



2009-2012

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## **President's Address**

# Andrew S. Imada, President



Serving as the 17<sup>th</sup> President of the IEA has been a richly rewarding and humbling experience. This provided a unique opportunity to see the discipline of human factors and ergonomics from a different scale. It is awe-inspiring to know how much we contribute to this world through our science and practice. The earthquake in Christchurch, New Zealand and the tsunami and subsequent nuclear events at the Fukushima facility in Japan served as good examples during this executive's term for the needs we can fulfil and the work that has to be done. At the same time, it is encouraging to see the kind of work that people are doing and the progress that we are making in improving our world and contributing to a better human condition. This position has provided a good vantage point to see the massive needs and impressive progress. Having the luxury of visiting federated societies, participating in many conferences and meeting many great people has given me a different appreciation of who and what our field is about.

What has been most striking is the quality of people in our field and their dedication to their national ergonomics societies and the IEA. The current executive committee – Eric Wang, Klaus Zink, Ralph Bruder, Yushi Fujita, Karen Jacobs, Barbara Silverstein, David Caple and Marcelo Soares – are great role models of skilled and generous professionals. Their responsiveness to tasks and hard work are inspiring. I appreciate David Caple's sage and reliable advice. His calm experienced hand had positive effects on our team. I also benefited from many of the past presidents who shared their wisdom about matters both general and specific. I am particularly grateful for the current leadership's generosity with their talent, time and treasure. The generosity of these leaders, their employers and their families becomes clearer when you realize that the officers and several subcommittee chairs took care of their own travel expenses during the entire term. This allows the lion's share of expenditures to be spent by the Standing Committees where most of the IEA's work is done.

I am particularly pleased with five accomplishments during this executive term. First, the Future of Ergonomics White Paper represents an important first step for IEA to take a strategic stance in addressing our field moving forward. We are deeply indebted to Jan Dul for his role in leading a talented team and a wide range of professionals through a participatory process that now gives us a unique perspective of our future. Second, the lighthouse project we began, demonstrates the value of ergonomics, particularly in Industrially Developing Countries (IDCs). IEA's collaboration with industry and university partners, Nicaraguan farmers and workers provides a framework for moving forward to create greater visibility and to practice our discipline. Key individuals have helped to procure funding for this and another worthwhile ergonomics projects in India. Third, our registration in Zurich has proven to be challenging in several respects. One requirement was to re-write our IEA Rules to conform to Swiss standards for not-for-profit tax status. A diligent review committee updated our rules. This was a time-consuming task that required skill, cooperation and patience from several key leaders. We are indebted to them for their great service. Fourth, the IEA managed to gain visibility around the world as you will see under IEA Achievements 2009-2012. Notably, thanks to the work of dedicated professionals over many years, the IEA sponsored and/or released the following publications: Ergonomic Checkpoints (ILO/IEA, 2010); Ergonomic Guidelines (IEA/ICOH, 2010); Ergonomic Checkpoints in Agriculture (ILO/IEA, 2<sup>nd</sup> Edition 2011); and Handbook of Ergonomic Quality in Design (IEA, 2012). IEA Executive Committee members and representatives made 36 visits or virtual video greetings to federated societies and partners over the past 27 months. (See Tables 1 and 2). Fifth, we began working with the Japan Ergonomics Society (JES) to upgrade our information technology infrastructure. Last year we saw the breakdown of the IEA website security on two separate occasions and lost our domain name temporarily. This is partly the result of a fragmented IT infrastructure. JES's proposal will consolidate website functions, communications and archiving IEA information and is an important first step for creating a professional and scalable information system. We are extremely grateful for JES's generous offer for a long-term commitment to this effort.

#### Challenges

Internally, we continue to face challenges on increasing partnerships through sustaining memberships. Aside from the financial benefits, sustaining memberships represents a value proposition that has yet to be fully realized. We did not make the progress that I hoped for with the IEA office and banking infrastructure. The office function remains dependent on individuals and is difficult to administer sustainably. Finally, our Swiss registration brought unforeseen challenges that we were able to overcome. However, this would be difficult without a German-speaking officer with patience, who happened to be nearby, and had the time and resources to deal with the requirements from Zurich.

Externally, the IEA and our profession faced several opportunities and threats that are common to the rest of the modern world. First, as many federated societies have noticed, our memberships are maturing and recruiting new members will be the key to maintaining our vitality. Recruiting new members and societies is necessary to move forward in the future. Second, specialization leads to a fracturing of the discipline and loss of focus on our systems perspective. Our multidisciplinary heritage makes it a challenge to maintain an identity; specialization can further erode this identity. Finally, the rate of change makes it imperative for us to continue to adapt and find new ways of solving human and system problems quickly and effectively.

#### **Our Future**

Our identity as a discipline and ability to contribute meaningfully to the world are aptly summarized in the Future of Ergonomics White Paper. The systems perspective is a unique feature to our profession. Another unique feature is that ergonomists change the environment to fit the human through design. Finally, there is a focus on improving human well-being and overall performance. Hal Hendrick, who was a great mentor and leader to many of us, argued tirelessly that no one is better equipped than we are to <u>simultaneously</u> improve the human condition (e.g. health and safety, satisfaction, pleasure, learning, personal development) and system performance (productivity, efficiency, quality, innovation, flexibility, (systems) safety, reliability, sustainability). While many others do similar kinds of work, these features make our work unique.

Just as our organization is in mid-life, so too it appears are many of us in the field. If demography is our destiny, we may be a declining professional organization. Attracting younger, more diverse professionals into our field, applying our science to new arenas, creating new paths, reducing resistance, and mentoring are ways we can increase ergonomics' appeal and breadth. Our nominations to council, the awards we give, the students we accept, or the protégés we mentor should be chosen with the future in mind. This may not be the best researcher, or most traditional model, and may not even fit our current conception. To meet future demand, our ideas must meet the future's requirements. As strategic leaders, our sights need to be set on a future that is better than the one we already have.

This Triennial report provides a broad international perspective of the field, its historical record, official positions and current developments, particularly during the 17<sup>th</sup> executive from 2009-2012. It is a young multidisciplinary field populated by talented, good people with whom I am proud to share my professional identity.

## About the discipline of ergonomics

#### **IEA** definition of ergonomics

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

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

#### Domains of specialisation

Derived from the Greek ergon (work) and nomos (laws) to denote the science of work, ergonomics is a systems-orientated discipline which now applies to all aspects of human activity. Practicing ergonomists must have a broad understanding of the full scope of the discipline, taking into account the physical, cognitive, social, organisational, environmental and other relevant factors. Ergonomists often work in particular economic sectors or application domains. These application domains, which are not mutually exclusive, evolve constantly. New ones are created old ones take on new perspectives.

Within the disciple, domains of specialisation represent deeper competencies in specific human attributes or characteristics of human interaction.

**Physical ergonomics** is concerned with human anatomical, anthropometric, physiological and biomechanical characteristics as they relate to physical activity. The 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. The relevant topics include mental workload, decision making, skilled performance, human-computer interactions, human reliability, work stress and training as these may relate to human-system design.

**Organisational ergonomics** is concern with the optimisation of socio-technical systems, including their organisational structures, policies, and processes. The relevant topics include communication, crew resource management, work design, design of working times, teamwork, participatory design, community ergonomics, cooperative work, new work paradigms, organisational culture, virtual organisations, telework and quality management.

#### Birth and development of IEA

The International Ergonomics Association was founded in 1959. At the time, only three ergonomics societies were operating (in the United Kingdom, the USA and Germany). Members of the IEA were not societies, but individuals. In 1976, due to the growing number of national or regional societies on one hand and to the will of being able to interact with world organisations like the World health Organisation (WHO) or the International Labour Organisation (ILO) on another hand, the IEA decided to become a federation of societies.

Since then, the history of IEA and of ergonomics has been a story of expansion. Expansion first in terms of the number of Federated Societies (from 11 in 1976 to 47 in 2009) or of number of individuals belonging to member societies (11,689 in 1976 to an estimated 25,000 in 2009).

Expansion also in terms of scope of interests: the range of topics covered by the Triennial Congresses has manufacturing, standards, human reliability, quality management, aging agriculture, rehabilitation, etc. Attendance has grown (120 participants in 1961, 519 in 1976, 1600 in 1997, 3100 in 2000, and 1400 in 2006). Variations in attendance IEA Congresses are influenced by the location in the world, and global events at the time including SARS, wars, and global financial crises.

Expansion finally in the penetration of ergonomics in the society. Ergonomics is not only today an academic discipline, it is a profession. This has led to the definition of professional certification systems in ergonomics and of training programs in the ergonomics discipline. This has also led to a revision of the definition of ergonomics, which now defines what ergonomics is and what ergonomists do.

The IEA is now a mature organisation, with responsibilities at an international level. The IEA interacts with WHO and ILO for specific actions, developing and implementing ergonomics programs in small and medium size companies in manufacturing, as well as in agriculture. Special emphasis has been given to developing countries in Africa and Asia.

Recently, the IEA has undertaken to develop a program for assessment and certification of ergonomic design processes in the area of consumer product development, with respect to application of human-centre principles in processes of design.

The IEA Archives are currently hosted by CNAM in Paris, France.

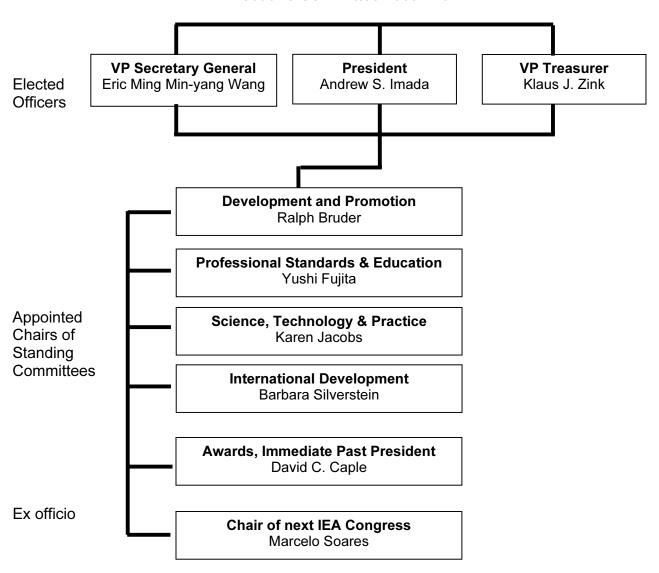
The IEA was re- registered in Zurich, Switzerland in 2009 as a Not for Profit organization.



2010 IEA Council Meeting Bruges, Belgium

## **About IEA**

#### **IEA Executive Committee 2009 - 2012**



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

The IEA is governed by the Council with representatives from the federated societies. Day to day administration is performed by the Executive Committee, which consists of the elected IEA Officers, Chairs of the Standing Committees and Chair of the next IEA Congress.

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

#### **Goals and Objectives**

The following are the principal goals of the IEA:

- To develop more effective communication and collaboration with federated societies
- To advance the science and practice of ergonomics at international level

To enhance the contribution of the ergonomics discipline to global society

#### **IEA Standing Committees**

The Standing committees accomplish much of the work of the IEA. In turn, their sub-committees are responsible for specific functions or activities.

#### **Development and Promotion**

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 assist in development of policy recommendations to better serve Federated societies and the international ergonomics community.

#### **International Development**

This Standing committee promotes, coordinates, and implements ergonomics 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.

#### **Professional Standards and Education**

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

#### **Science Technology and Practice**

The IEA Science, Technology and Practice Committee undertake the following activities, in cooperation with the Technical Committees and Special Task Committees set up to support its role:

- Initiate development of committees in various ergonomics technical interests
- Promote dissemination of technical knowledge through the Ergonomics Compendium
- Support the organization of scientific and technical events
- Assist in the planning of the IEA Triennial Congress scientific program
- Review applications for IEA endorsement of scientific events and publications
- Provide information for

#### **Awards**

This Committee recommends to council awards to individuals for their contributions to the field. Awards for which this committee is responsible include:

- IEA Fellow Award
- IEA Distinguished Service Award
- IEA President's Award
- IEA Outstanding Educators Award
- IEA Award for Promotion of Ergonomics in Industrially Developing Countries
- IEA Ergonomics Development Award
- IEA / liberty Mutual Prize and IEA / LM Medal Award
- IEA / JOSE Best Paper Award
- IEA KU Smith Student Award



IEA Executive – Bruges, Belgium 2010
Marcelo Soares, Barbara Silverstein, David Caple, Karen Jacobs, Ralph Bruder
Klaus Zink, Andrew Imada, Eric Min-yang Wang, Yushi Fujita

# **IEA Membership**

As of January 2012, the International Ergonomics Association has 47 Federated Societies, two affiliated societies, two networks, eight sustaining member organisations and five individual sustaining members.

#### **IEA Federated Societies**

Federated Societies are societies that have the main aim of promoting ergonomics. They are bodies that elect a governing council from within their own membership and encourage the publication of research material and the development of ergonomics practice.

Argentina Australia Austria Belgium Brazil Canada Chile

China Colombia Croatia

Czech Republic

Ecuador

French Language Ergonomics Society

Germany
Greece
Hong Kong
Hungary
India

Indonesia Iran

Ireland Israel

Italy

Japan Latvia

Mexico

Netherlands

**New Zealand** 

**Nordic Countries** 

**Philippines** 

Poland

Portugal

Russia

Serbia

Singapore

Slovakia

South Africa

South Korea

Spain

Switzerland

Taiwan Thailand Tunisia Turkey Ukraine

**United Kingdom** 

USA















#### **IEA Affiliated Societies**

Affiliated Societies are other national or international professional societies that are ineligible for federated member status or have an interest in ergonomics but have their main aim in an associated area.

- Human Ergology Society of Japan
- Nigeria (Ergonomics Society of Nigeria ESN)

#### **IEA Networks**

The growing size of the IEA has led to a revision of its membership structure, by creating IEA networks. Societies federated in the IEA may work together in networks, when a need is felt to do so. Examples of such needs can be geographical proximity, sharing of a common language, promotion of common interests. The IEA Council gives its agreement to the creation of the network, on the basis of a proposal from networked societies stating membership and goals. The networked societies are granted the status of IEA Network. IEA Networks have to report their activity to the IEA.

Networks of IEA federated societies are being considered in Europe and in South America.

- Federation of the European Ergonomics Societies FEES
- South East Asian Network of Ergonomics Societies
   SEANES
- Union of Latin-American Ergonomics Societies ULAERGO

#### **IEA Sustaining Members**

Academicians and practitioners accomplish the work of the IEA. However, many initiatives vital for the development to ergonomics as a unique science and profession cannot be funded with existing resources. Funds are then needed to support the development of ergonomics worldwide, including in industrially developing countries. To disseminate ergonomic knowledge to the industry and to society at large, to promote ergonomics education and competency standards, and to support the work of our Technical committees

The IEA Sustaining Membership program supports the science and application of ergonomics worldwide. The program provides exposure and enhances the image of institutional members.

IEA is a non-profit organisation. No monetary benefits are given to people involved in the operational of the IEA. This means that 100% of IEA funds support the implementation of the IEA goals.

There are four levels of support on a three year basis, and each level offers specific benefits. The granting of IEA Sustaining Membership does not imply IEA endorsement or approval of company products or services.



Christina Jonsson presenting at ILO ISSA 19th World Congress – Istanbul, Turkey – September 2011



ABERGO ULAERGO Conference - Sao Paulo - August 2011



SEANES Conference - Cebu City, Philippines - December 2011

## **Organizational Sustaining Members**

#### Diamond Level - US \$ 10,000 per year

**Liberty Mutual Research Institute for Safety Ian Noy**USA

#### Platinum Level- US \$ 5,000 per year

Elsevier Rebecca Wilson UK

#### Gold Level - US \$ 1,000 per year

**3M Nancy Larson** USA

Jim Knowles Group Barbara McPhee AUSTRALIA

Gulf Petroleum Industries Co Mr Yasser A Rahim KINGDOM OF BAHRAIN

Korean Occupational Safety & Health Agency (KOSHA) Mr. Min-ki Noh, President KOREA

Central Institute for Labor Protection Dr. Danuta Koradecka, Director POLAND

Center for Industrial & Management Research Resources Dr. Min K. Chung, Professor and Head Pohang University of Science and Technology KOREA

#### **Individual Sustaining Members**

Jennifer A. Gutierrez

**Martin Helander** 

Andrew S. Imada

Kazutaka Kogi

#### **Corporate Sustaining membership benefits**

# Gold level US \$ 1,000/year Individual members US \$ 200/year

- Listings in printed IEA directories as well as in the IEA website
- > Complimentary copy of the quarterly updates from the IEA President to the federated Societies.
- Sustaining Member Plaque with company name inscribed

#### Platinum level US \$ 5,000/year

- All benefits at the Gold level
- Official listings in the programs of IEA conferences and congresses
- Two complimentary registrations for the forthcoming IEA congress
- Company logo on IEA website home page with active links

#### Diamond level US \$ 10,000/year

- > All benefits at the Platinum level
- > Free space at exhibitions organized at IEA congresses, subject to approval by congress organizer
- > Exposure of company logo at IEA conferences and congresses
- > Direct links between new company products with relevant sections of the IEA website
- > Other benefits such as a speech by an IEA officer can be negotiated

#### Star level US \$ 25,000/year

- > All benefits at the Diamond level
- Additional three complimentary registration for the next IEA congress
- Acknowledgements on the first page (covers) of the Congress proceedings
- > Free distribution of promotional materials at IEA Congress
- > Additional benefits can be negotiated

# **Technical Committees**

- Activity Theories for Work Analysis and Design
- Aerospace HFE
- Affective Product Design
- Aging
- Agriculture Ergonomics
- Anthropometry
- Auditory Ergonomics
- Building and Construction
- Ergonomics for Children and Educational Environments
- Ergonomics in Design
- Ergonomics in Manufacturing
- Gender and Work
- Healthcare Ergonomics
- Human Aspects of Advanced Manufacturing
- Human Factors and Sustainable Development
- Human Simulation and Virtual Environments
- Mining
- Musculoskeletal Disorders
- Online Communities
- Organizational Design and Management
- Process Control
- Psychophysiology in Ergonomics
- Safety & Health
- · Slips, Trips and Falls
- Transport
- Visual Ergonomics
- Work With Computing Systems WWCS

# IEA Strategic Plan 2009-2012

Approved by the IEA Council - Seoul, Korea 2003.

#### **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 organisations, 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.

#### **Goals: The Following Goals Reflect the IEA Mission**

- A. Contribute to the development of federated societies.
- B. Advance the science and practice of ergonomics at an international level
- C. Enhance the contribution of the ergonomics discipline to global society

#### GOAL A: Contribute to the development of federated societies

# SUBGOAL A1: Develop more effective communication and collaboration between and with federated societies.

- 1. Facilitate visibility of each member society through the IEA home page and other means of communication
- 2. Facilitate joint events between member societies when this will not conflict with the operations of these societies
- 3. Facilitate the creation of networks of societies
- 4. Support member societies in taking proactive and reactive positions on major public issues and in their use of the media
- 5. Support member societies to disseminate ergonomics knowledge at various levels
- 6. Support participation of the industrially developing countries in IEA activities (e.g., support for travel to conferences)

#### SUBGOAL A2: Develop ergonomic societies through the world.

- 1. Support the continuing growth of ergonomics in industrially developing countries by training and education
- 2. Provide industrially developing countries with ergonomics knowledge by stimulating the existing IEA mechanisms

#### SUBGOAL A3: Improve IEA operational effectiveness

- 1. Develop mechanisms for effectively involving member societies in IEA activities
- 2. Improve communication with member societies
- 3. Facilitate the exchange of views and experiences among the leaders of member societies
- 4. Initiate campaign to increase the numbers of sustaining IEA
- 5. Increase revenues from donations, endowments and funds when this will not conflict with the operations of member societies (e.g. from international bodies)

#### GOAL B: Advance the Science and Practice of Ergonomics at an International Level

#### SUBGOAL B1: Stimulate Development of the Ergonomics discipline

- 1. Define and clarify the field of ergonomics
- 2. Identify and elaborate cultural and economic differences affecting ergonomic science and practice
- 3. Identify future needs for development of ergonomics
- 4. Support and promote specialised conferences and workshops in collaboration with member societies
- 5. Promote IEA publications suited to knowledge dissemination by IEA

#### SUBGOAL B2: Enhance the quality of professional practice and education in Ergonomics

- 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
- 10. Show best practices in order to stimulate the growth of ergonomics

#### **GOAL C: Enhance the Contribution of the Ergonomics Discipline to Global Society**

#### **SUBGOAL C1: Promote Recognition Of Ergonomics Discipline**

- 1. Identify specific areas where greater international exchange of information is needed, and develop appropriate means for dialogue
- 2. Increase public awareness of the benefits of ergonomics through mass media communications
- 3. Provide information about ergonomics/IEA for listing in international directories and reference publications
- 4. Expand and strengthen links with other international bodies
- 5. Expand and strengthen links with societies working in related fields
- 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
- 8. Elaborate and promote the benefits of ergonomics to improve the quality of life for individuals, organisations, and society.

#### SUBGOAL C2: Promote Applications of Ergonomics in All Aspects of Life

- 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
- 3. Promote collaboration in ergonomics projects among government and international bodies
- 4. Stimulate the involvement of ergonomics in the emerging fields of application (e.g. management sciences and mass communication).
- 5. Support member societies in taking positions on major public issues and in their use of the media
- 6. Promote ergonomics in geographical regions where particular support is needed
- 7. Develop program of certification of ergonomic quality in design

## IEA Achievements - 2009-2012

#### GOAL A – Contribute to the development of federated societies

#### 1. Communication

The major thrust to assist the federated societies participate at a global level has been to improve **communication**. During this Executive a number of initiatives have been continued.

#### 1.1 IEA Website.

A major challenge came in 2011 when the website was under attack by hackers. The Secretary General's competent staff, in collaboration with our Australian host partners, did a great job in restoring control of the website, backing up information and increasing security. Unfortunately, traffic through the website was impeded for a period, but eventually restored. In a separate incident, the website domain name was taken over because of an administrative problem in renewing payment. This once again caused a temporary inaccessibility to the IEA website.

New features on the website include: newest and the top downloaded articles from Applied Ergonomics the International Journal of Industrial Ergonomics; free downloadable copies of the IEA/ILO Ergonomics Checkpoints (2<sup>nd</sup> Edition) and new ways for member societies to pay their dues online.

# 1.2 Facilitate visibility of each member society through the IEA home page and other means of communication.

The website explains the IEA endorsement process and allows member societies to apply for IEA endorsement. Interested parties can see the member society's events in upcoming events on the IEA home page.



#### 1.3 IEA President's Newsletter

During this executive's term, 12 newsletters have been circulated to member society presidents, council members and other interested parties. These newsletters are concurrently available on the website. Federated societies are free to incorporate these news items into their own communications in their efforts to promote ergonomics in their own country.



#### 2. Collaboration between ergonomics societies.

The members of the "IEA family" have provided opportunities for federated societies to directly assist and support each other. Examples include:

- The Association of Canadian Ergonomists hosted online webinars with free attendees offered to IEA members from developing countries.
- The president of FEES spoke at the first Latvian Conference on Ergonomics.
- The IEA hosted conferences by federated societies who have been donating CDs of their conference proceedings for free circulation to IEA developing country members.

#### 3. Global Ergonomics Month

This initiative was commenced in 2008 to focus on October as the month where the federated societies share programs and resources at local and international levels to promote ergonomics outreach activities. HFES and FEES, who have been conducting ergonomics month activities in the USA and Europe respectively, have provided the leadership for this program. This program now showcases all of the activities on the IEA and has subsequently brought collaboration from other ergonomics societies as an example of sharing resources to promote ergonomics to the community.

#### 4. Maintaining IEA not-for-profit status for Swiss registration.

The IEA has a registered mailing address with the HFES in the USA and a bank account in Canada. In 2009 the IEA was officially registered in Zurich, Switzerland through the Registry of Commerce. Recently, the Swiss officials challenged our not-for-profit status and levied a tax on the IEA. To comply with the registry requirements for not-for-profit status, the IEA Vice President and Treasurer, through consultation with experts, proposed the necessary changes to maintain the original tax status. These changes were vetted through a drafting committee, a review committee

and circulated to the federated societies in 2011. These changes to the rules will be voted on at the Council meeting in Recife.

#### 5. Council meeting as a mechanism for involving members in IEA activities

The IEA Council meeting continues to include a welcome reception on the evening prior to the Council. This provides an opportunity for new and current Council members to meet each other informally and to share experiences relating to the federated societies prior to the Council meeting.

During the Council meeting, the delegates participate in a series of informal discussions or workshops to further promote their contribution to the council on behalf of their federated society and to share and learn from each other. In the 2010 meeting Council members discussed alternatives for the Liberty Mutual Award criteria and ways of improving that award selection process. In 2011 Council provided input to Jan Dul's work on the Future of Ergonomics. This was a great opportunity to solicit expert opinions from a wide range experts in a single location.

#### 6. Formation of new societies

There were no new societies added to the existing list of member societies. However, the IEA did support the efforts in the formation of the Human Factors and Ergonomics Society of Malaysia (HFEM). Halimahtun Khalid informed the IEA that on 5 June 2010, a meeting was held to form the HFEM. There are 50 members to date and it is growing. Despite many obstacles, the leadership of this group managed to register with the Malaysian Engineering and Technology Association. IEA wrote a letter of support to the Registry of Societies, Malaysia and we were pleased to be able to play a small part in this successful recognition for HFEM. We welcome HFEM to the international community and look forward to receiving an application for membership to the IEA family.



SEMAC Conference - Ciudad Juarez, Mexico - May 2010



Walter Rohmert Research Award Presentation – Darmstadt, Germany – 2010 Ralph Bruder, Ulrich Bergmeier, Nicole Jochems, Christopher Schlick, Heiner Bubb, Gert Zülch



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Jan Dul Presenting at ILO ISSA 19 World Congress – Istanbul, Turkey – September 2011



IEA Secretary General receives Ergonomics for Everyone from Indian Society of Ergonomics

#### 7. Financial Support

The IEA has supported ergonomists from Industrially Developing Countries (IDCs) to attend IEA2012. These \$500USD stipends were awarded at the recommendation of the federated societies. Each IDC was allocated one stipend. Additionally, the IEA2012 organizing committee provided special registration fees for attendees from IDCs to encourage their participation.

#### 8. IEA Good Practices Database

Yushi Fujita (JES), chair of the Professional Standards and Education Standing Committee, reinvigorated a subcommittee after several changes required a transition in leadership. The goal of this subcommittee is to disseminate good ergonomic practices for educational purposes. There are currently several databases around the world at universities and websites. Integrating these will be a valuable outcome. Building on the JES initiative, there is an effort to use language and cultural similarities to increase the database to Chinese. There is an effort between the Japanese and Taiwanese societies to translate these best practices to Chinese and make it accessible to more people. Chih-Wei Lu (EST) formally took charge of the committee in 2011. A roundtable discussion to share ideas for educational practices is scheduled at IEA2012.

#### 9. IEA Dues Calculation and Payment Online

In 2007 the IEA Council voted to change the method for calculating dues to the IEA by federated societies. Thanks to the effort by Vice President and Treasurer Klaus Zink, federated societies can now use a worksheet to calculate their dues on the IEA home page. Moreover, to reduce costs and efforts, some societies may now elect to make their payments using Paypal. This will save time and money for both the payer and the IEA. We thank the Treasurer's team, Margo Fraser and ACE for their support in helping us set up this account.

#### 10. IEA Historian

To help federated societies and the IEA maintain its rich heritage, we revived the role of the IEA Historian. Patrick Waterson (IEHF) responded because of his interest in our shared history. He has a good understanding of people and events in the U.K. and parts of Europe. He interviewed several prominent ergonomists and has organized a special IEA session at IEA2012 with a group of experts who can share their perspectives on our history. This builds on the rich history already documented in Ilkka Kuorinkas book on the first quarter century and the 50<sup>th</sup> Anniversary Booklet published in 2006 by IEA under Pierre Falzon's presidency.

Table 1

IEA Visits to Federated Societies and Partners

Location	Representative	Date	Participation
Geneva, Switzerland	Klaus Zink	October 2009	Represented IEA at the WHO Planning Committee for the Collaboration Centers and the ILO Better Work Program
Semarang, Indonesia	David Caple	November 2009	The Indonesian Ergonomics Society hosted their 2009 meeting at Semarang, on Java Island.
Singapore	Pierre-Henri Dejean	November 2009	ICSID meeting in Singapore
Calcutta, India	Verna Blewett, Eric Wang, Kazutaka Kogi, Wendy Macdonald	December 17-19, 2009	HWWVE Conference in Calcutta Eric Wang presented a talk entitled "Ergonomic challenges for an old and new society."
Darmstadt, Germany	Ralph Bruder	March 24-26, 2010	GfA Holds Spring Congress 2010 to Design New Environments of Working and Living
Burapha, Thailand	Barbara Silverstein Kate Stewart	May 6-7, 2010	Occupational Ergonomics Workshop at Burapha University
Ciudad Juarez, Mexico	Andrew Imada	May 5-8, 2010	The Sociedad de Ergonomistas de Mexico (SEMAC) held their XII Ergonomics International Congress from 5-8 May in Ciudad Juarez, Chihuahua.
Nagoya, Japan	Andrew Imada	June 12-13, 2010	The Human Ergology Society celebrated its 40th Anniversary and their 45th Annual Meeting in Nagoya, Japan.
Sapporo, Japan	Andrew Imada	June 19-20, 2010	The 51st annual conference of the Japan Ergonomics Society in Sapporo.

August 1-6, 2010 Indonesian Ergonomics Society (PEI) hosted International Joint Conference of Asian-Pacific Conference on Computer-Human Interaction (APCHI) and ErgoFuture in Bali, Indonesia. Andrew Eric, Klaus, and David addressed keynote speeches in the conference. An IEA EC meeting was held before the conference.	September 30, 2010 63 <sup>rd</sup> Annual United Nations DPI/NGO Conference	September 6-8, 2010 The Nordic Ergonomic Society 2010 is the 42nd conference.	Oct. 10-12, 2010  Conference on Ergonomics (IEA endorsed conference). Andrew gave a welcome address to the conference. Andrew, Eric, Klaus, and Ralph were the Plenary Session Chairs. Prior to the conference, an IEA EC meeting and a Council meeting were held.	Nov. 7-10, 2010  9th Pan-Pacific Conference on Ergonomics organized by Ergonomic Society of Taiwan (IEA endorsed conference). Eric was General Chair. Andrew gave a keynote speech in the conference.	December 14-17, The First Southeast Asian Network of Ergonomics 2010 Societies (SEANES) Conference hosted by the Philippine Ergonomics Society (PHILERGO). Andrew gave a keynote address.
Andrew Imada, Eric Min- yang Wang, Klaus J. Zink, David Caple, Yushi Fujita	David Caple, Verna Blewett, Wendy McDonald, Andrea Shaw	David Caple Karen Jacobs	Andrew Imada, Eric Min- yang Wang, Klaus J. Zink, Ralph Bruder, David Caple, Barbara Silvestein, Karen Jacobs, Marcelo Soares, Yushi Fujita	Andrew Imada, Eric Min- yang Wang,	Andrew Imada
Bali, Indonesia	Melbourne, Australia	Stavanger, Norway	Bruges, Belgium	Kaohsiung, Taiwan	Cebu, Philippines

Meeting with a representative from Ergonomics Society of Korea and International Public Design Foundation to discuss the possibility for IEA to contribute to an award for Good Public Design.	Site visit and meeting with organizers of 2012 IEA Congress	Tenth International Symposium on Human Factors in Organizational Design and Management was hosted by the Department of Human Kinetics and Ergonomics, Rhodes University and the Ergonomics Society of South Africa. Andrew, Klaus, David and Ralph were the Plenary Session Chairs. Andrew gave a keynote speech in the conference. Prior to the conference, an IEA EC meeting and a Council meeting were held.	WHO Planning Committee Meeting Collaborating Centres for Occupational Health to work on WHO's Global Plan of Action (GPA) on Workers Health (2007-2017).	Attended the FEES Board Meeting. Welcome in the new officers.	Healthcare Systems Ergonomics and Patient Safety (HEPS) conference. Presented a keynote address.	ABERGO ULAERGO Conference. Yushi delivered a four-hour course and keynote address at Jornada Internacional Abergo Ulaergo 2011
December 17, 2010	February 20-21, 2011	Apr. 4-6, 2011	June 16-17, 2011	June 21, 2011	June 22-24, 2011	August 11-12, 2011
Andrew Imada	Andrew Imada, Klaus J. Zink, Karen Jacobs	Andrew Imada, Eric Minyang Wang, Klaus J. Zink, Ralph Bruder, Barbara Silverstein, Yushi Fujita, David Caple, Marcelo Soares	Wendy Macdonald Owen Evans	Andrew Imada	Andrew Imada	Yushi Fujita
Seoul, South Korea	Recife, Brazil	Grahamstown, South Africa	Oslo, Norway	Oviedo, Spain	Oviedo, Spain	Sao Paulo, Brazil

Istanbul, Turkey	Andrew Imada, Eric Minyang Wang, Klaus J. Zink, Ralph Bruder, Barbara Silverstein, Yushi Fujita, Marcelo Soares, Karen Jacobs, David Caple	Sep. 12-15, 2011	Andrew and Ralph were the symposium Chairs of the 19 <sup>th</sup> World Congress on Safety and Health at Work in Istanbul. Barbara, Jan, David, Kazu, Christina and Alain participated in symposia. Prior to the conference, an IEA EC meeting was held.
Oulu, Finland	Klaus Zink	September 18-21, 2011	2011 conference of the Nordic Ergonomics Society. Klaus presented a keynote address.
Hsinchu, Taiwan	Eric Min-yang Wang	October 4-8, 2011	Eric served as the Chair of 2011 Asia Ergonomics Summit, and organized IEA endorsed conference of 2011 East Asia Ergonomics Symposium.
Riga Latvia	Klaus Zink, Pieter Rookmaaker	October 7, 2011	Latvian Ergonomics Society First International Conference. Klaus and Peter contributed keynote addresses to this conference on Contemporary Ergonomics and Business.
Rio de Janeiro, Brazil	Jose Orlando Gomez	October 19-20, 2011	Jose Orlando represented the IEA at the WHO World Conference on Social Determinants of Health (WCSDH).
Manila, Philippines	Alma Maria Jennifer Gutierrez	October 10-14, 2011	Jennifer (Vice President, PHILERGO) represented the IEA a the WHO Regional Committee Meeting for the Western Pacific.
Medellín, Colombia	Andrew Imada	November 2-4, 2011	Sociedad Colombiana de Ergonomía (SCE) annual meeting. Presented a one-day workshop on on macroergonomics and lecture on participatory ergonomics strategies for engaging enterprises.
Chennai, India	Barbara Silverstein	December 13-17   2011	Indian Society of Ergonomics HWWVE International Conference on Ergonomics and Human Factors. Barbara gave a keynote address on exposure assessment methods for preventing WRMSD.

Table 2

# Virtual Visits by Video Messages

Location	Representative	Date	Participation
Calcutta, India	Andrew Imada	December 17, 2009	HWWE International Conference on Ergonomics. Sponsored by the Indian Society of Ergonomics
Liège, Belgium	Andrew Imada	September 13, 2010	Societe d' Ergonomie de Langue Française (SELF) 45 <sup>th</sup> Congress
Darmstadt, Germany	Andrew Imada	March 24, 2010	Gesellschaft für Arbeitswissenschaft (GfA) Spring Congress
Port Harcourt, Nigeria	Andrew Imada	December 9, 2010	Ergonomics Society of Nigeria National Ergonomics Workshop
Brussel, Belgium	Andrew Imada	March 17, 2011	Belgian Ergonomics Society (BES) Annual Meeting
Darmstadt, Germany	Andrew Imada	December 1, 2011	First EAWS Conference

#### GOAL B - Advance the science and practice of ergonomics at an international level

#### 1. Certification

The Professional Standards and Education Standing Committee formed a subcommittee to explore the possibility of mutual recognition among the certification bodies and to review the IEA certification process for compatibility with mutual recognition findings. This committee was chaired by Peter Budnick BCPE (USA). Committee members included: Kazuo Aoki CPE/JES (Japan), Matthias Goebel, ESSA (South Africa), Ernst Koningsveld, CREE (Europe), Trudy Tilbury, HFESA (Australia), Kirsti MacAulay CCPE (Canada), and David Tappin, BCNZE (New Zealand). Their findings will be discussed at a special session at IEA2012.

Certifying bodies that have been accredited by the IEA include:

- Australia
- Europe (Committee for Registration of European Ergonomists CREE)
- Japan
- New Zealand
- United Kingdom
- United States (BCPE)

In the past, there was extensive consultation on the definition of a **certified ergonomist**. This debate highlighted the different types of ergonomists depending on their interest in education, research or practice.

The definitions adopted in relation to these were:

- "an ergonomist is an individual whose knowledge and skills concern the analysis of human/system interaction and the design of the system in order to optimise human wellbeing and overall system performance".
- "an IEA / Recognised Certified Ergonomist is a professional ergonomist whose practice and training have met the quality criteria set by an IEA / endorsed certifying body".

#### 2. Research Awards

The IEA has continued to promote research through the Liberty Mutual Medal in Occupational Safety and Ergonomics. As a result of input from Council and discussions with the Awards and Executive Committees, the criteria for accepting nominations were changed to include papers published within the past year and solicited nominations from editors of IEA endorsed journals. These changes produced a large number of high quality papers for the review committee to consider.

The winner of the 2011 IEA/Liberty Mutual Medal in Occupational Safety and Ergonomics is the paper by Marie Ward, Nick McDonald, Rabea Morrison, Des Gaynor, and Tony Nugent. The paper, "A Performance Improvement Case Study in Aircraft Maintenance and its Implications for Hazard Identification," was published in and nominated by the journal *Ergonomics*. We extend our heartiest congratulations to the authors on receiving the most prestigious recognition in our field for this research. The authors will receive the award at the opening ceremony at IEA 2012. We thank the Liberty Mutual Research Institute for Safety for their generous support of this award and to the review committee, under the leadership of Mike Smith, for their careful examination of a highly competitive field of submissions.

The KU Smith Award encourages research and presentation by students at the Triennial IEA Congress. Due to the generosity of the Smith family and the investment of funds through their HFES, the IEA is now able to provide two awards in 2012. Each award is valued at US\$3,000 and the winners will have an opportunity to make a special presentation at the IEA Congress. The winners of the KU Smith Award for 2012 were Baiduri Widanarko from Indonesia and Riley Splittstoesser from the USA.

#### 3. Recognition for Individual Contributions

An important function of the International Ergonomics Association is to award formal recognition to members of Federated Societies who have made outstanding contributions to the field of ergonomics on an international level. All awards are presented during the IEA Triennial Congress. As prescribed by the Rules, Past President David Caple, served as Chair of the Awards Committee.

The Awards Committee, based upon nominations from federated societies, selects recipients for the first four awards listed below. The IEA President, who may receive nominations from the Council and Executive Committee, selects the IEA President's Award.

**IEA Triennial Distinguished Service Award** is presented to individuals for outstanding contributions to the promotion, development and advancement of the IEA.

**IEA Triennial Outstanding Educators Award** is presented to persons in recognition of outstanding contributions in the area of ergonomics education for having: developed ergonomics education programs; produced new methodology and/or materials for teaching ergonomics; and graduated persons who have become outstanding ergonomists.

**IEA Triennial Award for Promotion of Ergonomics in Industrially Developing Countries** is given to a person(s) who has made significant and outstanding contributions to the development of infrastructure of ergonomics in an industrially developing country. This may be manifested through development of teaching/training programs, implementation of ergonomics design in industry, development of R&D programs, organization of ergonomics professionals, and extensive collaboration with international bodies such as the United Nations.

**IEA Triennial Ergonomics Development Award** is presented to persons who have had an international impact on ergonomics in terms of making a contribution or development which: significantly advances the state of the art of existing ergonomics sub-specialty; opens up a new area of ergonomics research and/or application.

**IEA Triennial President's Award** is presented to persons who have made outstanding contributions to ergonomics or the furthering of ergonomics, and whose contribution does not clearly fall into one of the other award categories. Persons qualifying for this award do not necessarily have to be ergonomists. Nominations may come from the IEA Council or the IEA Executive Committee. Final approval of this award rests with the IEA President.

#### 3.1 Triennial Award Recipients - 2009 - 2012

IEA Triennial Award for Distinguished Service – Pascale Carayon

IEA Triennial Award for Ergonomics Development – Hal Hendrick

IEA Triennial Award for Outstanding Educator – Raja Parasuraman

IEA Triennial Award for Promotion of Ergonomics in Industrially Developing Countries

Kamiel Vanwonterghem

IEA Triennial Presidents Award – Ernst Koningsveld

#### 3.2 IEA Fellow Award

The IEA Fellowship Award is given to recognize extraordinary or sustained, superior accomplishments of an individual. To be considered for a fellowship two eligibility criteria must be satisfied. In addition, the candidate's distinction as an ergonomics professional must be demonstrated.

New IEA Fellows - 2009 - 2012

Jörgen Eklund Frida Fischer Valerie Gawron Roger Haslam Wendy Macdonald Clas-Håkan Nygård Eric Min-Yang Wang

#### 4. Promoting Ergonomics through Technical Committees

Under the leadership of Karen Jacobs, the Science Technology and Practice Committee has overseen involvement in 26 active Technical Committees within the IEA. Technical Committees form a vital pathway for professionals to be involved in the IEA Congress. Their coordination and control of symposia, reviews and technical matters are vital to the active involvement of professionals to the specialty areas.

The different Technical Committees provide opportunities for IEA members with similar research and practice interests to interact in relation to their work and to participate in programs such as special editions of technical journals and to organise and participate in conferences together. The Technical Committees also utilize websites and chat rooms to share information.

In 2011, the IEA hosted the Healthcare Ergonomics & Patient Safety (HEPS) Conference in Oviedo. This was a collaborative program between the ergonomics societies in Italy and Spain to focus on the needs of this technical area of the ergonomics domain. The leadership provided by the Italian Ergonomics Society with this conference is greatly appreciated.



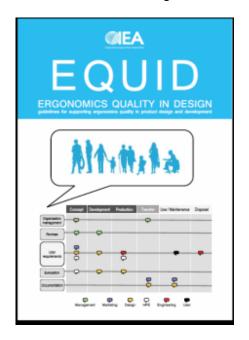
IEA Executive mid-year meeting - San Francisco, California - January 2010

#### 5. Ergonomics Quality in Design (EQUID)

The Ergonomics Quality in Design document began initially under Lena Bonapace's leadership and subsequently under Ralph Bruder from Germany. In May 2007 this document was circulated to all Federated Societies as a resource for designers, design managers and manufacturers to reflect the ergonomics requirements in product design.

Major global companies participated in benchmarking the EQUID document. This provided feedback on the EQUID processes and criteria used to assess the user requirements. The International Organization for Standardization (ISO) was consulted to investigate opportunities for the ISO to disseminate the EQUID process as Guidance document or to integrate it into their Standards documents. In total, there were 12 versions of the EQUID design document.

At the IEA Council meeting in Beijing, we approved the document in principle and were charged with creating a more targeted and more usable final product. Ralph Bruder undertook this effort under the Development and Promotion Committee. He took information from international experts in human factors/ergonomics on integrating ergonomics into product life cycles. The EQUID model was presented at various conferences and seminars including GfA, 2011, ODAM 2011 and SELF 2011. The result is an EQUID publication, which includes guidelines for using and supporting ergonomics in product design and development to different fields of application. We look forward to seeing this work product at the IEA2012 Council meeting and on the website soon.



#### 6. IEA2012 Recife, Brazil

The IEA is extremely pleased to be going to Recife, Brazil to the first IEA Triennial Congress to be held in Latin America. We thank the Brazilian Ergonomics Society (ABERGO) and the Union of Latin-American Ergonomics Societies (ULAERGO), the Congress Chairman, Marcelo Soares, and the IEA2012 Organizing Committee for hosting us in Brazil. We thank Karen Jacobs and Marcelo Soares for their efforts in coordinating the scientific program. Both will serve as special issue editors to the Human Factors Journal, which will publish the keynote addresses. We are grateful to the Chairs of the Technical Committees for their nomination of symposia, for their reviews, and coordinating the expertise in their areas of interest. We could not do it without the specialized

knowledge about the research and practice that these experts possess. This has been a collaborative spirit over several years and we are grateful for their hard work devoted to the advancement of our discipline and practice.

#### 7. IEA Governance Ad Hoc Committee

At the Beijing Council meeting, a proposal was made to restructure the IEA officers' roles and responsibilities. Council decided to undertake the issue more broadly by studying restructuring alternatives in light of the IEA's mission and goals. David Caple chaired this committee and reported the results to the IEA Council meeting in October 2010. The committee members included: Jan Dul, The Netherlands (Past Development Chair); Pierre Falzon, France (Past President); Kentaro Kotani, Japan; Yair Lifshitz, Israel; Bill Marras, USA; Pieter Rookmaaker, The Netherlands (FEES Chair); Torunn Sveinsdottir, Iceland; and Kan Zhang, China. This committee provided vital information toward making our organizational structure and function meet its current needs. We have operated in essentially the same way for the past 50 years and have managed to grow and achieve our objectives. However, in light of our size and strategic plan, we needed to consider options for how the IEA should function in the future. Among the proposals adopted was the addition of Vice President to the Secretary General and Treasurer titles. This more accurately reflects how the officers operate as a team rather than purely functional responsibilities.

#### 8. IEA Future of Ergonomics Committee

After examining the internal dynamics of the IEA organization, we turned to external and future directions for the field. In 2010 a team was assembled, under the auspices of Ralph Bruder and the Development and Promotion Subcommittee, to examine our field and future directions. Clearly this estimation will have implications for how the IEA should position itself strategically. It also provides direction for each of the federated societies and how collectively we can advance the field. This committee has completed its work and will be presenting a White Paper to Council at our meeting in Recife. The paper will be published in *Ergonomics*, and will be available for download soon afterward. This committee is headed by Jan Dul (Chair, Netherlands) and a group of highly experienced professionals including: Ralph Bruder (Germany), Peter Buckle (UK), Pascale Carayon (USA), Pierre Falzon (France), Bill Marras (USA), John Wilson (UK), and Bas van der Doelen (Secretary, Netherlands). We thank the members of this team for their work and commitment to this important effort. We also thank the SC Development and Promotion for starting this initiative. We look forward to hearing about the results of this effort in Brazil. This is arguably the most significant strategic initiative undertaken by this executive and has implications for all of us.

#### 9. Financial Support

In addition to providing funding to support the lighthouse project in Nicaragua, the IEA has played a critical role in securing funding for ergonomists and their work in their regions. Largely through Klaus Zink's efforts, the John Deere Company has provided generous support for continuing the work in rural India by Suman Singh. These funds will support this most worthwhile effort, which the IEA recognized in 2009 by awarding it the IEA/Liberty Mutual Medal.

There have been subsequent discussions with the John Deere Foundation about funding future projects that may be mutual interest to the IEA and the John Deere Company.

#### GOAL C: To Enhance the Contribution of the Ergonomics Discipline to Global Society

The promotion of ergonomics in research and application has been enhanced through our partnerships with external bodies.

#### 1. Tripartite Memorandum of Understanding

The IEA continues to work in the framework of the MOU with the International Commission on Occupational Health (ICOH) and the International Occupational Hygienists Association (IOHA) signed in 2008. This reinforces the commitment for each international association to recognize each other and to promote their areas of related activities.

Examples of these activities have included:-

## 1.1 Joint Symposium at ILO World Congress

ICOH and IEA proposed and presented a symposium at the International Labour Office (ILO) and International Social Security Association (ISSA) XIX World congress on Safety and Health at Work in Istanbul, Turkey in September 2011. The session was chaired and organized by the Presidents of IEA and ICOH and focused on Successful Participatory Practices to Improve Health and Safety.

## 1.2 CybErg Conference

The IEA invited the IOHA members to contribute papers to the next CybErg Conference to be hosted by Brazil in 2011.

## 1.3 ICOH Congress in 2012

The IEA President has been invited and agreed to make a semi-plenary address at the ICOH Congress in Cancun, Mexico in March 2012. Also included are remarks to be made by the President at the opening ceremony of the 30<sup>th</sup> International Congress.

#### 1.4 Publishing Ergonomic Guidelines

IEA and ICOH worked together to complete the publication of Ergonomic Guidelines. This involved identifying a publisher, printing and distributing copies around the world. This joint publication will be valuable to those interested in implementing ergonomics but do not have all the resources for a formal program.

#### 2. Emerging Relationships with other Professional Associations

As the diversity of ergonomics continues to grow, so do the opportunities to investigate Memoranda of Understanding or less formal relationships in sharing with other international professional associations.

The International Committee of Societies of Industrial Design (ICSID) has been communicating with the IEA. In November 2009 Pierre-Henri Dejean represented the IEA at an ICSID meeting in Singapore. We discussed the potential joint work in the EQUID program.

IEA will follow up on a proposed MOU with the Foundation for Professional Ergonomics (FPE), which was discussed in 2010 but not completed to date.

#### 3. World Health Organisation (WHO)

#### 3.1 WHO Meetings in Geneva

IEA VP Treasurer Klaus Zink attended a two-day WHO meeting in Geneva. As a WHO NGO, IEA participates as a member of the Planning Committee for the Collaboration Centers. The meeting focused on the activities of the 8th Network meeting. Zink told the group about IEA's continued interest in partnerships with WHO, ILO, ICOH and IOHA and envisioned an enlarged contribution to the WHO Collaboration Networks. Moreover, the WHO Collaboration Centres for Occupational Health have five objectives and 14 priorities. We may be able to contribute most readily by developing practical tool kits for assessing and managing occupational health risks, with special focus on MSDs, and ergonomic checkpoints.

## 3.2 WHO 127<sup>th</sup> Meeting of World Health Assembly Executive Board

IEA contributed a statement to the 127th Meeting of World Health Assembly Executive Board On 22 May 2010 Professor Michel Guillermo presented a joint statement from the IEA, IOHA, and ICOH regarding child injury prevention to the WHO Executive Board Meeting. The statement raises attention to the 215 million children under the age of 18 who are engaged in child labor worldwide. This includes the 115 million children subjected to the worst forms of child labor including slavery, sexual exploitation and illicit activities. Large numbers of children work in agriculture in family settings. Policies and enforcement are needed for those less than 18 years of age. Good practices from ILO, ICOH, IEA, and IOHA are available for specific kinds of workplaces, schools, educating parents, and for engaging the public health sector to address risks to working children. The statement goes on to offer assistance to develop guidance and to share, implement and evaluate practices to reduce injuries for working children. The presentation and discussion took about one hour, and according to ICOH President Kogi, was well received by the WHO board members.

#### 3.3 IEA / WHO Relations Extended

Alex Ross, Director in the Department of Partnerships from WHO, notified IEA that the Executive Board recently reviewed the report of our collaboration from 2008-2010 and decided to maintain relations with IEA for another two years from 2011-2013. The board appreciated the report, the successful collaborations and the support IEA has given to WHO. This builds on the framework that David Caple and the last executive developed. David, Eric Wang and especially Wendy Macdonald contributed significantly on that report. Wendy is our representative to the WHO and oversees many of the IEA projects with WHO.

#### 3.4 WHO Meeting in Oslo

EC member Ralph Bruder, IEA Liaison to WHO Wendy Macdonald, and Owen Evans attended the WHO Planning Committee Meeting Collaborating Centres for Occupational Health in Oslo, Norway on 16-17 June 2011. IEA was invited to this meeting as an officially recognized non-governmental organization (NGO). The larger context of this meeting is WHO's Global Plan of Action (GPA) on Workers Health (2007-2017). WHO Collaborating Centres for Occupational Health contribute to the GPA according to a global work plan on occupational health. This work plan includes objectives "to protect and promote health at the workplace (GPA objective 2)", or "to incorporate workers' health into non-health policies and projects (GPA objective 5)". Recent developments in the current work plan (2009-2012) for the Collaborating Centres were presented and the new work plan (2012-2017) were also discussed. IEA has contributed to the work plan with the development of a tool kit for the prevention of work-related musculoskeletal disorders. The work on the tool kit is coordinated by the

IEA Technical Committee on Musculoskeletal Disorders.

#### 3.5 WHO Events

Jose Orlando Gomez (President, ABERGO) represented the IEA at the WHO World Conference on Social Determinants of Health (WCSDH) in Rio de Janeiro Oct 19-21, 2011.

Alma Maria Jennifer Gutierrez (Vice President, PHILERGO) represented the IEA at the WHO Regional Committee Meeting for the Western Pacific on October 10-14, 2011 in Manila.

#### 3.6 Wendy Macdonald Official Liaison to WHO

Because of her long history and dedication to the IEA, the EC agreed to give Wendy Macdonald an official title of Liaison to WHO. This is a fitting recognition for the vital role she plays for us in our valued relationship with WHO.

#### 4. UN DPI conference in Melbourne

David Caple coordinated IEA participation at the 63<sup>rd</sup> Annual United Nations DPI/NGO Conference in Melbourne in September 2010. David worked with Verna Blewett, Wendy McDonald and Andrea Shaw to represent IEA at this conference titled "Advance Global Health – Achieve the MDGs". This conference was organized as a partnership between the United Nations Department of Public Information (DPI) and the NGO/DPI Executive Committee and the Government of Australia. This event highlights partnerships that can contribute to fostering global health, not just managing disease. We were delighted to participate and equally delighted that we had such great ambassadors to represent us. Efforts such as this reinforce our strategy to intensify our international collaborations and solidify the relationships that have been developed over the past few years. This will expand our scope of influence in practical ways by addressing real problems.

## 5. International Labour Organisation (ILO)

#### 5.1 Better Work

Klaus Zink attended the ILO Better Work Program while he was in Geneva in October. This program seeks to improve labor practices and competitiveness in global supply chains. With three current projects, Better Work estimates that it directly affects 800,000 workers. Zink believes that this broader ODAM-like approach that focuses on competitiveness in globalized markets will be more sustainable than simply focusing on improving working conditions. This stakeholder-oriented approach that embraces ODAM and TQM offers great promise to improving working conditions. IEA can support this important initiative through our federated societies and relevant Technical Committees. We would encourage support on this approach. For more information see: http://www.ilo.org/global/What\_we\_do/Projects/lang--en/WCMS\_084616/index.htm

#### 5.2 ILO World Congress on Safety and Health at Work

IEA was invited to propose a symposium at the International Labour Office (ILO) and International Social Security Association (ISSA) XIX World congress on Safety and Health at Work in Istanbul, Turkey in September 2011. Ralph Bruder, Chair of the Promotion and Development Standing Committee, organized and chaired the symposium entitled, "Ergonomics and OSH strategies in relation to governmental activities." Presenters included: IEA Past President David Caple (HFESA), Alain Piette, National Secretary (BES), Christina Johansen, President (EHSS), and Jan Dul (NVvE).

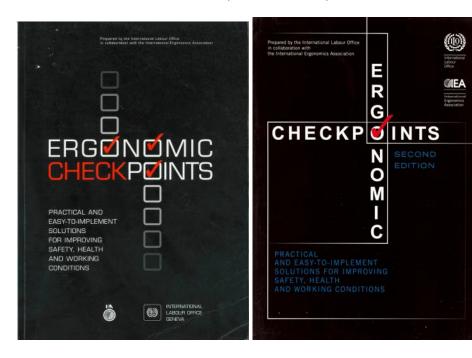
## 5.3 IEA/ILO Checkpoints Series

## 5.3.1. IEA Checkpoints 2<sup>nd</sup> Edition

In 1996, a joint publication on Ergonomic Checkpoints was released by the ILO and has become one of the largest circulating documents from their series. In 2006, the IEA and ILO recommenced this process with a review and subsequent development of the 2<sup>nd</sup> Edition of the Ergonomic Checkpoints. In 2009, we launched a second edition as a further demonstration of partnership and commitment between the IEA and the ILO.

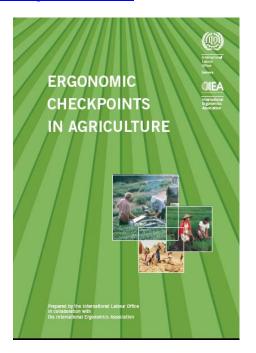
In 2010, Dr. Shengli, from the ILO, notified the IEA that the Second Edition of Ergonomic Checkpoints has been published. This joint IEA and ILO project updates on the highly successful first edition that ILO published in 1999. Like the first edition, these checkpoints use sound ergonomics principles and seek to identify simple, practical and inexpensive solutions to 132 problem areas. These workplace situations include: materials storage and handling, hand tools, machine safety, workstation design, lighting, hazard control, welfare facilities and work organization. This is the work product of many dedicated ergonomists from IEA contributing their time and talents. IEA is proud to be a part of this publication, which we believe can reduce work, related accidents and diseases and improve safety health and working conditions. The IEA and ILO have agreed to make this document available for a free download on the IEA home page <a href="http://www.iea.cc/">http://www.iea.cc/</a>

The IEA is grateful for the financial support and resources that were provided by the ILO to assist in the development of the Ergonomic Checkpoint publications. We are also grateful for the support provided by Dr. Khai and Dr. San in Vietnam in the development of the illustrations. The overall leader for these joint projects has been Dr. Kazutaka Kogi from Japan. Dr. Kogi has been tireless in his commitment and dedication in the development of these publications.



#### 5.3.2 Ergonomic Checkpoints in Agriculture

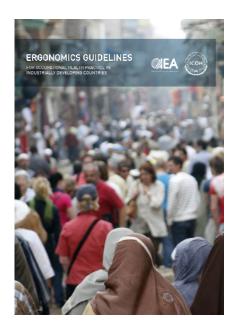
In 2007, the IEA and ILO jointly hosted a workshop in Kuala Lumpur, Malaysia to develop Ergonomic Checkpoints relating to Agriculture. Under the direction of Kazutaka Kogi (HES) and his colleagues this has been a work in progress to deliver useful information to developing solutions for workers in agriculture. At the end of 2011, ILO announced the publication of this valuable document. This will be available at the IEA2012 Congress and is available through the ILO Publications Unit. <a href="http://www.ilo.org/employment/DepartmentsOffices/rural-development/WCMS">http://www.ilo.org/employment/DepartmentsOffices/rural-development/WCMS</a> 159051/lang--en/index.htm



## 6.0 IEA/ICOH Collaboration in Publishing Ergonomic Guidelines

After many years of work from many dedicated individuals, the IEA and the International Commission on Occupational Health (ICOH) jointly published "Ergonomic Guidelines". These guidelines are designed to assist personnel in the field of occupational health who have a limited knowledge of ergonomics. They outline the process of identifying, assessing and controlling problems related to health and safety in the workplace. The ultimate aim is that they can provide assistance in planning basic intervention strategies based on sound ergonomics principles.

We are deeply indebted to former IEA and ICOH presidents Ian Noy and Jean-Francois Caillard for their leadership to begin this process with a Memorandum of Understanding between our two organizations. Work began at the IEA Triennial Congress in San Diego in 2000 with a small group who discussed how to implement this project. Kazutaka Kogi, Barbara McPhee and Pat Scott made up the core group responsible for the majority of the development work. After many years of hard work and persistence and with the financial support from ICOH, IEA, Institute for the Science of Labour in Japan and the Jim Knowles Group in Australia, Kurt Landau from Ergonomia and the IAD Institute for Ergonomics from the University of Technology Darmstadt in Germany supported the printing of these Guidelines. Thanks to the efforts of so many over the years to make this publication possible. We are pleased to announce that these Ergonomic Guidelines will be available for free downloads at the IEA home page in the near future. http://www.iea.cc



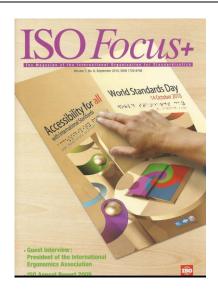
#### 7.0 International Standards Organisation (ISO)

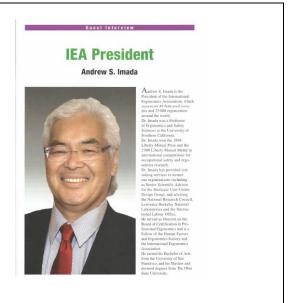
#### 7.1 TC159

Under the leadership of Ralph Bruder, the ad-hoc group to support ISO TC 159 delivered proposals for new standards to define processes to integrate ergonomics at different levels in companies (Executive level, Management level, Specialist level). IEA representatives participated in several ISO meetings worldwide.

#### 7.2 ISO Focus+ Interview

IEA received a request for a guest interview from ISO for their publication ISO Focus+, which featured accessibility in the September 2010 issue. With great help from the Executive Committee and other subject matter experts, IEA responded in time to meet the publication deadline. Special thanks to Tom Stewart (U.K.), Harald Weber (Germany), Takashi Yokoi (Japan), Tomas Berns (Sweden), and Marcelo Soares (Brazil) for their expertise and support. The Executive Committee's responsiveness and support were invaluable in meeting this tight timeline. The interview was published in the September 2010 issue. <a href="http://www.iso.org/iso/iso-focus-plus index/isofocus-plus 2010/iso-focus-plus 2010-08.htm">http://www.iso.org/iso/iso-focus-plus 2010/iso-focus-plus 2010-08.htm</a>





#### 7.3 Ongoing Cooperation with ISO

The ISO continued to have consultations with the IEA in relation to the EQUID project and opportunities for joint collaboration.

In 2009, the ISO 159 Standing Committee hosted their annual meeting at the IEA Congress in Beijing, China. In 2012 ISO was invited to make a keynote presentation at IEA21012 and graciously accepted the invitation. This will provide opportunities for closer collaboration between our organizations and open participation and discussion between Congress delegates.

The ISO also has provided direct access on the IEA website to all of the Standards that have been developed through the ISO in relation to ergonomics.

#### 8.0 Industry Partnerships

#### 8.1. 4C Association and ECOM - Coffee bean harvesting project in Nicaragua

One of the highlights for the IEA during the 2009-12 executive has been a Lighthouse Project to demonstrate the value of ergonomics, especially in IDCs. Barbara Silverstein brought this project to the IEA's attention that involved a participatory methodology to improve the design of coffee bean harvesting baskets for workers in Nicaragua. The 4C Association aims at uniting all relevant coffee stakeholders in working toward the improvement of the economic, social and environmental conditions of coffee production and processing to build a thriving, sustainable sector for generations to come.

4C Association and IEA (through the JES Fund for IDCs) supported this project that was done in collaboration with the University of Washington and the National University of Nicaragua (UNAN-Leon). This project created a prototype harvesting basket that is designed to be more productive and safer by reducing harvesters' risk of back and shoulder injuries. The second phase of this project, which IEA funded through the HFES Fund for IDCs and ECOM, will focus on validating the

design during the 2011-12-crop season and will identify ways of transporting the harvested coffee down mountainous terrain.

The first phase of this study evaluated the impact of coffee harvesting on the musculoskeletal system of 19 coffee harvesters in northern Nicaragua, when using the traditional basket and a prototype bag with waist and shoulder straps. Musculoskeletal symptoms questionnaires, surface electromyography (EMG) measures of trapezius and erector spinae muscle activity, and soliciting worker opinions were used to assess the difference in impact between basket and bag. There were no statistically significant differences between bag and basket for symptoms or muscle load. The greatest EMG ratings and risk were identified for lifting and carrying 60kg plastic bags of coffee cherries on the back and shoulders. Workers reported liking the prototype bag better than the basket, with important suggestions for how to make the bag better.

The IEA wants to show the way of implementing practical ergonomics solutions that can demonstrate the unique contribution of our discipline to simultaneously optimize human well-being and system effectiveness. We believe that this is such an example.



#### 8.2. Diamond and Platinum Level Sustaining Members

Liberty Mutual has been the major sponsor of the most significant award hosted by the IEA relating to research in the area of occupational health and safety. Elsevier is a Platinum level sponsor and has been a loyal supporter of the IEA. Elsevier is publisher of IEA endorsed journals and also offers a range of services to IEA members. These services include the free access to the newest and top downloaded articles in Applied Ergonomics Journal and the International Journal of Industrial Ergonomics on the IEA website. We are grateful for this consistent support from our industry partners.

#### 9. Ergonomics Quality in Design (EQUID) Project

This project has been funded and developed by the IEA since 2000 and version 1.11 of the design template document was circulated to all Federated Societies in May 2008. This provided an opportunity for external review and reflection on the scientific validity and the practicality of the document. This project was led during 2006-2009 initially by Lina Bonapace, and subsequently by

Ralph Bruder. They have been ably assisted by a committee in developing, reviewing and evaluating the EQUID materials.

In 2007, the IEA Council agreed to finalize the development of the document and to determine an implementation plan. One aspect of this plan was that the Council did not wish for the IEA to commercialize the product and to have any direct involvement in assessing and endorsing particular products for manufacturers. In 2008, the EQUID committee continued in testing the EQUID document and refining it to be ready for presentation to the Council in 2009. At this time, the Council will vote on potential public release of the EQUID document and decide the most suitable implementation plan.

This project exposed to the ergonomics process to a wide range of international companies particularly involved in product design. Now, we are anticipating the release of this publication, which will include guidelines for using and supporting ergonomics through EQUID in different fields of application. We thank Ralph Bruder and his team for following up and completing this project.

### 10. JES Colleagues Survive Disaster and Contribute to Recovery

Presidents Saito, from the Japan Ergonomics Society (JES) and Maie, from the Human Ergology Society (HES), reported that all their members are safe and none were directly affected by the tsunami and subsequent nuclear accident in Fukushima, Japan. Despite the hardships, our colleagues in Japan continue to take positive actions by informing the public about ergonomics and contributing to our common interests. These actions include: 1) The JES President sending a message that reviewed ergonomics role in dealing with the earthquake, tsunami and accident at the nuclear power station; 2) An urgent joint conference of JES and CPE in Japan was held entitled "Ergonomist and JES could do anything now under the present serious accident!"; 3) JES issued a statement about learning from the present nuclear power station accident from the ergonomic point of view, and that finding causes is more important than assigning responsibility; 4) The Committee on Certified Professional Ergonomists published ergonomic advice on how to adjust to the darker conditions caused by the Japanese government's requirement to reduce energy consumption by 15% during the hot summer season. The IEA sent a message supporting JES's efforts and offered the IEA family's support to our colleagues in Japan, their families and their communities. This message was translated to Japanese and posted on the JES website.

#### **FINANCIAL REPORT**

Klaus J. Zink, Treasurer

#### **Accounting and Banking Procedures**

The IEA carries out its financial operations in U.S. Dollars (US\$). The IEA fiscal year coincides with the calendar year, January 1 through December 31. A cash basis of accounting is used. On this basis, revenues are noted and recorded when received, and expenses are noted and recorded when paid. The IEA maintains and carries out its financial activities with Scotiabank in Ottawa (Canada), Kreissparkasse (Germany) and PayPal. Two types of accounts are maintained with Scotiabank. The first type is an Active Cash Account (ACA) that can be characterized as a working account into which income is deposited and from which payments are made. In addition, there is a PayPal Account to collect dues and an Operating Account with Soctiabank into which the PayPal balance can be transferred. The second type is Guaranteed Investment Certificates (GICs). These accounts are interest bearing. A goal in managing the accounts is to maintain appropriate amounts to maximize interest income (which has been difficult during the last years because of the general interest level) while enabling financial affairs to be carried out efficiently. The Active Cash Account in Germany provides a credit card for paying IEA expenditures.

The IEA finances its activities with revenue from a number of different sources including fees of its member societies, sustaining memberships, capitation fees, donations, and other sources. Categories of expenditures include the work of the officers and standing committees, administration, awards, meetings, seed money, grants and other miscellaneous activities. As noted in the tables in this section, the financial situation of the IEA remained stable during the report period 2009-2011.

Because the IEA Congress is held every third year, and because there are significantly greater expenses during years of the Congress, it is customary for the Triennial Report to show revenue and expenditures for the past three years. This additional information provides the basis for a better understanding of revenue and expenditures as well as a longer-term picture of IEA's financial status.

During the period 2009-2011 the support of IDCs was one of the dominant strategies. Especially three activities had to be funded: (1) publication of the Ergonomics Guidelines (together with ICOH), (2) project in Nicaragua regarding coffee harvesting (see the report of the IDC Standing Committee) and (3) project in India to improve working (and living) conditions of farm women. This project is carried out by the IEA Liberty Mutual Award winner of 2009. For the printing of the Ergonomics Guidelines funding could be realized by members of GfA (Prof. Landau and Prof. Bruder). The coffee project in Nicaragua was financially supported by 4CA and ECOM (each of them contributed 10,000 USD; another 8,000 USD were financed by IEA with support of the IDC fund of JES and HFES), and finally the Indian project received financial support from the John Deere Foundation (120,000 USD). The treasurer thanks again all supporters of these lighthouse projects, which shall be later, transferred to other parts of the world. Furthermore, the IEA organized a sponsorship for the IEA Triennial Congress 2012 by Volkswagen (25,000 USD).

#### **Assets and Equity**

Table 1 presents IEA's assets and equities between 2009 and 2011. The total assets as of December 31, 2011 were 302,342 USD. 19.6 percent of these assets were in the cash accounts and 72.6 percent were in GICs at Scotiabank. The Seed Fund Receivable (7.8 percent) is a loan for IEA Congresses. There was a loan of 23,500 (20,000 USD for IEA 2012 and 3,500 for SEANES 2012) during the past two years.

While IEA's funds are held in the Scotiabank accounts indicated above, the money is actually earmarked for certain categories of expenditures. Table 1 presents the various categories for which funds are earmarked. Two general categories are annual operations and special funds. The annual

operations are labelled loan and cash reserves, and include expenditures for administrative and other recurring activities. These expenditures are funded with revenues from membership fees, capitation fees, interests, and miscellaneous incomes. There were five special funds in this category whose purpose generally is to promote and support ergonomics in developing countries (IDCs). These funds have been used to support lighthouse projects in IDCs. IEA also helped to fund conference attendances for people from developing countries. Another special fund is for the Liberty Mutual Award.

Human Factors and Ergonomics Society of Australia Fund – This fund was created by HFESA in 1988 to provide grants and seed funds to promote ergonomics in industrial developing countries in Southeast Asia.

Human Factors and Ergonomics Society Fund – Established in 1992, this fund is maintained through annual voluntary contributions from members of HFES. The purpose of the fund is to promote ergonomics in industrially developing countries. This fund has supported the coffee project in Nicaragua together with the Japan Ergonomics Society Fund.

Societe d'Ergonomie de Langue Francaise Fund – this fund was created by SELF in 1993. It provides for grants and seed funds to societies or groups to support the organization of conferences, seminars and meetings in developing areas such as Africa and South America.

Japan Ergonomics Society Fund – This fund is maintained through annual voluntary contributions from JES. It provided grants and seed funds for promoting ergonomics research and for organizing conferences in industrial developing countries. This fund has, among others, supported the coffee project in Nicaragua.

Liberty Mutual Fund – Funding for the IEA/Liberty Mutual Award is provided by Liberty Mutual Insurance Company. The fund provides financial support for the Prize of \$10,000 that is awarded annually.

Table 1. IEA Assets and Equity (2009 to November 2011)

ASSETS:	2011	2010	2009
Cash Accounts* Term (GIC) Deposits PayPal Account Seed Fund Receivable	58,270 219,627 945 23,500	85,084 188,100 - 12,024	43,169 181,379 - 0
Total	302,342	285,208	224,548

EQUITY:	2011	2010	2009
100 5	00.005	0.4.005	00.050
IDC Funds	32,625	34,325	38,259
ESA	5,426	5,426	5,426
HFES	5,496	8,496	8,496
JES	12,080	10,780	14,714
SELF	7,647	7,647	7,647
ESK	1,976	1,976	1,976
Liberty Mutual Fund	33,988	36,988	21,988
Loan Reserve	35,000	35,000	35,000
Cash Reserve	200,729	178,895	129,301
Total	302,342	285,208	224,548

## **Revenue and Expenditures**

Table 2 presents a summary of IEA's revenue and expenditures for 2009, 2010 and 2011. From the table it can be seen that the expenditures were higher for 2009, a year of an IEA Congress. Therefore, the revenues increased in 2010 when the capitation fee had been paid from CES. The officers and standing committees carry out a significant portion of IEA functions and activities. There was a significant reduction in travel costs as the officers used other sources than IEA and alternative methods of communication such as Skype.

\*Currently, the Operating Account contains 0.08 CAD, which was used to test the Paypal deposit function.

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Table 2. Statement of Operations for 2009, 2010 and 2011

Year	2011	2010	2009
REVENUE:			
Membership Dues - Federated and affiliated societies - Sustaining members Capitation fees Interest and exchange value Contributions (JES) Liberty Mutual Fund Misc	47,292 7,775 2,277 (2.277) 1,300 - 141	43,114 9,975 27,533 6,599 11,066 15,000 1,733	41,051 14,154 2,612 11,022 1,997 30,000 0
Total	56,508	115,020	100,836

Year	2011	2010	2009
EXPENDITURES:			
Officers and Administration	6,942 - 1,987 3,745 4,170 9,825 8,969 3,000 733 11,476	9,601 - 15,021 2,023 4,820 19,076 531 2,520 0 767 12,024	3,334 9,061 3,525 4,819 4,338 10,171 14,683 6,553 22,699 1,172
Total	50,847	66,384	80,355
OPERATING SURPLUS	5,661	48,637	20,481

Figure 1 shows the proportion of revenue for the different categories for the three-year period 2009-2011. As indicated in the figure, federated and affiliated societies' membership fees provide most of the IEA revenues. The level of sustaining membership fees could not be kept but there was intensive fundraising for IEA lighthouse projects, the IEA Triennial Congress 2012 and the printing of ICOH/IEA Ergonomics Guidelines, whereas only a small part of the funds has been transferred via IEA accounts.

Figure 2 shows the proportion of expenditures in the different categories for the three-year period 2009-2011. The standing committees carry out a significant portion of IEA functions and activities. These committees account for 56 percent of all expenditures.

## **Concluding Statement**

Overall, the revenues and expenditures during the 2009-2011 period are similar to previous years. As IEA has grown and its activities have expanded, totals have increased, but proportions as shown in Figures 1 and 2 have remained similar.

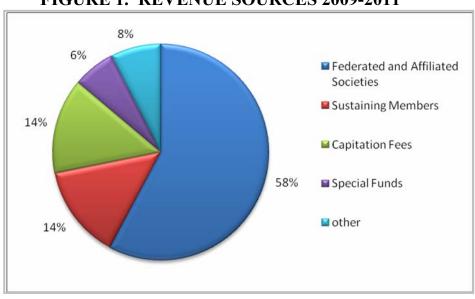
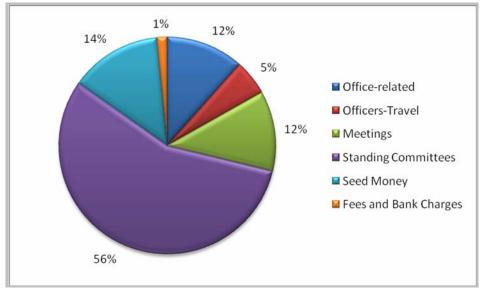


FIGURE 1. REVENUE SOURCES 2009-2011





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1961-1964:	President Secretary-Treasurer	S. Forssman E. Grandjean
1964-1967:	President Secretary-Treasurer	G. Lehman E. Grandjean
1967-1970:	President Secretary-Treasurer	P. Ruffell-Smith E. Grandjean
1970-1973:	President Secretary General Treasurer	B. Metz F. Bonjer J. de Jong
1973-1976:	President Secretary General Treasurer	F. Bonjer R. Sell J. de Jong
1976-1979:	President Secretary General Treasurer	A. Chapanis R. Sell H. Scholz
1979-1982:	President Secretary General Treasurer	J. Rosner H. Davis H. Scholz
1982-1985:	President Secretary General Treasurer	S. Sugiyama H. Davis J. Rutenfranz/B. Shackel
1985-1988:	President Secretary General Treasurer	H. Davis I. Kuorinka B. Shackel
1988-1991:	President Secretary General Treasurer	I. Kuorinka H. Hendrick B. Shackel
1991-1994:	President Secretary General Treasurer	H. Hendrick P. Rookmaaker I. Noy
1994-1997:	President Secretary General Treasurer	M. Helander P. Rookmaaker I. Noy
1997-2000:	President Secretary General Treasurer	I. Noy W. Karwowski K. Kogi

2000-2003: President W. Karwowski Secretary General P. Falzon Treasurer K. Kogi 2003-2006: President P. Falzon Secretary General S. Bagnara Treasurer K. Laughery 2006-2009: President D. Caple Secretary General P. Carayon Treasurer M. Chung 2009-2012 President A. Imada VP Secretary General E. Wang VP Treasurer K. Zink

## **Past IEA Triennial Conferences**

- Stockholm, Sweden 1961
- 1964 Dortmund, Germany
- 1967 Birmingham, United Kingdom
- 1970 Strasbourg, France1973 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
- 2003 Seoul, Republic of Korea
- 2006 Maastricht, Netherlands
- 2009 Beijing, China
- 2012 Recife, Brazil

## **Past Meetings of IEA Council**

- 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, German
- 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 Santorin, Greece
- 2000 San Diego USA
- 2001 Florence, Italy
- 2002 Santiago, Chile
- 2003 Seoul, Korea
- 2005 Funchal, Madeira
- 2005 San Diego, California, USA
- 2006 Maastricht, Netherlands
- 2007 Boston, USA
- 2008 Reykjavik, Iceland
- 2009 Beijing, China
- 2010 Brugge, Belgium
- 2011 Grahamstown, South Africa
- 2012 Recife, Brazil