |

IEA Founders Award

| | |
|-------|-------------|
| 1991: | J. Scherrer |
| 1994: | K.U. Smith |
| 1997: | W. Floyd |

IEA Outstanding Educators Award:

| | |
|-------|--------------|
| 1991: | E.N. Corlett |
| 1994: | W. Rohmert |
| 1997: | M. M. Ayoub |

IEA Ergonomics of Technology Transfer Award:

| | |
|-------|--------------|
| 1991: | A. Wisner |
| 1994: | H. Shahnavaz |
| 1997: | R. Sen |

IEA Ergonomics Development Award:

| | |
|-------|------------|
| 1991: | K. Kogi |
| 1994: | J. Leplat |
| 1997: | D. Meister |

IEA President's Award

| | |
|-------|-----------|
| 1997: | T. Leamon |
|-------|-----------|

K.U. Smith Student Award

| | |
|-------|--------------|
| 1997: | L. Ritmiller |
|-------|--------------|

Past IEA Triennial Congresses

The International Ergonomics Association has held fourteen Triennial Congresses as follows:

1961 Stockholm, Sweden
1964 Dortmund, Germany
1967 Birmingham, United Kingdom
1970 Strasbourg, France
1973 Amsterdam, The Netherlands
1976 College Park, USA
1979 Warsaw, Poland
1982 Tokyo, Japan
1985 Bournemouth, United Kingdom
1988 Sydney, Australia
1991 Paris, France
1994 Toronto, Canada
1997 Tampere, Finland
2000 San Diego, USA

The Fifteenth and Sixteenth Triennial Congresses of the International Ergonomics Association are scheduled as follows:

2003 Seoul, Republic of Korea
2006 Maastricht, The Netherlands

Past Meetings of the Council

The IEA Council has held meetings annually as follows:

1964 Dortmund, Germany
1965 Paris, France
1967 Birmingham, United Kingdom
1967 Brighton, United Kingdom
1969 Noordwijk, The Netherlands
1970 Strasbourg, France
1971 Brussels, Belgium
1972 Schipol, The Netherlands
1973 Amsterdam, The Netherlands
1974 Amsterdam, The Netherlands
1975 Dortmund, Germany
1976 College Park, USA
1977 Hayes, USA
1978 Luxemburg and Munich, Germany
1979 Warsaw, Poland
1980 Bournemouth, United Kingdom
1981 Richester, USA
1982 Tokyo, Japan
1983 Turin, Italy
1984 Toronto, Canada
1985 Bournemouth, United Kingdom
1986 Vancouver, Canada
1987 Stuttgart, Germany
1988 Sydney, Australia
1989 Noordwijk, The Netherlands
1990 Kyoto, Japan
1991 Paris, France
1992 Berlin, Germany

1993 Warsaw, Poland
1994 Toronto, Canada
1995 Rio de Janeiro, Brazil
1996 Breckenridge, CO, USA
1997 Tampere, Finland
1998 Cape Town, South Africa
1999 Santorini, Greece
2000 San Diego, USA

Recent IEA Executive Committee Mid-year Meetings:

1997 Kuala Lumpur, Malaysia
1998 London, United Kingdom
1999 Barcelona, Spain
2000 Canary Islands, Spain

PICTURES HERE from different meetings

REFERENCES

The International Ergonomics Association (1959). *Ergonomics*, 2(4), 400.

Bonjer, F.H. et al (1958). *Fitting the job to the worker: Report on the mission to the United States, 1956 (EPA Project 335, 1st phase)*. Paris: EPA/OEEC.

Burger, G.C.E. (1958). *Fitting the Job to the Worker: Report on the Leiden Seminar, 1957 (EPA Project 335, 2nd phase)*. Paris: EPA/OEEC.

LeCoultrre, D. (1985). *Ergonomics and the European Productivity Agency: A historical note*. *Ergonomics International*, 28(8), 1009-1011.

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