# Reports

# MEETING OF THE IEA EXECUTIVE COMMITTEE

16-17th May, 2023 Seoul National University (SNU), Department of Industrial Engineering, Seoul National University, Seoul, South Korea

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# **IEA President's Report**

### November 2022 to May 2023

#### José Orlando Gomes

This report outlines the activities of the IEA President since November 2022 oriented by the IEA mission and goals, as well as the IEA Strategic Policies<sup>1</sup>, previously called IEA 7 Policies. The IEA faced an extraordinary challenge in recent years, operating in virtual mode. Lessons learned on this domain from this ordeal helped to facilitate the IEA operations combined with the resumption of face-to-face activities such as the last IEA Council meeting in Delft.

I congratulate all EC the members that have been working tirelessly, the federated and affiliated societies, and IEA networks that have collaboratively worked towards the implementation of projects and the full functioning of their respective committees in conjunction with the respective co-chairs. Below I list my activities in conjunction with the IEA Strategic Policies.

### Coordination of Executive Committee Activities

- 1. Engage stakeholders (internal and external)
- 2. Collaborate with and reinforce IEA member societies and networks
- 3. Contribute to science, technology, and practice
- 4. Identify the roles of IEA in promoting education, certification, and related matters
- 5. Reinforce relationships with external organizations (existing and new relationships)
- 6. Reinforce the infrastructure of IEA
- 7. Maintain a future focus for HFE

It is worth mentioning that the EC members understood the delicate and complex moment and have risen to the tasks of activity planning and meeting daily demands. Their continuous engagement, cooperation, and ongoing support have been fundamental in planning and implanting the respective projects or continuing projects that came from previous term. In this sense, it is also important to highlight the fundamental work of the IEA General Secretariat, as well as the excellent work carried out by the IEA administrator, Aleksandra Gamper in supporting the EC members' activities throughout this period.

Planning activities, guided by the IEA Strategic Policies and using as a basic tool the P2DT tool kit have oriented the enormous collaboration of the officers, administrator, Past President, and the SPI Chair who meet weekly to manage activities and ensure a smooth operation, as well as realizing meetings com each standing and ad hoc committees and respective co-chairs responding a demand appointed in the last EC meeting.

And complementing this topic, the excellent outcomes achieved by the ad hoc Committee on HFE Standardization, led by our former president, Yushi Fujita, in collaboration with internal and external stakeholders whose goal is to develop recommendations for sustainable collaboration with ISO in coming years, in in accordance with IEA's 7 Policies.

#### Communication and Collaboration with Member Societies

- 1. Engage stakeholders (internal and external)
- 2. Collaborate with and reinforce IEA member societies and networks
- 3. Contribute to science, technology, and practice
- 4. Identify the roles of IEA in promoting education, certification, and related matters

#### 5. Maintain a future focus for HFE

With the first phase of the beginning of the new management team over, the face-to-face meeting of the IEA EC in Delft pointed to the need for more intense communication between the officers and the members of the EC, which has been carried out in a very positive way for the advancement of management.

Worth mentioning are the extraordinary efforts made by the DP Standing Committee to put in practice the Congress Model with great cooperation with the Korean and British host societies and their respective organizing committees, creating the IEA2024 and IEA2023 interaction committees to improve the IEA Triennial congresses organization whose importance for IEA is fundamental.

As mentioned earlier regarding the implementation of the standing committees' co-chairs, the CPR committee was reformulated in order to improve communication with the IEA internal and external stakeholders such as co-chairs for IEA social media, IEA NewsBriefs, IEA webinars series in cooperation with the STP/TC's and FoW Task Force, and early career professionals with excellent results.

Another series of projects was initiated or implemented in the area of HFE education articulated with federated societies, networks, and universities led by PSE/ID, supported by SID and certainly involving soon STP/TC' as follows:

- the PhD Program on HFE for Latin America & Caribe based in Colombia, led by the Universities del Valle de Cali and Nacional de Bogota, in collaboration with the Colombian Society of Ergonomics and Ulaergo, advances with the launch of the second selection process for 28 June 2023, and classes scheduled to start in August 2023. In parallel, agreements with foreign universities are in process, as well as the participation of international professors in the students' advising and research project design.
- the cooperation advances with the Technological University of Argentina for the development and implementation of a master's degree in HFE, in collaboration with the Argentine Association of Ergonomics, whose draft is already ready. The IEA/PSE has been facilitating agreements with foreign universities which are in progress such as the PhD Program for Latin America, as well as prospecting professors from other countries;
- to collaborate with the development of the Graduate Program in HFE for Asia project, led by the ID and PSE Committee Chairs and co-chairs;
- -designing of a Graduate Program on HFE for Africa Sub-Saharan lead by Ergonomics Society of South Africa leadership along with ID and PSE chairs and co-chairs;
- development of minor on HFE project for 7 Industrial Engineering courses/Universities in cooperation with the Ecuadorian Ergonomics Association in order to have further development such as the Ecuadorian Anthropometric tables;
- implementation of the master's degree in HFE organized by the Guglielmo Marconi University of Rome, in collaboration with the Italian Ergonomics Society and the Italian Network on Health and Safety to be started this May.
- it is worth mentioning the great effort in creating new societies and preparing them to become new federated societies in various regions of the world: Bolivia, Nicaragua, Guatemala, Honduras, Costa Rica, Dominican Republic and the Caribbean Society, the latter counting on the HFES collaboration. In Africa, the creation processes advance in Ghana, Angola and Mozambique. In Asia, efforts have been made for Bangladesh to become a federated society, as well as efforts to structure the society in Vietnam.

Last but not least, it is worth mentioning the enormous commitment of the federated societies and networks that organized congresses and meetings where we were representing the IEA, as can be seen in the table presented at the end of this report.

# Collaborations with External Stakeholders

- 1. Engage stakeholders (internal and external)
- 2. Collaborate with and reinforce IEA member societies and networks
- 3. Contribute to science, technology, and practice
- 4. Identify the roles of IEA in promoting education, certification, and related matters
- 5. Maintain a future focus for HFE

A great effort has been made in keeping projects and activities ongoing with the international organizations with which the IEA maintains relations, as well as initiating and implementing activities with new organizations. Among these, the ILO, WHO, ISqua, ISO, ICOH, IISE/AES, INCOSE, FPE, and CDC as well as new agreement is in process with International Society of Pharmacovigilance (ISOP).

The excellent work carried out by the Awards committee has consolidated the new awards as well as awakening the interest of other stakeholders on this matter. Certainly, all attention will be given in this regard.

1. The table below presents a summary of activities developed by the IEA's leadership team (President and EC) together with FS/AS's, IEA Networks, and external stakeholders. Expect more details of these activities in EC members' reports and presentations.

Activity	2022	2023
Conferences and Meetings (virtual)	Croatia	JES, Colombia (PhD Program), Abergo
Conferences and Meetings (in person)	India, Cuba, Colombia	Argentina
Officers weekly meeting	Almost every Tuesday, with participation of the officers, Past President, SDI Chair, and IEA administrator (except year's end break)	Almost every Tuesday, with participation of the officers, Past President, SDI Chair, and IEA administrator
Standing and ad hoc Committees meetings	Monthly (PSE/ID , DP, Caribbean HFE , Bolivia, Angola, Ecuador, JES)	monthly (PSE/ID , DP, Caribbean HFE , Bolivia, Angola, Ecuador, JES , Subsharan graduate program, etc)
Technical Committees	Assistance	Assistance
Journal: Work, Human Factors, etc.	article review	article review

IEA (2022). IEA Strategic Policies. (https://secureservercdn.net/45.40.153.46/m4v.211.myftpupload.com/wp-content/uploads/2014/10/IEA-Strategic-Policies-2021.pdf).

### 2022 IEA/Kingfar and IEA/Tsinghua Awards

As the IEA Awards Chair, I am pleased to announce selections for the 2022 IEA/Kingfar and IEA/Tsinghua Awards. Thanks again to Tsinghua University and Kingfar Beijing for sponsorship of these awards. The awards are accomplishing their goals to cultivate global citizens who will thrive in today's world and become tomorrow's leaders, to significantly promote and reward high-quality original research and applications on new and emerging HFE issues or issues specifically related to industrially developing countries (!DCs), and to promote a career path in HFE.

The 2022 awardees are all excellent and are representative of IEA's global membership. The student candidates were all well-deserving of the IEA/Kingfar Student Award. The competition for the IEA/Tsinghua and IEA/Kingfar ECR awards was high and selection was very difficult. Many congratulations to all on excellent work for Human Factors/Ergonomics!

**IEA/Tsinghua Award:** (5 nominations; 3 awardees selected)

Ting Li – CES (Chinese Ergonomics Society)

Rauf Iqbal - ISE (Indian Society of Ergonomics)

Tarcisio Abreu Saurin – ABERGO (Associação Brasileira de Ergonomia)

#### **IEA/Kingfar Student Award:** (5 nominations; 5 awardees selected)

Vigneshkumar Chellappa - ISE (Indian Society of Ergonomics)

Yidan Dong - CES (Chinese Ergonomics Society)

Jia Wei Fu - CES (Chinese Ergonomics Society)

May Jorella Lazaro – ESK (Ergonomics Society of Korea)

Akram Sadat Jafari Roodbandi – IEA (Iranian Ergonomics Society)

#### IEA/Kingfar Early Career Researcher Award: (7 nominations; 5 awardees selected)

Gabriela Garcia – SOCEERGO (Sociedad Cientifica Ecuatoriana de Ergonomia)

Carlos Aceves Gonzalez – SEMAC (Society of Ergonomists of Mexico)

Michael Greig – ACE (Association of Canadian Ergonomists)

Lakhwinder Pal Singh - ISE (Indian Society of Ergonomics)

Tingru Zhang – CES (Chinese Ergonomics Society)

Tsinghua University and Kingfar each comtributed an extra \$1000 for Honoria for the award selection committee. We have not yet distributed these.

It should be noted that the deadline extension in 2022 resulted in a delay in the selection process. I hope that we will be able to keep to the June 30 deadline this year so that the awards can be announced by the end of 2023. **Please urge your federated societies to nominate deserving candidates.** 

#### **Fellow Awards**

Nominations are (were) due on April 30-so far we do not have any nominations. HFES asked for an extension, so they will submit several nominations.

#### **Triennial Awards**

We have one new Triennial Award arranged by Andy Imada and Bill Marris with the CDC Foundation. The Thomas R. Waters MSD Memorial Scholarship Award is a realization of the Waters family's wish to enable students and recent graduates to continue the research to help understand and control MSDs in the workplace.

Thomas R. Waters was a scientist at NIOSH and was the mastermind behind the NIOSH Revised Equation for the Design and Evaluation of Manual Lifting Tasks. This contribution has been adopted by governments and industries all around the world and its applications have saved countless numbers of back injuries and human suffering over the years. The Waters family would like to encourage the furthering of the science in this area and are sponsoring a scholarship for students and recent graduates to further stimulate creative research associated with prevention of back disorders. The award amount in 2024 will be \$3000.

We will be sending a call for nominations for all Triennial Awards this summer. It is a bit distressing to note how difficult it is to solicit nominations and how few people are nominated for these awards.

# Follow-up on Outreach Activities

We have a draft MOU with ISoP, the International Society for Pharmacovigilance. Please take a look a the MOU, which should have been sent with the meeting materials. If you approve, we will take the MOU to Council for a vote.

#### **WHO**

We completed major revisions on the IEA/WHO document *Applying Human Factors/Ergonomics to Health Care for Patient and Health and Care Worker Safety.* WHO is satisfied with this draft and will start the process of edits and approvals from the WHO bureaucracy. Prior to finishing this draft, we conducted a workshop at HEPS2022 with experts in HFE in healthcare. These experts reviewed the document and gave feedback on the topics, content, and format, and also addressed the issues of stakeholders and potential stakeholder issues and actions.

We (led by Michelle Robertson and Sue Hallbeck) collected and organized a sample of 20 case studies representative of the HFE approaches addressed in the document. We have a large selection of valuable experiences that can be used as examples for continuous learning.

Because attention to HFE is included in the Global Patient Safety Action Plan (Strategic Objective 2: High-reliability systems; Strategy 2.4), implementation of HFE methods and solutions will be critical to the implementation of the plan. HFE is critical in implementing patient safety interventions. IEA is eager to assist through completion and dissemination of this collaborative document and the accompanying materials.

## IEA 2022 TREASURER'S INTERIM REPORT

# January 1st – December 31st, 2022

### Thomas Alexander

#### **INTRODUCTION**

This report summarizes the financial performance for the period of January 1<sup>st</sup>. December 31<sup>st</sup> of 2022 (hereafter referred to as "the Period"). The basic accounting rules are essentially the same as those applied in previous years. However, the following are noted for clarification:

- 1. Banking and financial services:
  - 1.1. The IEA has consolidated its banking at UBS in Switzerland, where it now has:
    - 1.1.1. a basic US\$ denominated checking account opened in Oct/2017
    - 1.1.2. a basic CHF denominated checking account opened in Oct/2017
- 2. on advice from the IEA's UBS account manager the fiduciary account for investment purposes has been closed, and its balance transferred to the IEA's checking account (the monthly interest of the investment account was expected to become negative).
- 3. Membership dues of previous years paid during Year 2022 are booked with Y2022 membership dues.
- 4. Membership dues for Y2023 and beyond paid during Year 2022 are booked as Liabilities.
- 5. Whenever possible expenses are allocated the various IEA committees rather than to "Representation & Outreach".
- 6. The "Representation & Outreach" classification holds only (but not all) expenses specifically related to IEA Executive Committee activities:
  - 6.1. Some of IEA officers' travel for "Representation & Outreach" is being partially covered by the host society or by the officer's local society.
  - 6.2. Most host societies are already covering accommodation, food, and local transportation, and some of them have started to cover air travel as well.

## 7. IEA accounting system

7.1. The following accounting titles are used in the P&L Statement.

Revenue items	Expense items
<ul> <li>Membership dues (FS and AS combined)</li> <li>Sustaining member contributions</li> <li>Capitation fees</li> <li>Interest</li> <li>Funds Contribution</li> <li>Miscellaneous</li> </ul>	<ul> <li>Meeting</li> <li>Representation &amp; Outreach</li> <li>Office</li> <li>Awards Committee</li> <li>ID Committee</li> <li>PSE Committee</li> <li>STP Committee</li> <li>DP Committee</li> <li>CPR Committee</li> <li>Grants</li> <li>Historian</li> <li>Bank charges</li> <li>Website</li> <li>Exchange rate and clearing fee</li> <li>Miscellaneous</li> </ul>

7.2. Following the recommendation of the accounting contractor (Consavo Fiduciaries, Zürich, CH.), the professional accounting software Banana (Ver. 9.0.5) has been introduced and used for accounting. This enables fast and cost-efficient exchange with the Swiss official. Modifications were introduced for year-end closing bookings according to Swiss tax regulations.

## BALANCE SHEET (BS)

Tables 1 & 2 show IEA's Balance Sheets on December 31<sup>st</sup>, 2021 and December 31<sup>st</sup>, 2022, to allow for easier comparison.

Table 1: Balance Sheet on December 31st, 2021.

Balance Sheet – Dec 31 <sup>st</sup> , 2021 - (US\$)			
Assets		Liabilities	
Current Accounts, cash and cash equivalents	\$439,535	Dues Advanced Received	\$193
Prepaid Expenses	\$2,396	Accounts Payable	\$12,756
		Earmarked Funds	\$48,187
		Accrued expenses and other provisions	\$4,391
		Total Liabilities	\$65,527
		Equity	
		Total Equity	\$376,404
TOTAL	\$441,931	TOTAL	\$441,931

Table 2: Balance Sheet on December 31st, 2022.

Balance Sheet – December 31 <sup>st</sup> , 2022 - (US\$)			
Assets		Liabilities	
Current Accounts	\$494,246	Dues Advanced Received	\$500
Prepaid expenses*	\$3,507	Accounts Payable	\$35,526
		Earmarked Funds	\$43,377
		Accrued expenses and other	\$2,163
		provisions	\$2,103
		Total Liabilities	\$81,566
		Equity	
		Total Equity	\$416,187
TOTAL	\$497,753	TOTAL	\$ 497,753

IEA's equity increased by US\$39,783 during 2022, from US\$376,404 on Dec 31st, 2021, to US\$416,187 on December 31st, 2022, due to postponed payments of member societies for previous years and to travel expense reductions due to the CoViD-19 prevention response. In addition, two major institutional sustaining members have increased their contributions significantly. This allowed supporting the general HFE development by additional awards for HFE projects and researchers by the Awards Committee.

### REVENUES AND EXPENDITURES (P&L)

Table 3, shows the Revenues and Expenditures performed from Jan 1<sup>st</sup> to December 31<sup>st</sup>, 2022 as is conventional in the Treasurer's Report.

Table 3: 2022 Revenues and Expenditures to December 31st, 2022

2022 P&L Statement to December 31st			
Revenues		Expenditures	
FS & AS Membership Dues	\$50,530	Meeting	\$6,804
Sustaining Member Contributions	\$60,200	Representation & Outreach	\$8,584
Capitation Fees	\$0	Office	\$10,844
Miscellaneous	\$8,218	Awards Committee	\$36,147
		ID Committee	\$3,216
		PSE Committee	\$0
		STP Committee	\$1,740
		Future of Work	\$686
		DPE Committee	\$1,522
		CPR Committee	\$0
		IEA Congress	\$499
		Bank charges and acc. Fees	\$998
		Exchange Rate Losses	\$0
		Website	\$8,000
		Miscellaneous	\$124
Total Revenues	\$118,947	Total Expenditures	\$79,165
Summary of operations			\$39,782

#### CASH FLOW

2022 Cash Flow was typical again for IEA financial activities. The year before has been untypical due to the transfer of IEA funds from an investment account to its USD checking account to protect the balance from expected currency devaluation. Reduced meeting expenses have also contributed to cash flow and to save money.

In 2022 seed money has not neither been sent nor received. The funds disbursed were used to support the develop the domain of Human Factors and Ergonomics in Central America and the Caribbean. Because of the poor investment conditions in 2022, it has been decided not to invest money in a special fund. This will be revisited in 2023, when conditions migh improve.

Table 5: Cash Flow to December 31st, 2022

Cash Flow (US\$)		
Summary of operations, Year 2022, up to Dece	mber 31 <sup>st</sup>	
Forwarded from 2021 @ 2022 Exchange	439,535	
Cash Revenues (+) (includes dues advanced this year, but does not include dues advanced in previous years)	118,447	
Cash Expenses (-) (does not include depreciation)	- 59,426	
Seed moneys sent (-) and received (+)	./.	
Funds disbursed (-) and received (+)	- 4,810	
Investment Fund liquidation	./.	
Revenues (advanced)	500	
2022 Cash Flow	54,711	
Available to be forwarded to 2023 @ 2022 Exchange	494,246	

### EXPLANATORY NOTE ABOUT EXCHANGE RATE VARIATION

Most of the IEA's financial assets are now held in US\$ denominated accounts. The IEA has a CHF denominated account due to local banking requirements and to support credit card operations, but the amounts maintained there are too small to warrant exchange rate tracking in this report (although the exchange rate and its variations are still taken into account in the IEA's books).

### REMARKS AND RECOMMENDATIONS

- It is necessary to continue to explore new and/or existing funding sources, in new ways, to guarantee sustainability.
- Member invoices were sent in the 1<sup>st</sup> quarter and payments were received as usual.
- 93.7% of 2021 sustaining member contributions have been collected.
- 30 of 54 FS & AS members paid their 2021 membership dues, totaling over 80% of revenues expected from this source, despite the pandemic.
- 2021 accounting information for our tax returns will be provided to our Swiss accounting service using the Banana Accounting software.
- Detailed transaction data has been input to Banana accounting from 2019 onward and the Excel-based accounting process will soon be retired.



#### Strategic report for Science Technology and Practice (STP) standing committee of IEA

The Science Technology and Practice (STP) standing committee is led by Nancy Black (NB, Chair) with Rosemary Seva (RS, co-chair, TCs), Karen Lange Morales (KLM, co-chair, Publications) and includes Technical Committee (TC) chairs (or their representative). Executive meetings occur bi-monthly (approximately).

The strategic plan for the STP standing committee for the period from 2022-2024 was defined with the STP executive and included 13 initiatives within the areas of TC Support, Publications, and Administration. First shared with the IEA Executive Committee in April 2022 these were organized into short term (by Dec. 2022), medium term (by March 2023) and long-term (by March 2024). The P2DT elements were applied to create this list of priorities. Green indicated complete.

Strategic initiative	Due	Status (April 2023)
<b>TC1.</b> Revised TC handbook document to facilitate communication between TC Chairs and co-chairs and the STP executive. RS sent to TC chairs for comments in September 2022.	≤ Dec 2022	Completed. The only TC response (Oct. 2022) was that as it was used, comments would be supplied. Since no comments have since been received, it is considered complete
TC2. New TC-Chair orientation to provide guidance to new TC executives, whether taking over from a previous executive, or starting a new TC. RS will lead with TC Chairs being direct knowledge users. We expect this will accelerate new TC creation and will take the form of YouTube available video-recorded support based on the revised TC Handbook.	≤ Mar 2023	Reviewing. Since no further requests have been received following the revised TC handbook, we are unsure if an orientation recording would be of use.  At June 5 2023 STP TC meeting next steps will be determined.
TC3. Hold regular semi-annual TC-STP meetings in June and December with a fixed agenda including a 1-slide report from each TC communicating their activities, challenges, and needs, encouraging STP and inter-TC support. This started in December 2021, and will continue, led by NB.	N/A	Continuing. Meetings scheduled: 1) Dec. 7 -9 2021 (2 times; 17 attended; 14 TCs) 2) June 1 12:30 pm UTC (12 TCs and 9 TC update reports received). 3) Dec. 1, 12:30pm UTC (14 TCs & reports + 6 TC reports+ 3 TC regrets; ideas shared in minutes* 4) COMING: June 5, 11:30am UTC (to facilitate attendance by Australians+; 18 accepted + 4 possible of 60 invited)
TC4. Guidelines to support Journal Special Issues led by TCs. Building from IEA2021 special issues experience, to support Special Issues associated with IEA Triennial Congresses + benefiting TCs and Journal partners. IEA and STP are indirect stakeholders.	≤ Mar 2024	Continuing. On agenda of STP TC Dec. 2022 meeting. No specific conclusions yet. Led by NB with STP executive support.



STP\_Report to IEA Council Meeting\_2023-04

STP_Report to IEA Council Meeting		
Strategic initiative	Due	Status (April 2023)
Pub1. MARKETING C-suite "Giving your business the human factors edge" IEA & CIEHF published 2022.20 pages. Available at: https://iea.cc/getting-down-to-business/https://ergonomics.org.uk/resource/giving-your-business-the-human-factors-edge.html CIEHF created 1 minute video & infographic. "Launched" at IEA2022 Council meeting. Stakeholders = IEA and E/HF practitioners and document users in the C-suites of the world.	≤ Dec 2023	Planning. Discussed with IEA Executive Committee Apr. 2023 - To define ISBN, authors, date of publication - Image consistent with IEA (to come, support of KLM & marketing student)
Pub2. Prepare "Ergonomics in a nutshell" document for Project Managers (operational managers). Following the template of the Csuite document (Pub1), led by STP with key support from E/HF experts for Project Manager knowledge users.	≤ Dec 2023	Progress. KLM created relevant mind-map from EQUID documents applied to this project. ChatGPT used to expand content.  Steering committee partly established (Andy Imada + 4 more people)
Pub3. Prepare "Ergonomics in a nutshell" document for Labour Organisations. Following the template of the (Pub1 & Pub2), led by STP with key support from E/HF experts for Labour Organisation knowledge users. Pub4. Complete publication of IEA2021 Special Issue for Journal WORK. Led by NB with editors from IEA past Executive	≤ Mar 2024 ≤ Dec 2022	Completed. Work - Volume 73, issue s1, 292 pp. 10.3233/WOR-223646 (editorial) Published: Nov. 2022. <i>Open access</i>
Committee (Kathleen Mosier, José Orlando Gomes, Thomas Alexander, and Sara Albolino).  Pub5. Developments from EQUID	≤ Mar	<b>Progress.</b> Equid 4.0 theoretical article in
publications for knowledge translation into new formats to encourage application. Led by KLM with STP executive support, for knowledge users in the IEA community.	2024	revision post initial journal review. Equid 4.0 Application article planned (early writing stages). Further knowledge translation to come.
Ad1. Review and revise Endorsement Operating Procedures. Led by NB. Propose revisions to clarify, facilitate procedures for users while respecting IEA best practices. These will be presented first to IEA Executive Council then to full Council. Stakeholders: IEA and those using OPs to streamline processes.	≤ Oct 2022 +	IEA Event Endorsement clarified.



STP\_Report to IEA Council Meeting\_2023-04

Strategic initiative	Due	Status (April 2023)
Ad2. Support IEA Triennial Congress Management Planning group. Actively supporting knowledge translation from IEA2021 to future triennial congresses led by Elina Parviainen's (EP) CPR group.	≤ Dec 2022 +	Completed document. NB and Patrick Neumann created A Scientific Chair's Guide to Organising an IEA Congress: Tips and advice from the IEA2021 Scientific Chairs) including Hybrid and Virtual concerns for Congress Management document. Submitted to EP April 2023; distributed
Ad3. Facilitate quarterly webinar production by TCs to support IEA series, by defining required supporting documentation (for organisers). Led by RS with Sara Albolino and TCs. Increased visibility of presenting TCs will support member recruitment and TC renewal.	≤ Dec 2022 +	Completed. Resource documents created & shared at STP-TC June meeting. Calendar created. Publicity in collaboration with CPR group. Announcements due 17th of the month. Automated certificates of thanks to come. RS managing calendar.
Ad5. Liaison between ISO and TC led by NB, as STP chair. This is a reporting role to annually communicate relevant IEA activities and initiatives to ISO and from ISO to IEA and its TCs for mutual benefit.	≤ Mar 2022 +	Progress. Ad Hoc Standards IEA Committee proposed by IEA Executive Committee. Committee structure defined; committee chaired by Yushi Fujita. NB to step back

#### \* TC ideas from Dec. 2022 meeting to be followed up at June 2023 meeting +

- Publications platform for communications presented at TC-organized events (to ensure enduring open access).
- Ergonomics for Children and Educational Environments:
- An artist required for the upcoming Ergonomics Checkpoints document focusing on (contact Lawrence Schultz)
- Dearth of information on children with disabilities (anthropometry +). To support efforts to correct this absence, contact Lawrence Schultz
- Courses through TCs:
- Resilience engineering free 45-hour course initiative successful this fall. Certificates available through organizers.
- Summer School planned associated with Digital Human Modelling annual conference (June 2023, Belgium)
- Webinar attendance
- IEA Zoom subscription allows 1000 attendees in webinar format but only 100 attendees in meeting format.
- Capture number of people registered for webinars + number of actual attendees.
- Interest in creating Podcasts (to complement webinars).
- Recruitment is a challenge for some TCs. Suggestions:
- Take advantage of IEA Federated Societies to increase TC membership (ex. HFES creating new group on "Ergo for children")
- Reach out to new geographical areas for new ideas, members (ex. Building and construction)
- Good initiatives planned to increase new career member involvement.

#### Professional Standard and Education (PSE) committee

**Chair:** Takeshi Ebara (Japan) **Cochairs:** Yassierli (Asia, Indonesia), Tahar Hakim Benchekroun (Africa, Paris), Joao Alberto Camarotto (Latin America, Brazil)

**Certification sub-committee chair:** Marion Edwin (Oceania, New Zealand)

# 1. Development of education tool kit for HFE core competencies collaborating with CNAM (Paris) and JES/CPEJ (Japan)

- Monthly meetings with CNAM (Paris) and JES/CPEJ (Japan) are held from March 2022.
- Goal is to develop "hands-on training" for HFE practitioners, corresponding to a real-world problem and the industry needs on HFE.
- We eventually would like to share our output/experience with the federated societies of IEA, as a model case of practical training on HFE responding to new core competencies.

# 2. Ph D program in HFE for Asia in collaboration with International Development Standing committee and Strategic Development Committee (Ganguli, Andrew Todd, Yassierli, and Ebara)

- Developing a collaborative Ph.D. program on HFE in Asia, monthly meeting were held at the initiative of Prof Ganguli.
- For Identifying the need for Ph.D program, we conducted a preliminary online survey. Most of the respondents answered that low awareness of HFE among stakeholders was a barrier to the implementation of HFE in each region. And we need to identify how many universities/faculties in Asia are interested in collaborative PhD programs.

# 3. The activities of the IEA co-chairs of the IDC and PSE committees for Latin America & Caribe and African Portuguese Speaking Countries (Profs Antonio, Rodriguez, and Camarotto)

They had several activities from September 2022 to April 2023 divided by topics below.

#### I) Implementation of Teaching and Research in Ergonomics

- Colombia: Doctorate Program on HFE for Latin America and Caribe, Universidad del Valle, Cali, Colombia, hybrid model

Activities with the coordination of the postgraduate course in Ergonomics, together with the doctoral course at the School of Public Health at the Universidad del Valle; we participate in face-to-face activities, on site, and online activities, both meetings and seminars and classes.

The first cohort inaugurated in August 2022 count with 15 students from 6 Latin American countries from different areas such as industrial and environment engineering, medicine, psychology, physiotherapy, etc from Mexico, Colombia, Ecuador, Peru, Chile, and Uruguay. The application for the second cohort is open for new 15 students until June 28, 2023 and this time will include Caribbean region as well. The folder below is in Spanish.

Last but not least, the Universidad del Valle board, the 3rd public university most important in Colombia took a decision to affiliate to IEA as corporate sustaining member, at Gold Level. The Universidad del Valle also planning a Doctoral School in Vina del Mar, in the same period of the IEA EC & Council Meetings, and the Sochergo Congress next October to profit the presence of international experts. This an work in progress in coordination with Sochergo, IEA EC and co-chairs

# - Argentina: Master on HFE, National Technological University of Argentina, Industrial Engineering Department, Campus Buenos Aires, hybrid model

Attendance at 2 face-to-face meetings, together with members of the Argentine Society of Ergonomics, and the UTN University, in the construction of the Master in Ergonomics at that university. Nowadays, the master draft is ready and an agreement with the Doctorate Program on HFE for Latin America & Caribe of Universidad del Valle is in progress in order to have international profs and also to offer this course to other Latin American countries in the region, for example, Bolivia which just legalized its society.

- Brazil: Professional Master on HFE for Labor Inspectors of the Ministry of Labor, Federal University of

#### Rio Grande do Sul (UFRGS), Porto Alegre, Brazil, presential

Design and teaching the course in the Federal University of Rio Grande do Sul and the Ministry of Labour, with the support of ABERGO, in the organization and development of a Master's Degree on Human Factors & Ergonomics, aimed exclusively at training 15 labor inspectors in Ergonomics.

#### - Ecuador: Bachelor of Engineering

Summary Of Activities Of The Commission to design a minor on HFE in the "Ergonomic Project For Industrial Engineering Careers In Universities Of Ecuador":

In July 2022, under the direction of Prof. José Orlando Gomes, president of the IEA, the following people met: Prof. Mario Cesar Vidal, IEA PSE co-chair; Porf. Joao Alberto Camarotto, IEA PSE co-chair (replaced in 2023 Prof. Mario Vidal who is co-chair for Awards Committee); Prof. Iván López, Commission Coordinator & Ecuadorian Ergonomics Association; Prof. María Gabriela García, San Francisco de Quito University; Prof. Guillermo Neusa, Technical University of the North (UTN); Prof. Julio Pambabay, UTE University. Later, by the end of the year, the following people joined: Prof. Grether Real, Technical University of

Later, by the end of the year, the following people joined: Prof. Grether Real, Technical University of Manabí (UTM), Prof. Edison Salazar, Technical University of Cotopaxi (UTC)

In these 5 months it was possible to talk about the subjects that each career has and that are related to Ergonomics and Human Factors, tending to the following among the main ones: Ergonomics; Ergonomics Laboratory; Human Resources; Work Psychology; Industrial Security; Industrial hygiene; Labor legislation; Industrial hygiene; Work Sociology; Product Design; and Capstone Project base on Field Study (2 semesters in the 5th year).

For the month of February 2023, two more people joined: Prof. Edmundo Cabezas, National University of Chimborazo and Prof. Oswaldo Tandazo, Private Technical University of Loja (UTPL).

Currently, each member of this commission is collecting the following information: 1) Academic content of each subject, 2) Number of students receiving this subject, and 3) Hourly load of each subject.

We hope that for the next meeting we can have the information as well as more participants from other universities and the idea to design a minor and in the future to build up the anthropometric tables for Ecuador using the student capstone projects guided by the profs in cooperation with Ecuadorian stakeholders such as Ministries of Education and Health, industrials, unions, etc.. Secondly, the industrial engineer trained in the HFE minor will be associated to the HFE society as ergonomist junior.

#### II) Certification & HFE Standards

**Brazil:** We actively participated in the implementation of the ABERGO/Brazilian Association of Technical Standards (ABNT-ISO affiliated) agreement, to develop the Brazilian Ergonomics Management Certification System to apply to Brazilian Companies. The draft document is already finalized and approved by SISCEB and ABNT and the implementation will start in second half of the year 2023.

**Brazil:** We are assisting ABERGO in the implementation of a new federal ergonomics regulation on HFE in cooperation with the Brazilian Ministry of Labor, which will replace the old one from the 1990s.

#### 4. Report on the progress of the certification subcommittee (Marion)

- Certified: South Africa, In progress: Argentina.
- Planning a workshop in the IEA 2024 to have an opportunity with all certification bodies/boarding bodies to discuss the certification system.

#### 5. Update of HFE Educational map <a href="https://iea.cc/global-hf-e-education-map/">https://iea.cc/global-hf-e-education-map/</a>

- IEA provides global educational institution map of HFE on the IEA website.
- The number of organizations/institutions/universities registered is 1,426 as of the end of April 2023. Especially, the number of registrations in the Asian and African regions is quite low. We look forward to receiving the information of institution that provides bachelor, master, and Ph.D program on HFE.

## **International Development Standing Committee**

Chair - Anindya Ganguli India

**Co-Chairs** per Region:

Martin Rodriguez, ADEA, Argentina Latin America

Paulo Antonio Barros Oliveira, ABERGO, Brazil

Nelson Ekechukwu, ESN, Nigeria – Africa

(with the collaboration of Prof. Paulo Antonio for African Portuguese speaking countries)

Liang Ma, CES, China Asia

Jennifer Guiterrez, HFESP, Philippines

#### **LATIN AMERICA**

(IEA Presidents - present and past)

Steps towards the creation of new Ergonomics Societies in Latin America & Caribbean Region that could be affiliated to ULAERGO and IEA

#### **Bolivia**

Meetings were held with the management group of the newly created Society of Ergonomics of Bolivia, which is in the final stages of its formal regularization. Participation in the organization and presentation of panels and conferences at the congress organized by that entity; and also held monthly meetings with the society board.

#### Angola/Mozambique

Online meetings have been held, and an in-person meet is scheduled in June, together with South Africa, for the formation of the respective societies of specialists in cooperation with ESSA and Prof. Andrew Todd. A working group was set up with Angola with the important stakeholders in the country, such as Sonangol, the Angolan State Oil Company, and the Superior Polytecnical Institute of Angola (ISPTEC).

#### Caribbean countries:

Meetings have been held with professionals from several Caribbean countries, such as Puerto Rico, Cuba, and Barbados, in order to structure the Caribbean Society of Ergonomics and Human Factors with the support of ULAERGO, the Human Factors and Ergonomics Society from USA (Dr Christopher Reid), and the Doctorate Program on HFE for Latin America & Caribbean. Monthly meetings are being held to move forward with the project. Also, the West Indies Universities are on board supporting the project.

In November 2022, JOG and KM participated in the XX Scientific Congress of Engineering and Architecture, of the Technological University of Havana to further the discussion at Merida about the formation of a Caribbean HFE Society and to get support of Cuban ergonomists. Currently, for the Cuba chapter, there is a core group of Cuban professors, many of them from the Universities Tecnologica de Havana (CUJAE), Matanzas.

Dr. Erik Vega Guzman, Director of Puerto Rico OHSA- San Juan Area and Puerto Rican colleagues are very interested in organizing the Puerto Rico chapter of the Caribbean Society.

At the last Congress of the Indian Society of Ergonomics, also held in November 2022 in Patiala, JOG and AKG interacted with Prof. Subir Gupta of West Indies University and motivated him to contribute

to developing this work in Barbados and with other colleagues at the West Indies University to leverage its presence in 17 English-speaking countries and Caribbean territories.

#### **Central America countries:**

Small countries in Central America (Nicaragua, Guatemala, Honduras, Costa Rica, and Dominican Republic) already have structured small societies or interest groups on HFE in order to have legalized registration of these organizations. Some of them are already affiliated to ULAERGO such as Costa Rica, Nicaragua and Guatemala. The project now is to structure them in order to be federated societies of IEA.

#### **AFRICA**

#### Ghana -

At present, there are not enough members to form a society. Initiatives to increase the membership (such as a Masters Programme in HFE, described below) are in progress.

#### Masters Programme for Sub-Saharan Africa -

(in collaboration with Future of Work Task Force, Communication and Public Relations, and Strategy Development and Implementation Committees)

So far, there have been five meetings of the group looking at postgraduate educational training in HFE for Sub-Saharan Africa, the last being on the 3rd of April 2023.

A two-prong approach of Coursework masters' in HFE and a Bridging short course in HFE is being considered.

The ESSA PAB Formation Model has been adopted as the base, and the group is now looking at what is preparatory for the programme (what should participants already know before embarking on the Masters) and what is core to include in the Masters, and what is missing from the Formation Model (content or process) that should be included in this uniquely African programme?

#### **ASIA**

#### Collaborative Ph.D programme for Asia -

(in collaboration with Professional Standards and Education and Strategic Development Committees)

The development, with IEA support, of a PhD program in Latin America (Colombia) focused on HF/E as a collaboration between the National University of Bogotá and the University del Valle now forms a notable example for such collaborative HFE doctoral programmes in other parts of the world. Benchmarking with the Ph.D. program developed in Latin America, it is proposed to develop a collaborative HFE Ph.D. program in Asia, using the IEA's Participative Programme Development Tool (P2DT) for this purpose. The preliminary steps in the implementation of this tool are to identify the needs and the stake holders, and to make a list of the barriers and benefits. Four meetings have been held, and a questionnaire to identify the needs and barriers was developed and finalised after discussion. The questionnaire was sent out to all the stakeholders and responses have been received. A meeting to discuss the findings and decide the way forward will be held in the beginning of May.

### Bangladesh -

Based on the interactions between AKG and the office bearers of the Bangladesh Ergonomics Society (BES), the BES has formally applied for membership of ACED. This application has been approved by the ACED Executive Committee and will be put to the ACED Council for approval in the ACED Council meeting in December 2023. However, there are not enough members to comply with the eligibility

requirements to apply for IEA membership (Federated or Affiliated). IDC is maintaining contact with the BES and supporting their activities with the aim of helping them to fulfil the IEA membership requirements.

#### Vietnam -

Based on communication in December 2022 with Dr. (Mrs.) Le Thai Ha, Vice Director of the National Institute of Occupational and Environmental Health (NIOEH), Ministry of Health, Vietnam, Head of WHO WPRO CC - VTN03, and In charge of International Collaboration; and also Prof. Nguyen Bich Diep, National Institute of Occupational & Environmental Health and Vietnam Occupational Health Association, the following information was gathered:

- (1) There is no Ergonomics Society (formal or informal) in Vietnam
- (2) The National Institute of Occupational & Environmental Health is the main centre of HFE related activity.
- (3) There is a Vietnam national standards committee on Ergonomics (of the Viet Nam Standards and Quality Institute)
- (4) In 2018, the International Conference on Occupational & Environmental Health was held in Vietnam. Special sections were organized on occupational health where Human Factors / Ergonomics (HFE) was the theme or part of the theme. In this conference, Dr. Frederick Tey represented the ACED and delivered a keynote address.
- (5) In 2021, NIOEH organized the 10th National Conference on Occupational & Environmental Health integrated with the Digital international Conference on Occupational & Environmental Health and there were special sections on occupational health where Human Factors / Ergonomics (HFE) was part of the theme in these sessions.
- (6) Most recently, on April 21 and 22, 2022, they organized the 10th National Scientific Conference on Occupational Health and Environment; including the field of Ergonomics
- (7) Details of additional contact persons in Vietnam were obtained, such as Dr. Nguyen Thu Ha, Head of Department of Psycho-physiology of Work and Ergonomics in NIOEH. Associate Professor Dr. Nguyen Thuy Quynh, Head of Occupational Health Section, and Associate Professor Dr. Nguyen Ngoc Bich, Head, Department of Occupational & Environmental Health in Hanoi University of Public Health.
- (8) Dr. Frederick Tey informed that in 2018 he was told that the university in Vietnam is keen to establish a society.

All the above persons have been invited to the ACED 2023 conference to be held in Mumbai, India (along with the Indian Society of Ergonomics Annual Conference HWWE 2023 and BRICSplus HFE conference), and it is expected that this will be a suitable place to convince them to take the necessary steps to formally register a society and apply for IEA membership (Federated or Affiliated), and that IDC will help them in every possible way in this regard.

As advised by the IEA President, in addition to the prospective meeting in December during ACED 2023, IDC is trying to work with them to organize an activity in Vietnam, if required, using IDC funds, and to better understand their needs. It has been emphasized that IEA would also like to help by way of providing resource persons for their Conferences / Symposia, and help in the development of collaborative HFE academic and research programmes.

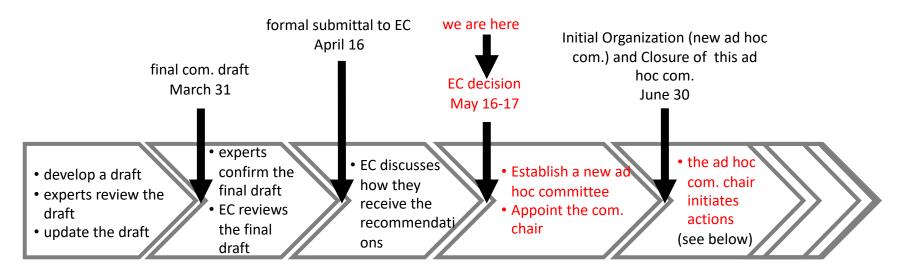
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# Recommendations to EC

Ad Hoc Committee on Standardization

May 16-17, 2023, Seoul

# **Timeline**



### **Recommended Actions for New Ad Hoc Committee**

#### near-term

- communicate with ISO
- resume liaison activities
- maybe organize a new TC
- define relationship between ad hoc com. and the TC
- organize liaisons to SC
- specify details of near-term action plans

- develop operating procedures and working procedures
- propose a series of events at IEA2024
- begin member services (periodic inputs to newsbriefs?)

### mid to long-term

- propose a new standard
- regularly communicate with external stakeholders

#### <u>routine</u>

- routinize liaison activities
- monitor technical trends to explore new standards



# Recommendations

# This ad hoc committee has identified the following eleven (11) top-level recommendations together with 28 supplemental recommendations.

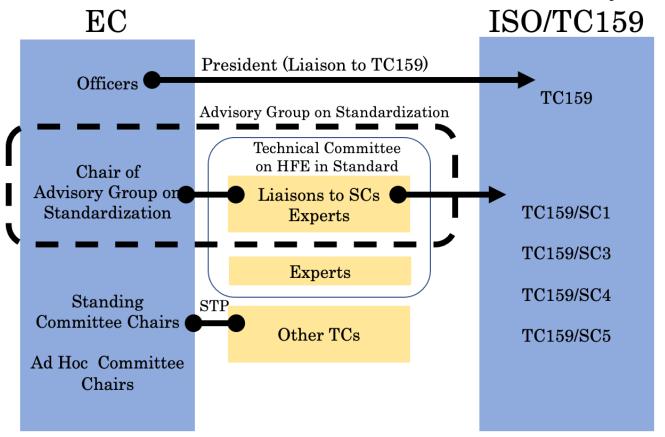
- Maintain the Category-A Liaison status.
   Collaboration with ISO is one of the best means of promoting HFE to industries. (2)
- 2. Be collaborative to member societies and technical committees of IEA. (3)
- Fulfill the minimum duties of Category-A Liaison to maintain the status. Category-A Liaison must fulfill some duties. (4)
- 4. Establish and maintain an infrastructure for supporting liaisons. Whatever infrastructure is introduced, efforts must be made to keep it effective. (3)
- 5. Ensure that the transition of EC does not cause obstacles to liaisons and other contributions that IEA is making to ISO. EC is refreshed every three years, whereas the liaisons and other commitments (e.g., participation in working groups of ISO) have to be maintained to ISO across EC terms seamlessly. (3)

- 6. Optimize the selection of liaisons. Sub-committees (and maybe working groups) which EC liaises with must be selected carefully. (3)
- 7. Consider a technical committee dedicated to standardization. (2)
- 8. Consider a new position within EC which coordinates activities and communications relevant to standardization. (2)
- 9. Develop a set of tools (e.g., rules) that guide liaisons and others who are involved in collaboration with ISO. (1)
- Consider utilizing IEA's technical assets (e.g., documents published by IEA) for standardization.
   (4)
- 11. Always develop constructive opinions (e.g., ideas for new standards that help promoting and advancing HFE). (2)

The number of supplemental recommendations are shown in parentheses.



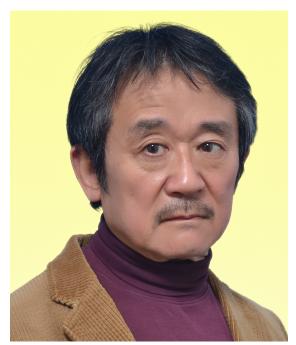
# Framework for the Governance of Standardization by EC



If TC-Std. becomes capable of conducting researches by themselves, they should be under supervision of STP.



# Dr. Shin'ichi Fukuzumi - A Candidate for the Chair of AGS



- April 2018 Present: Research Scientist and Deputy Team Leader, RIKEN, Japan
- April 2020 Present: Visiting Professor Tokyo Metropolitan University, Japan
- April 1986 -March 2018: Researcher and Division manager NEC Corporation, Japan

# Main research interests

- Acceptability and receptibility of technology in society from the viewpoint of culture and human.
- Quality-in-use modeling, application of HCD process to development area.
- Improvement of usability for variety of systems.
   Experiences in Standardization
   32 years of involvement in international standardization including:
- ISO/TC159/SC4 (Ergonomics of humansystem interaction), Chair of Japanese mirror committee
- ISO/TC159/SC4/WG1, Convenor
- ISO/TC 159/SC 4/JWG 28 (Joint ISO/TC 159/SC 4 - ISO/IEC JTC 1/SC 7 WG: Common industry formats for usability related information), Co--convenor



# How does relevant activities look like?

Activities	Explanations	How to accomplish?
Routine	A a duty of Category A Liaison, observe and support the activities of ISO/TC159, and provide advices.	<ul> <li>The President liaises with ISO/TC159</li> <li>The new ad hoc committee (AGS) helps the President</li> </ul>
Promotion of new standards	Propose new standards and support/coordinate the drafting process (e.g., offer Project Leader)	AGS and its members or a new Technical Committee (TC-Std.) observes relevant trends (international standards, disruptive technologies) and identify possibilities for new standards.
Share information	Share information with member societies and external stakeholders by using various media (e.g., IEA News Briefs, webinars, publication)	The members of AGS or TC-Std. manages/coordinates relevant activities.

# Comprehensive research

- What is Category-A Liaison of ISO? Chapter 2
- How is HFE addressed in international standards? Chapter 3
- How is IEA serving in international standardization? Chapter 4
- How are international standards adopted nationally? Chapter 5
- How beneficial standardization is for IEA? Chapter 6
- How are international standards created? Chapter 7
- How can IEA make sustainable contributions? Chapter 8
- How should IEA act action plan? Chapter 9
- How should IEA be guided to implement the action plan (i.e., Recommendations)? - Chapter 10

A summary is shown at the beginning of each chapter.



# Ad hoc committee on standardization

This ad hoc committee is asked consider recommendations for establishing sustainable collaboration with ISO

Committee organization (17 experts)

## Main committee:

- Jonathan Davy (ESSA), rep of EC
- Yushi Fujita, Chair (JES), lead author
- Shin-ichi Fukuzumi (JES)
- Anindya Ganguli (ISE)
- Peter Nickel (GfA)
- Robert Smille (CIEHF)
- Takashi Toriizuka (JES), rep of Subcommittee 2

# <u>Sub-committee 1 (international):</u>

- Peter Burns (ACE)
- David Caple (HFESA)
- Paulo Antonio Oliveira (ABERGO)
- Gyila Szabo (MET)
- Wei Zhang (CES)

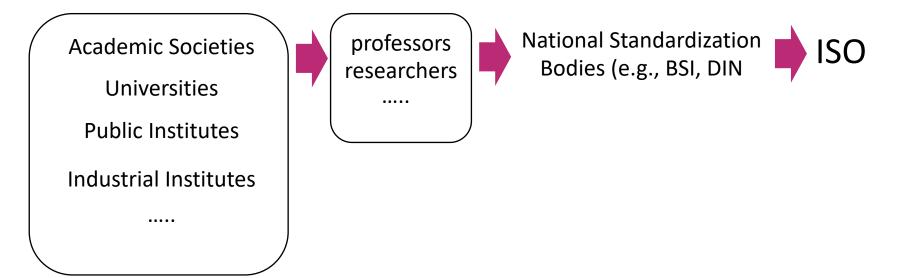
# Sub-committee 2:

- Takeshi Ebara, vice chair
- Nana Itoh (JES)
- Shin-ichi Fukuzumi (JES)
- Daiji Kobayashi (JES)
- Hiroyuki Sato, vice chair (JES)
- Takashi Toriizuka (JES)
- Kosuke Yamada (JES)



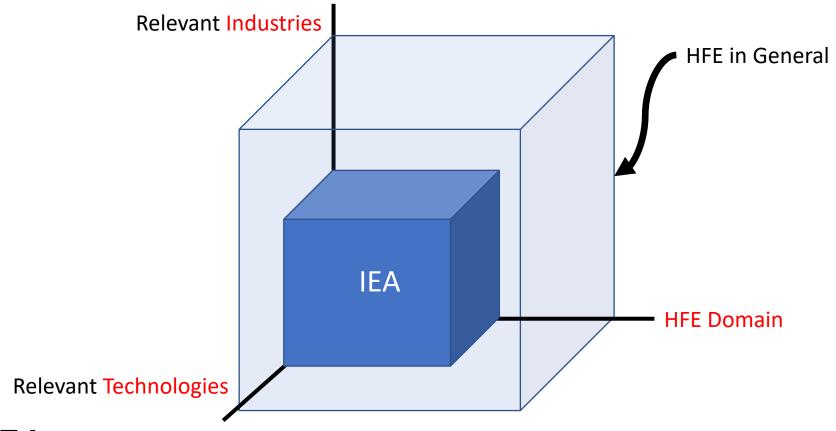
# Standards are more than norms to follow

- Standardization is a creative work.
- For good standards, good science and technologies are necessary.
- For sciences and technologies, good standards are a stimulation.
- Many professors and researchers are supporting standardization.





# HFE covered by standard is broader than HFE covered by IEA (The figure below is only conceptual.)





# Examination of Consistency with IEA Fundamentals

Mission & Goals and Seven Strategic Policies	Consistency	Explanations
IEA Mission 2 - to expand the scope of ergonomics, its application and contribution to society to improve quality of life by working closely with its member societies and related international organizations	Yes	(1) standards are a strong means of expanding the scope of HF/E; (2) its application and contribution to industries; collaboration with ISO is a premise; (3) proposed new TC will be made open to federated societies thereby encouraging collaborative approaches.
IEA Goal 1 - to promote the advancement of the science and practice of ergonomics at an international level	Yes	involvement in standardization is a means to promote the advancement of HF/E at an international level.
IEA Goal 2 - to stimulate enhanced contributions of the ergonomics discipline to global society	Yes	standards provide a means to stimulate enhanced contribution of HF/E to global society, mainly through industrial activities.
Strategic Policy 1 - Engage Stakeholders	Yes	both writers and users of standards, who may or may not be specialized in HF/E of standards, are important stakeholders. HF/E standards are a good means of providing them with high-quality HF/E. A role that is most expected for IEA (by ISO).
Strategic Policy 5 - Strengthen Relationships with External Stakeholders	Yes	(1) ISO is one of IEA's major external stakeholders which is globally influential; (2) establishment of relationship with new external stakeholders is expected.
Strategic Policy 7 - Maintain a Future Focus for HF/E	Yes	standardization is intended to guide industries to explore new frontiers, where new HF/E approaches are in need.
Mission 1, Goal 3, and other Strategic Policies	Not directly relevant	(1) this is not a direct member service, but proposed new TC will create room for collaborations; (2) information on standards/standardization must be useful for the members.



### **IEA'S FUTURE OF WORK TASK FORCE**

This report provides an update to the report in October 2022.

- 1) Establishment of Task Force with regional representatives. This strategy was not fully implemented. Instead, I have used my own contacts from different regions of the world to find suitable speakers. Thank you to Tim Bentley, Wei Zhang, Rauf Iqbal, Elina Parviainen, Thomas Alexander, Andrew Todd, and Hongwei Hsiao for their suggestions.
- 2) 2022-2023 Webinar series (Challenges from the Future of Work from around the world). Since the last EC meeting in November 2022 the following four webinars have been held:
  - 2 December 2022: "The challenges for HFE from the future of work: the experience from China" by Wei Zhang (China) and Liang Ma (China). This webinar emphasized the challenges from AI and Gig work.
  - 16 February 2023: "HFE perspectives on the future of work from South-East Asia" by Rosemary Seva (The Philippines) and Shanqing Yin (Singapore). This webinar emphasized the challenges arising from migrant labour populations despite high education levels.
  - 15 March 2023: "HFE perspectives in manufacturing when adopting new Industry 4.0 technologies" by Jari Kaivo-Oja (Finnish) and Art Reiman (Finnish). This webinar emphasized the challenge from Northern Europe about the of HFE and how non-responsive HFE is to the rapid changes to the future of work.
  - 24 April 2023: "HFE perspectives on the future of work from Central Europe" by Anita Tisch (Germany) and Verena Nitsch (Germany). This webinar emphasized the challenges from the digitalization of work in Central Europe emphasizing aspects such as demographic changes, immigration, and an aging workforce.

A further webinar has already been planned at present:

• 10 May 2023: "HFE perspectives on the future of work from Africa" by Andrew Todd (South Africa) and Augustine Acquah (Ghana).

We have also been asked to lead the discussion emerging from AI and AGI (e.g., ChatGPT and other AI technologies) and the role of HFE. The first of these webinars is in the process of being set up:

• June 2023: "HFE and the challenges from Artificial General Intelligence" by Paul Salmon.

I am currently in the process or organizing webinars from India through Rauf Iqbal, from North America through Hongwei Hsiao, from the UK through Ben Peachy and Barry Kirby, and from South America through Paulo Antonio Oliviera and Jose Orlando Gomes.

3) 2023 Webinar series. Webinars by prominent E/HF industry stakeholders (e.g. the ILO, the EU Beyond Work programme, the World Refugee Programme). We have not

made progress with this point as it is only scheduled to begin from late 2023 leading into IEA2024.

- 4) 2023-2024 Opinion piece production. Information is currently still being collected from the webinars and associated documents.
- 5) 2023-2024 Special Issue production curated by Andrew Thatcher and Wei Zhang. Planning has not begun on this item yet. There are some thoughts that this will be a single target article rather than a whole Special Issue.

Co-Chairs
Andrew Thatcher (South Africa) Wei Zhang (China)

# Andrew Todd – Strategic development and implementation ad-hoc committee report:

### 1. Development of map of IEA activities:

To better understand the various activities of the IEA, the executive committee, standing committees and ad-hoc committees and the interactions between these activities, the resources required, etc it is important to have a map of these activities. Work Domain Analysis (first step of Cognitive Work Analysis) is being used to map the activities of the IEA executive committee:

- President, Treasurer, Secretary
- Standing committees
- Ad-hoc committees

Work Domain Analysis allows for the mapping not only of activities but also to understand how these activities relate to higher order functions of the association (thereby linking between various committees). Furthermore it allows for the mapping of how each of these activities and functions relate to the purpose(s) of the IEA providing an indication of where the IEA is strong and were it is potentially weak in terms of activities. This relates well to building a better understanding of the constraints and affordances on the activities of the IEA.

The reports from the previous council meeting in Delft, Netherlands and documents on the IEA website and in the repository are being used to develop this map. Currently the map is about halfway complete and will be ready for presentation at the council meeting in Argentina later in the year.

#### 2. IEA/ErgoAfrica collaboration

A significant amount of work is currently underway in Africa. As a continent that is least represented in the IEA with potentially the greatest need this is an important strategic development point for the IEA. Key activities are outlined below:

- i) ErgoAfrica presidency: Support the facilitation of the handover of the ErgoAfrica presidency from Tunisia to Nigeria and the incorporation of Algeria and Ghana into the network.
- ii) Formation of the Angolan Association of Ergonomics (AAE): Collaboration with Portuguese-speaking network of ergonomics societies. IEA/ErgoAfrica workshop with AAE facilitated by Prof Oliveira and Andrew Todd in Luanda 19-22 June 2023.
- iii) Mozambique: Collaboration with Portuguese-speaking network for training of medical doctors. Potential workshop with Mozambique 13-18 June 2023.

### 3. Collaboration with PSE and ID on development of education

The growth of HFE as a science and practice is intrinsically linked to the provision of high quality HFE education that is contextually relevant and therefore is a key strategic

development and implementation objective. To facilitate this growth collaboration between standing committees is key; Therefore, strategic development and implementation chair has been working with both the professional standards and education and international development standing committee activities to support their work as outlined below:

- Sub-Saharan Africa education program: Work with ErgoAfrica and Andrew Thatcher for the development of educational programs in Africa for HFE. Current focus is on supporting work in Nigeria and Ghana. Andrew Thatcher leading the project and to report more fully. The EACEA intra-Africa academic mobility grants cross-regional consortium projects are a potential funding mechanism to facilitate learning across the continent. This funding requires at least four different countries representing the 3 sub-Saharan regions (West, East and Southern Africa).
- ii) Collaborative HFE PhD program for Asia Andidya Ganguli to report
- iii) CNAM/JES/CPEJ Takeshi Ebara to report on details
- iv) Support Latin-American co-chairs for PS&E and ID with implementation of P2DT for development of education programs

### 4. Future of work presentation

Contribute to the future of work ad hoc committee webinars on the future of work in Africa with a presentation on "The future of work in Africa: Ponderings on the gaze and pose of HFE – time to be a nuisance".

### 5. Executive Committee meetings

Attended the weekly EC meetings and meetings with IEA standing committee chairs.

#### IEA Executive Meeting May 2023: Report of Vice-President and Secretary General VPSG

Dr Margaret Graf EurErg.

The VPSG is largely an administrative task but specifically, I would like to mention the following activities that have taken up my time in the last six months:

#### 1. Improving contact with IEA working groups.

An invitation schedule for communication between SCs, ad hoc chairs and the officers was proposed at the last EC meeting. Originally, I proposed meetings each quarter year, but this may be too optimistic. Organising suitable times is time consuming and the meetings to date tended to be very long. This, of course, emphasizes the need for them, so we will keep working on it.

#### 2. The IEA webinar series.

The webinars have continued, largely owing to contributions from Andrew Thatcher's Future of Work series, but others are in the pipeline, notably one aimed at our federated society executives to exchange experiences related to the promotion of students and early career HFE specialists, and another on informal work.

A worrying trend is for less attendance or registration at these events. As participant feedback is largely positive, we have no good reasons why this is so.

#### 3. New TC established

The Informal Work Technical Committee has been established and it is proposed, following discussion with the Early Career Group, that a TC for Students and Early Career Professionals will also be established. The group working with Yushi to coordinate the work of people involved with the International Standards Organisation has also proposed establishing a TC, so we are expecting to have established 3 new TCs before the Council meeting in Chile.

#### 4. Work on the Sustainable Development of the IEA

Following the meeting in Delft the former poorly named "Business Plan" was renamed and the results of the stakeholder analysis conducted by Elina Parvianen was included into it. Several new aspects were then developed as need arose:

- A review of the sustaining membership categories, with a proposal to add a new category specially for universities. Those from our Education Map that agreed to be contacted by the IEA have been asked for their opinions on this. It may be possible to give a report on the results at the EC meeting.
- Response to the 2022 publication by the Early Career Group, which involved a number of proposals. Many have already been actioned, others require more organization, e.g., establishment of formal representation to IEA, activities in relation to IEA Congresses, etc.
- We need to develop some ideas for the major issues facing us, so that will be the focus of the next workshop on the Sustainable Development Model.

#### 5. Improving the external image of the IEA

During a meeting with the STP SC it was proposed by Karen Lange Morales that we improve our corporate image to bring it in line with other similar organisations active today. This will involve unifying the appearance of our documents, website, social media presence and publications. A project has been proposed with a working group including Karen, Maggie, Aleksandra, Takeshi Kawai and Sadeem Qureshi. A student will do the work as part of a Masters Degree in graphic design. He/She would work for 6 months for a total salary of EURO 2100 (US\$2315) under the supervision of Karen's company and using their workplace. This requires approval by the EC. The Marketing Budget previously agreed by the Council could possibly be used.

6. Getting and keeping the information on the IEA website up to date and regular news items published.

All the Council members have been given access to the Members area, where a number of current documents and archives are available to them. There is also a Forum for them to exchange ideas, but this has hardly been used. It is planned that the meeting documents for the upcoming Council meeting will be placed in the Members area, so it is important that all council members check their access. Please use your networks to encourage them to do this beforehand.

An IEA Structure diagram, information on the IEA Congresses and various other smaller changes have been made to the content of the website.

The other work is coordinated with our NewsBriefs Editor, Sma Ngcama-Tukulula, Aleksandra for the website and Constant Contact emails and Sadeem Qurashi for the social media announcements.

#### 7. Work on Congress Model

Providing feedback on the various documents submitted in relation to the CM took several days but, hopefully, will be useful to the working group and to the IEA in future. Thanks to Elina and her team for all the thought and work that has gone into it.

#### 8. Improving internal and external liaison.

I have had less contact with the ILO, WHO and other world bodies over the last months.

At the request of the CIEHF Chief Executive, monthly meetings have been held with him to improve our collaboration. This has revealed amongst other things, that there is a shortage of qualified HFE specialists in the UK and student numbers have been dropping. This has also resulted in a slow drop in membership that seems to be evident in several European countries. A survey was conducted of the societies to see how general this phenomenon was, but too few responses were received to analyse in any detail. In other areas the membership has kept steady, whereas in others it has increase.

#### 9. Representation

I received an invitation to attend a meeting of the certification body of the Nordic Ergonomics Society, where I was asked to explain the structure and activities of the IEA. The presentation may be used by others who wish to make similar presentations, just ask.

#### 10. IEA Membership

A formal application for federated membership has been submitted by the Bulgarian Ergonomics Society. A review by two members of the EC and a FEES representative resulted in a unanimous proposal to present the application to Council in October for formal approval.

Two federated societies are currently not operating: IREA (Russian and soviet states) and All-Ukranian Ergonomics Association. They remain listed as federated societies on the IEA website. It is expected that when political conditions change, they will resume membership. There are no other changes to IEA membership.

There have been some discussions about the differences between federated members and affiliated members. Some members of the executive would like to see societies apply for affiliated membership that are working towards federated membership but may be too small or too new to qualify. The chair of International Development, Anindya Ganguli Kumar, proposed making it cheaper or offering something to make such a proposal attractive to them. Under the current rules they would pay as much as a federated member but they have no voting rights on Council. There are currently only two affiliated members, and both are affiliated because there is another HFE society federated to the IEA in their country. No decision has been reached on this.

# Development and Promotion Committee (DP) Development of IEA Congress model (CM) STATUS May 2023, Starting the implementation of CM

- 1. Background. The abridged version of CM was shared to Council members for familiarizing purpose in August 2020. The longer version was shared for comments and feedback to EC 2021. Discussions with each chair of the standing- and adhoc was kept during 2022. Chairs brought out the needs and wishes concerning IEA Congress. Current EC (2022-2024) has got the Digi CM version for familiarizing in April 2023
- 2. Plans created for implementing CM into use and Stakeholder mapping as agreed in Delft 2022
  - Plans presented to Officers Feb. 2023→ Plans modified by Maggie Graft 22.2.2023 (appendix 1.and 2.)
  - Proposal for Officers to nominate two teams to work with the utilization of CM with IEA 2024 and IEA 2027. IEA 2024 discussions lead by Yushi (this is accepted and endorsed by Officers) Elina with IEA 2027 (this is not endorsed yet)
  - Stakeholder mapping divided into two teams, Yushi leads the team for mapping stakeholders related to ISO (actions ongoing) and Elina related to IEA congress with Ben Peachey (co-operation started)
- 3. Development of the usability and sustainability of CM Digi version is ongoing by Aleksandr Volosiuk. Creation of technical Handbook and instructions for ensuring the sustainability of the CM digiversion in IEA (actions for the future and a manual). Alexandr continues as a support and specialist for EC concerning the Digi version technical topics.

### Development of IEA Congress model (CM) STATUS May 2023.... continues

- 4. Preparations for the CM Workshop in Seoul ongoing. Agenda sent for EC members and Officers. Target of the workshop is to form mutual understanding of CM in the use of EC in collaboration with HS/OC and agree of next needed activities to get the CM finalized and implemented into use in IEA
- **Hybrid and Full virtual Congress.** Material Lessons learnt created by Nancy Black and Patrick Neuman. Appendix added into CM as a reference document (at the moment). Meetings with Nancy and Patrick.





### Next actions during 2023

- After EC meeting in Seoul May 2023:
  - Work with EC members for describing the general activities of EC committees during organizing of the IEA congress . Target to get this work done till May 2024
  - **Describe in collaboration** the role and general tasks of Officers for ensuring sustainability of CM in IEA in collaboration with Officers
  - Creation of the chapter concerning important topics to be noticed in organizing hybrid and full virtual congress
  - Collect all the feedback, comments and concerns from CM workshop and discussion parts of the CM and update, modify and make additions to the CM by the Core team (Yushi, Elina, Aleks)
- Continue the started work with Stakeholder mapping as planned:

Two teams lead by:

- Yushi Fujita, ISO, Elina Parviainen IEA Congress
- Continue the collaboration with IEA 2024 as agreed
- Start the collaboration with IEA 2027 after endorsement of Officers
- Plan and start the crosschecking between OP IEA and CM
- Continue the development of Handbook for ensuring sustainability of Digi CM in IEA. Start discussion
  and preparations for the next PD chair (role and tasks in EC → to be added in CM)
- Start discussion and preparations for the next PD chair (role and tasks in EC) Start collaboration with INCOSE (Guy Boy HSI, Michelle Robertson, Elina Parviainen. Meeting in May 2023, Joint conference INCOSE/ IEA) Note the difference with ICOSE







### (Progress Report #5)

# 22nd Congress of International Ergonomics Association

25-29th August 2024 | ICC, JEJU, KOREA

May 16, 2023
Myung Hwan Yun
Chair, Organizing Committee



# 22nd CONGRESS OF INTERNATIONAL ERGONOMICS ASSOCIATION

Period: 2024.08.25 (Sun.) – 08.29 (Thur.)

Location : ICC, JEJU

Host organization : IEA, ESK (KOSHA)

<Better Life Ergonomics for Future Humans>

•Main Content : Opening Ceremony, Parallel sessions, Symposia Sessions, Special sessions, Exhibition, <u>Ergonomic Design Award</u>

1,500 attendees (800 foreigners)

### Structure of OC (as of May 2023)

Secretariat	Chair	Gwan Sub Shin (Finance, Schedule, Personnel, Administration) Registration (registration, thesis application, payment of registration fee, invitation documents, VISA etc)
Program	Chair	Woojin Park (IEA SPC, Separate program members (regular session, poster, keynote)
	Co-chair, Co-Chair Co-Chair Co-Chair	Taezoon Park (workshop, demo, tutorial, doctoral symposium, alternative session) Inseok Lee, IEA/ISO Joint Symposium Hong-in Cheng, Program Events (Opening Ceremony Closing Dinner Reception Social) (TBD) Poster
Publication	Chair Co-Chair	Yong-ku Kong (Journal Issues)(promotional materials, program books, proceedings) (TBD) Proceedings
Exhibition	Chair	(TBD)
Promotion	Chair Co-Chair	Domestic Sponsorship (Domestic) International Sponsorship
IT & Hybrid	Chair Co-Chair	Sangwon Lee, SNS, Media (TBD) Hybrid Conference, Metaverse
Design Award	Chair	Taezoon Park (TBD) Temporary or trial stage
IAB	Chair	Sung Ho Han, International VIPs (US Europe and Asia)

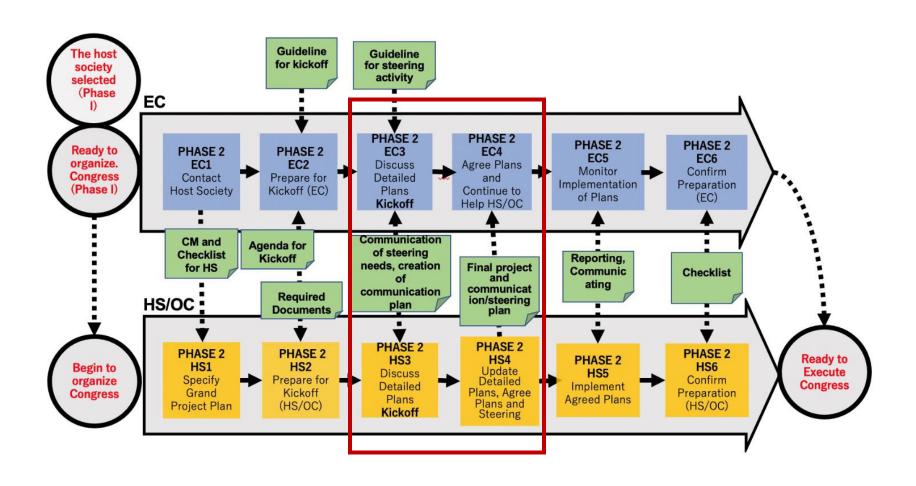
### Milestone Update

- 2018. 08. 24. IEA 2024 Jeju selected
- 2019. 01: IEA 2024 Organizing Committee Kickoff
- 2019. 06.10: Meeting with Elina Parviainen about IEA conference model
- 2019.10.22: Meeting with Elina Parviainen about IEA conference model for updates
- 2020.07.24: Final updates on ESK activities (COVID-19)
- 2021. 06.03: MOU with Jeju Convention (eventually PCO contract, expected June 2022)
- 2021. 06.13: Promotion at IEA 2021 (Presentation and Video)
- 2022. 01. 01 : Organizing Committee Restructuring (on-going)
- 2022. 01. 01: MOU with KOSHA re-initiated. in progress. Proposal Submitted (Feb. 2022)
- 2022. 4.6: Progress Report #3 (IEA EC Meeting, On-line)
- 2022. 04. 28 ESK Domestic Conference (LG R&D Center)
- 2022. 10.6. ESK Domestic Conference (40<sup>th</sup> anniversary, 23<sup>rd</sup> JES-ESK Symposium)
- 2023. 8. (Contract w PCO)





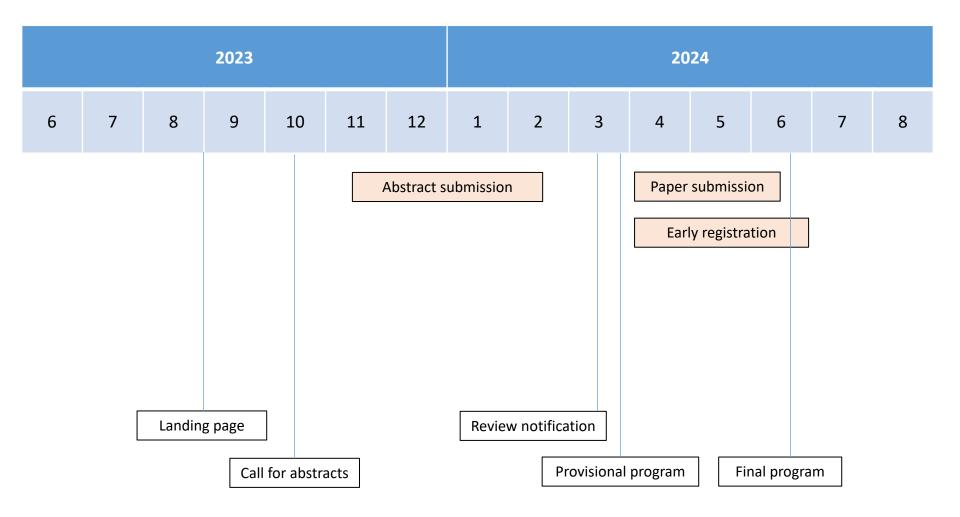
## IEA Conference Model 1.1



# Key Dates (as of May. 2023)

- 2023. 8 : Open a Landing Page (brochure)
- 2023. 10 : Call for Abstracts
- 2023. 02 : Abstract Due
- 2023. 03 : Review Notification
- 2024. 03 : Distribute Authors Instructions
- 2024. 03 : Open Registration
- 2024. 04 : Distribute Provisional Program
- 2024. 06 : Full Paper Due
- 2024. 06 : Early Registration Due

# Key Dates (as of May. 2023)



### Conference Program and Contents

 For future planning of the 2024 congress program and contents, the programs of the previous IEA congresses and the ESK conferences are being examined.

### Grouping of Contents (IEA2021 Proceedings)

#### SYSTEMS AND MACROERGONOMICS

- Activity Theories for Work Analysis and Design (ATWAD)
- Systems HF/E
- Ergonomic Work Analysis and Training (EWAT)
- HF/E Education and Professional Certification Development
- Organization Design and Management (ODAM)

#### INCLUSIVE AND SUSTAINABLE DESIGN

- · Ageing and Work
- Ergonomics for children and Educational Environments
- · Ergonomics in Design for All
- Gender and Work
- Human Factors and Sustainable Development
- · Slips Trips and Falls
- · Visual Ergonomics

#### 3. SECTOR BASED ERGONOMICS

- Practitioner Case Studies
- · Aerospace Ergonomics
- Agricultural Ergonomics
- Building and Construction Ergonomics
- · Ergonomics in Manufacturing
- HF/E in Supply Chain Design and Management
- · Transport Ergonomics and Human Factors

#### HEALTHCARE AND HEALTHY WORK

- · Health and Safety
- · Healthcare Ergonomics
- HF/E Contribution to Cope with Covid-19
- Musculoskeletal Disorders

#### METHODS & APPROACHES

- Affective Design
- Anthropometry
- Biomechanics
- Ergonomics in Advanced Imaging
- Human Factors in Robotics
- · Human Modelling and Simulation
- Neuroergonomics
- · Working with Computer Systems

### Conference Program and Contents

 Common themes will be identified. Also, idea generation will be performed to identify possible special topics for the 2024 congress.

#### Grouping of Contents (IEA2018 Proceedings)

- 1. Healthcare Ergonomics
- 2. Safety and Health and Slips, Trips and Falls
- 3. Musculoskeletal Disorders
- 4. Organizational Design and Management (ODAM), Professional Affairs, Forensic
- Human Simulation and Virtual Environments, Work with Computing Systems (WWCS), Process control
- 6. Transport Ergonomics and Human Factors (TEHF), Aerospace Human Factors and Ergonomics
- Ergonomics in Design, Design for All, Activity Theories for Work Analysis and Design, Affective Design
- 8. Ergonomics and Human Factors in Manufacturing, Agriculture, Building and Construction, Sustainable Development and Mining
- 9. Aging, Gender and Work, Anthropometry, Ergonomics for Children and Educational Environments
- Auditory and Vocal Ergonomics, Visual Ergonomics, Psychophysiology in Ergonomics, Ergonomics in Advanced Imaging

### Grouping of Contents (ESK2022 Spring Conference)

- 1. Metaverse
- 2. Human Factors Intelligence
- 3. UI/UX/Usability
- 4. Affective Design
- 5. Occupational Biomechanics
- 6. Occupational Safety and Health
- 7. Human Centered Design
- 8. Serious Accidents Punishment Act
- 9. AR/VR
- 10. Al Human Factors
- 11. Vehicle Ergonomics
- 12. Physical User Interface

## Symposia and oral sessions

About 200 symposia and oral sessions expected:

IEA2021 (Vancouver)

Туре	#		
Symposia & oral sessions	169		
Plenary sessions	2		
Panel discussions	15		
Workshops	9		
Keynotes	4		
Special sessions	3		
Awards, competitions	3		

# of papers in the congress proceedings:

- IEA2018 (Florence, Italy): 540 (5 volumes)
- IEA2021 (Vancouver, Canada): 999 (10 volumes)

### Program committee members (2024 OC)

- Woojin Park (Chair)
- Taezoon Park (Co-chair)
- Hongin Chung (Co-chair)
- Inseok Lee (Co-chair)
- Hyunkyung Kim (TBD)
- Jaehyun Park (TBD)
- Dongwook Hwang (TBD)
- Donghyun Beck (TBD)
- Yihun Jeong (TBD)

•

# Special Programs Overview

### Tutorials

 One, two or half day tutorials prepared by TCs, organizations and individuals

### Workshops

- Half or full day workshop by TCs, organizations and individuals
- Doctoral Colloquium: half day
  - Student presentations and general discussions with the expert panelists
- Panel Discussions (tentative): half day
  - 90 min discussions on the challenges of Human Factors and Ergonomics in various domains

# Important dates for SP (tentative)

- 2023. 08 : Pre-release of Call for Proposals to TCs
- 2023. 10: Official Release of Call for Proposals (Tutorials, Workshops, Doctoral Colloquium, Panel Discussions)
- 2024. 02 : Proposal Due
- 2024. 03 : Selection Notifications
- 2024. 03: Panel Selection for Colloquium and Panel Discussions
- 2024. 04 : Distribute Provisional Program

### IEA/ISO Collaboration Program

- Key persons and contact bodies
  - IEA2024 Organizing Committee: Prof. Inseok Lee
  - Korean Mirror Committee of TC159 (Chairperson: Prof. Dhong Ha Lee)
  - Administrative Organization of KMC of TC159: KEA (Korea Electronics Assoc.)
  - Korean National Body of Standardization: KATS

#### Possible Plans

- Hosting TC159 Plenary meeting before or after IEA 2024 at the same place
- Organizing technical sessions on HFE in international standardization
- Inviting keynote speakers such as TC159 chairperson or convenors of SCs
- Providing meeting rooms for SC or WG meetings

#### Future Work

- Collaborating with Prof. D.H. Lee and talking with KEA and KATS
- Collaborating with EC for developing programs
- Inviting speakers for the technical sessions



### **IT and Social Media**

- IEA 2024 website creation and update
  - <a href="http://iea2024.com/">http://iea2024.com/</a> (temporary open)
  - · Reflecting recent design trends
  - Developing responsive systems operating in all devices
  - Meeting web standards and considering web accessibility
  - Managing server database, front-end and back-end
  - Developing and embedding the registration and payment functions
  - Developing the website for the conference program (specifically for mobile users)
- IEA 2024 social media setup/open and News update
  - Opening IEA 2024 Facebook and Instagram
  - · Mailing news to IEA members and those interested
  - Continuous update of news on IEA 2024 website and linking them to IEA 2024 Facebook and Instagram



# Hybrid & Metaverse Conference



- 1<sup>st</sup> Try for MetaVerse Platform in 2022
- Partially successful
- 100% Hybrid
- Partially, Metaverse

# Special Event Proposal

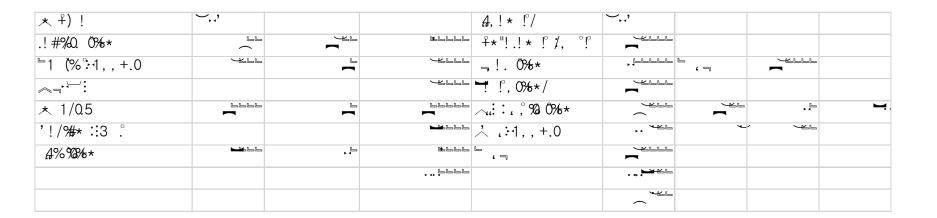
- Banquet
  - K-pop singer, traditional dance/music, Taekwondo performance
  - Jeju cuisine introduction event
- Break time
  - Jeju tangerine (chocolate)/ traditional liquor tasting event
- Tour program
  - Boat, Yacht
  - Halla mountain or Volcanic Cone Hiking
  - One-day programs etc

### IEA 2024 Special Issue Publication

- Finding Guest Editors for Special Issue (SI) Publication
  - Candidates of Guest Editors:
    - Technical Committees
    - Organizers of special session or symposia
  - Submission of SI Application (1page description) to Publishers (target Journals)
- Candidates of Special Issue Publishers
  - Human Factors,
  - IISE Transactions on Occupational Ergonomics and Human Factors
  - WORK and etc.
- Decision of Theme & Topics
  - Human-Systems Integration in Healthcare
  - Digital Human Modelling in Ergonomics 4.0
  - Human Factors and Ergonomics in an Interconnected World: Directions for the future
- Provide Procedure (Timeline)
  - Abstract Submission 1 or 2 pages (Due by, OCTOBER 2023)
  - Full-paper Submission 4 or more pages (Due by DECEMBER 2023),
  - Review Process (Decision time varies by Publisher)
  - Special Issue Publication (varies by Publisher)

### Finance

- Expecting about 1500 registration (Break Even, 1000 paid registration)
- 100% hybrid Conference, On-Line and Off-Line, Ergonomic Design Award



supports from governmental organizations

#### Bidding Stage ▶ Promotional Stage ▶ Hosting Stage

109,000 USD (completed)

by Korea Tourism Organization and Jeju Convention & Visitors Bureau

Expected from private/public sectors

#### About 150,000 USD (w KOSHA MOU, August 2022)

by Industrial partners and KOSHA (Korea Occupational Safety and Health Agency)

Extra supports for ESK

#### 10,000 USD (every year until 2024, expense based)

by Jeju Convention & Visitors Bureau

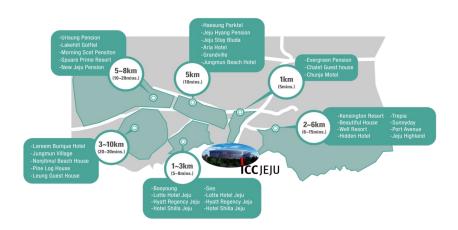
Benefits for congress participants

 $\label{lem:condition} \textbf{Jeju Tour Information Desk \& M.I.C.E Card}, \ \ \textbf{20 USD for every registration})$ 

by Jeju Convention & Visitors Bureau

### Infrastructure

- 1. Facility ICC JEJU
- 2. Accommodation 2200 rooms
  - 1. To Increase mid-budget hotels
- 3. Shuttle Bus
- 4. Traffic Cards 20 USD per person
- 5. Conference Tour
  - Boat Tour
  - 2. Yacht Tour







### Ideas for Programs Proposed by EC

Idea#	Related Ideas	Title (tentative)	Proposed by	# of Slot and Type(s)  KN (Keynote) C (Ceremony) PS (Plenary Session) PTS (Parallel Technical Sessions) PNL (Panel Discussion), RT (Round Table) E (Events) TV (Technical Visit)		ion) chnical cussion),	Descriptions Discussions	Note	
1		IEA Annual and Triennial Awards	KM	1	С			IEA annual (Fellowship, Kingfar, Tsinghua) and triennial awards (Distinguished Service Award, Outstanding Educators Award, Promotion of Ergonomics in Developing Countries, Ergonomics Development Award Human Factors and Ergonomics Prize, John Wilson Award, President's Award)	
2		KU Smith Student Award	KM	1	C+P S			Ceremony and presentations by award winners	
3		Society Awards	KM	1	С			Awarding by ESK (new)	
4	14	AI and other Disruptive Technologies	KM/ ATh	?	PTS	KN		Many people are worried that AI and other technologies will develop and be implemented without HFE input. IEA should be proactive about this.	
5		HFE Standardization	YF	3	KN	PNL	PTS	Let people know that standardization is a powerful means of promoting HFE particularly to industry, and clarify that IEA will make efforts in this area.	Th chairperson of ISO/TC159 is a candidate for keynote

Idea#	Related Ideas	Title (tentative)	Proposed by	# of Slot and Type(s)  KN (Keynote) C (Ceremony) PS (Plenary Session) PTS (Parallel Technical Sessions) PNL (Panel Discussion), RT (Round Table) E (Events) TV (Technical Visit)		ion) chnical ussion),	Descriptions Discussions	Note	
6		General Assembly	JOG	1	PS			The President reports to the members of IEA and other participant the present status of IEA and prospects for the future of IEA and HFE.	cf. OP- Triennial Congress
7		Informal Work	MG		KN PS			This is a request from the newly formed TC to increase awareness of work in this area. They are investigating if someone from the ILO could give a keynote.	
8		Meet the IEA Executive	MG		RT/ E			Aim: interactive session to present the work of the IEA in a more detailed way than the opening awards ceremony.  Requires as many EC members as can participate.	
9		Certification body experience exchange	MG TE	?	PTS			This has been organized at the last three IEA congresses and is very much appreciated by the certification bodies.  All certification bodies or on-boarding bodies get together and discuss in Korea in person.	PS&E Chair may have alternative idea
10		Students and Early Career Professionals	MG		PNL RT E			The S and EC group has a number of proposals following on from activities at IEA2021. Please contact Katie Buckley or Jono Davy for details. katie.buckley@worksafe.govt.nz	
11		System approach and design driven HF/E	EP		PS			Opening the core of IEA strategy. What is meant by the system approach and design driven HF/E. HF/E experts in proactive collaboration in design driven activities.  Possible KN/PS speakers include Paul Salmon, Neville Stanton, Nancy Leveson	Joint session with INCOSE? (They speak about HSI!!) This should be a group preparation work of EC, maybe lead by PD?

Idea#	Related Ideas	Title (tentative)	Proposed by	# of Slot and Type(s)  KN (Keynote) C (Ceremony) PS (Plenary Session) PTS (Parallel Technical Sessions) PNL (Panel Discussion), RT (Round Table) E (Events) TV (Technical Visit)		ion) chnical ussion),	Descriptions Discussions	Note	
12		Global HFE Education in Ph.D/master course and practical training"	ET AG ATd					Discuss the experience and learned lessons on several IEA educational initiatives. Organizing and sharing a special session for introducing current trends of the worldwide HFE Master/Ph.D program is informative for all participants of the congress.	
13		Remote Presentations by LMIC	AG					Provide researchers and students of LMIC with opportunities to remotely present their good HFE works, who otherwise cannot expose their works to the global society. This not only helps in widening the awareness about the IEA, but also it enhances the quality and quantity of networking at the conference. This offers FS/AS to provide better services to their members, which in turn will result in increased membership.	
14	4	AI	TA/ ATh	2	KN			AI is truly a topic of general interest (HFE topics in/for AI, in a safe and trustful AI), and it would require a special session and/or one or two keynotes which talk about the topic from different perspectives. I would like to recommend that we ask Ben Schneiderman if he would be willing to give a KN. We could also ask someone like Paul Salmon or Mica Endsley to give a KN (they are both	A potential keynote speaker may be proposed by the proposer.

Idea#	Related Ideas	Title (tentative)	Proposed by	# of Slot and Type(s)  KN (Keynote) C (Ceremony) PS (Plenary Session) PTS (Parallel Technical Sessions) PNL (Panel Discussion), RT (Round Table) E (Events) TV (Technical Visit)		ion) chnical cussion),	Descriptions Discussions	Note	
								working actively in this area)	
15		Climate change, decarbonization and circular economy	TA/ ATh					This topic has been around for a while and it is of high relevance for all disciplines. It has also attracted a great audience during German activities last year. HFE can (and should) contribute to the topic and should therefore address it at our congress as well.	Need further discussions at EC meeting. This probably falls under the auspices of the HFSD TC. Gabriel Garcia-Acosta has done a lot of work on integrating the circular economy into the EQUID system.
16		Contribution of IEA Networks to the IEA: Past, current and future	ATd	1	RT			A strategic policy of the IEA is to collaborate with IEA networks. Considering the important role that networks can and do play in communication and development within their regions they are key partner of the IEA. The IEA congress is a good opportunity reflect on the past, current and possible future relationships between networks and between networks and the IEA.	
17		HFE education – Reflections on efforts of the 2021-2024 executive committee	ATd	1	PS PTS			PSE and ID Committees (including their co-chairs) have been working for the development of education programs in Asia, Latin America and Africa. This session will report on the lessons learnt and the progress made including discussions around the formation models used to develop curricula.	

Idea#	Related Ideas	Title (tentative)	Proposed by	# of Slot and Type(s)  KN (Keynote) C (Ceremony) PS (Plenary Session) PTS (Parallel Technical Sessions) PNL (Panel Discussion), RT (Round Table) E (Events) TV (Technical Visit)		ion) chnical cussion),	Descriptions Discussions	Note	
18		IEA Ergonomics in a nutshell Publications	NB	1	C/R T/E			Either "launch" or update – would be nice to have people talk about uptake or development process followed. At this time C-Suite and Project manager publications (at least) should be complete. Labour version will be in progress.	To coordinate with Karen Langes Morales.
19		IEA Webinars – resources & opportunities	NB	1	RT			Description of webinars to date, and process to propose, recognition (, "value-added". Suggest involving those who have actively proposed webinars (ex. MSD TC, Future of Work…)	To coordinate with Rosemary Seva, (Aleksandra, Maggie Graf)
20		What is a Technical Committee and why should you care?	NB	1	RT			How to start a TC, how to get involved	With Rosemary Seva
21		Equid 4.0	NB	1	PTS			Multiple communications on the development and updating of this tool and its application for Ergonomics Quality in Design	Led by Karen Langes Morales.
22		Proposals from Technical Committees	NB						A meeting with TC chairs is scheduled for June 5.
23		HF/E Future of Work Task Force	ATh	1/2	PNL /RT			We have been collecting thoughts about the impact of the Future of Work on HF/E from around the world. We would like to use the IEA 2024 Congress to bring this	To coordinate with Prof. Wei Zhang

Idea#	Related Ideas	Title (tentative)	Proposed by	# of Slot and Type(s)  KN (Keynote) C (Ceremony) PS (Plenary Session) PTS (Parallel Technical Sessions) PNL (Panel Discussion), RT (Round Table) E (Events) TV (Technical Visit)		(s)	Descriptions Discussions	Note		
									information together to identify the commonalities and the gaps in our understanding to formulate an agenda for the IEA.	
24		Usability/UX/UI	YF (AV)	2	KN	PNL			For those people whose main interest is Usability/UX/UI, IEA is not a major platform for activities - both academic and application. This may be one of main reasons for IEA to fail in increasing members (or to cause losing the popularity). This proposed idea invites us to consider how to gain an impetus in this domain.	
25		Follow up survey of IEA2024 (this is not a technical session)	YF						Conduct in collaboration with the congress organizer a follow up survey to collect information useful for IEA2027.	

# Congress Model (CM) Workshop EC meeting Seoul 17.5.2024

Opening the Workshop (In the past, in the future)

Development of CM and EC

Successfull congress

How does CM handle key issues

Organization of CM and related documents

General tools for successfull managing

Digital Congress Model (dCM) Sustainability

Group Work

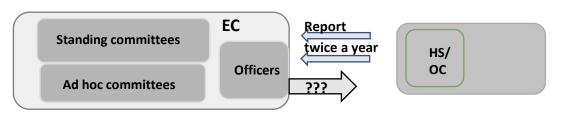
Demolition of group work / Discussion. All

Summary and end of the workshop





From the Past to Now no transparent and systematic co-operation and communication between EC/Officers and HS/OC concerning organizing of IEA Triennial Congress

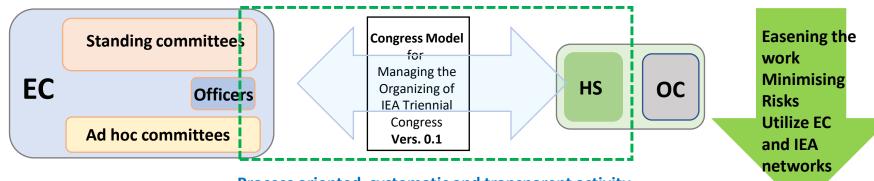


Individual based ad hock activity

Increasing work load Increasing risks
No utilization of IEA /EC resources

Elina

From Now to the future a guide available for help for transparent and systematic cooperation and communication between EC/Officers and HS/OC concerning organizing of IEA Triennial Congress

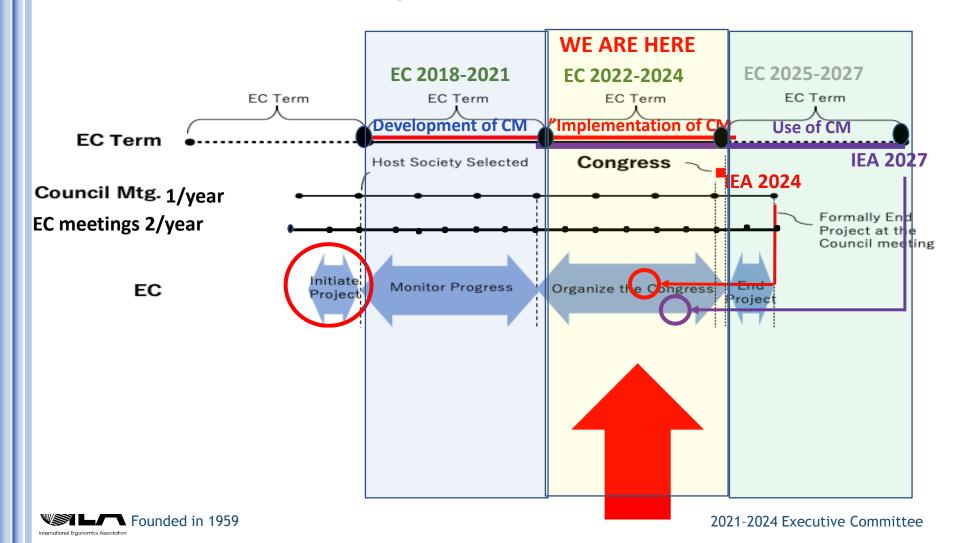


Process oriented, systematic and transparent activity



Global Federation of Human Factors and Ergonomics Societies Founded in 1959

### Development of CM STATUS



# Successful Congress



Hints for Approaches

Members/participants Feel Happy!

Competitive & Good Reputation!

- High Technical Quality!
- Healthy Financial Performances!
- Risks Well Managed!
- ′

Triennial Congress Model
A tool for people to collaborate



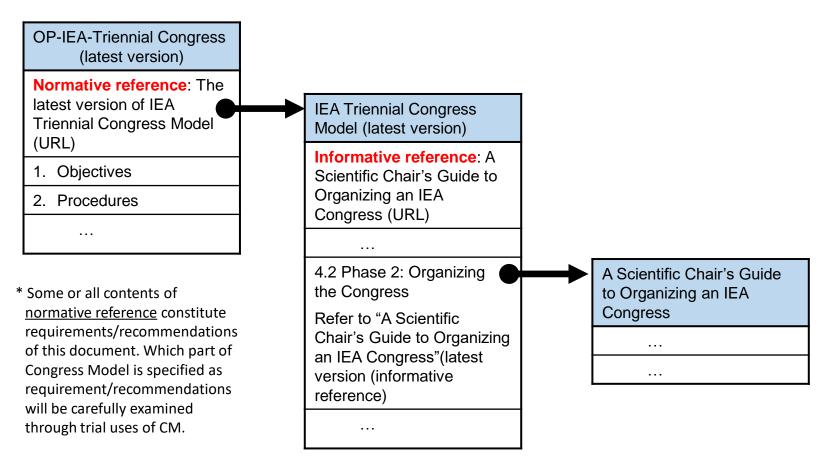
- Co-creation!
- Good Communication!
- Good Management!
- Systems Approach!
- Stakeholder Engagement!
- Highlight Strength (=what we are)!
- Up To Date (e.g., technologies)!
- Future-oriented (=changing work,..., society)!



## How Does CM Handle Key Issues?

Key issues	Basic approaches	Recommendations by CM
Discontinuity of management	EC and HS communicate continuously from the election of HS to the completion of congress	Introduce Steering Committee     (Chapter 4 of CM)
Room for EC to help management	<ul><li>introduce a process-based management</li><li>develop various tools</li></ul>	Introduce Project     Management Process (PMP)     (Chapter 4 of CM)
No explicit risk management	introduce a culture to accept systematic risk management	Develop a pragmatic risk     management     (Section 3.1.4 of CM)
No explicit discussion on the surplus	share a recognition that surplus is important for EC to run projects for the benefit of members and HFE	Share the understanding on the surplus     (Section 3.1.5 of CM)
Room for EC to     enrich technical     programs	introduce a culture in which HS and EC help each other to design the congress competitive	Develop a mechanism to enrich technical quality (Section 3.2.1-5)

### Organization of CM and Related Documents





## Considerations for Project Management

Section	Key Question
3.1.1 Manage Seamlessly	How can the steering committee be an answer for realizing the seamless management?
3.1.2 Share Common Understandings	<b>How</b> can the goals and values of congress be clearer to HS/OC and EC?
3.1.3 Be Innovative While Observing Rules	How can rules be utilized effectively?
3.1.4 Prepare for Risks	How can risks be handled more transparently? How important is it to evaluate the risk of IEA Congress, and how can it be done in practice?
3.1.5 Financial Management	Why is the surplus essential for IEA?
3.1.6 Define Responsibilities and Capabilities	How can all committees interact more?  (Apart from the discussions in this section)
3.1.7 Prohibit Monetary Benefits for Individuals	How can we be sure that the dark-side does not exist?

# Considerations for Congress Contents Management

Section	Key Question	
3.2.1 Make Congress Competitive	What does "competitive" mean?	
3.2.2 Realize Congress Theme	Why is it meaningful to realize the congress theme?	
3.2.3 Reflect Various Visions	What does 'successful congress" mean?	
3.2.4 Provide Platform for High-quality HFE	What does "high-quality HFE" mean?.  How and what new technical features can we for the future of HFE?	
3.2.5 Be Attractive to Internal and External Stakeholders	How can we be more influential? How can we be responsive to potential demands for HFE?	

## In general

To be able to manage the project the project manager needs a project plan

To be able to create the content into project plan the manager needs a project team.

To be able to work as a project team member, one needs to know own role, tasks, targets and time it takes to do own work

Each one in the project team needs the project plan to be able to manage own tasks and collaborate as agreed.

PROJECT MANAGER MANAGES THE OVERALL PROJECT FOR SECURING THAT SET TARGETS ARE ACHIEVED AS PLANNED AND IN RIGHT TIME.



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Visualization for help in managing the organizing activities and collaboration

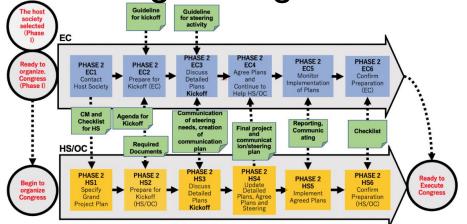


Table 6: IAO PHASE1 HS2 Submit Draft Proposal

PHASE1 HS1 >>	PHASE1 HS2 Submit Draft Proposal	>> PHASE1 HS3			
Responsible Person: Federated socie	Responsible Person: Federated society				
Inputs		Output			
Due:	Activity	Due:			
From: PHASE1 HS1		To: PHASE1 EC2			
Draft proposal	Check the eligibility and other conditions (Appendix 1, Appendix 2, the by-laws, and OP).     Complete the proposal using Form for Proposal (Appendix 4).     Submit the draft proposal to EC.	Draft proposal			

Table 1. IAO FITAGET LOZ NECEIVE DIAIL FTOPOSAL

PHASE1 EC1 >>	Proposal	>> PHASE1 EC3		
Responsible Person: VPSG or an appointed EC person				
Inputs		Output		
Due:	Activity	Due:		
From: HS2		To: PHASE 1 EC3		
Draft Proposals	Form an Evaluation Committee	Evaluation Committee		



## General "tools" for successfull managing and collaboration

 Steering group. Fromed from representatives of HS and EC for keeping collaboration up, follow the progress and offer help and support when needed.

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- Project organization chart, more detailed than one shown at the time of application (roles, tasks and resposibilities included)
- Project plan which is more detailed than one shown at the time of application (what, when, how, by whom, deadlines)
- Grand schedule (i.e., GANTT) which is more detailed than one shown at the time
  of application and is in line with the project plan
- Budget which is more detailed than one shown at the time of application (in line with the plan and activities)
- Rough risk management plan which is more detailed than one shown at the time of application (e.g. readiness to hybrid and full virtual congress, risks e.g. economical, technical etc.)
- Reservation agreement of the venue (in relation to set target amount of the participants, content of the congress and budget
- Other possible documents concerning organizing activities and agreements





## Digital Congress Model (dCM) Sustainability

Manuals, No added fees, No mandatory updates

Role	Access	
Non-registered	No access	
Registered (pre-user)	personal profile info (read/update)	
User [assigned by Admin]	<ul> <li>personal profile info (read/update)</li> <li>CM contents (read only)</li> <li>comments (create/read/update only personal)</li> </ul>	
Manager [assigned by Admin]	<ul> <li>personal profile info (read/update)</li> <li>CM contents (read/update)</li> <li>comments (create/read/update only personal)</li> </ul>	
Admin [CM core team]	<ul> <li>ALL profile info (read/update/create) except SuperAdmin</li> <li>CM contents (read/update)</li> <li>comments (create, read/update ALL)</li> </ul>	
SuperAdmin [dCM admin, Officers, IT comm]	<ul> <li>ALL profile info (read/update/create) no exceptions</li> <li>CM contents (read/update)</li> <li>comments (create, read/update ALL)</li> </ul>	



Here we should have used 40min for leaving 20 min for group work and for discussions all together together/summarizing 30 min

### Questions

- Group 1. EC capability
  - 1.1 How capable EC is to support HH/OC in managing the needed activities for organizing successfull IEA Triennial Congress?
  - 1.2 How IEA can quaratee the needed managing skills and competences in EC?
- Group 2. For promoting and developing better HF/E globally through IEA Triennial Congress.
  - 2.1 What is meant by this in practice?
  - 2.2 Who are the stakeholders of IEA congress to make possible better HF/E in practice?
- · Group 3 Officers.
  - 3.1 What are the most important tasks and roles of Officers in the use of CM for collaboration in EC and with HS/OC?
  - 3.2 How Officers define the steering group representative from EC and define needed skills and competences?
  - 3.2 How the sustainability of the use of CM will be quaranteed in EC?



## End discussion of all that has been arisen into participants mind. Questions concerns etc.

 We (Yushi, Aleks and me) will facilitate with questions based on that what comes from participants. Target is to form a mutual understanding in EC for what CM is, what is the status of CM and what are the next short term and long term activities for implementing the CM into use in IEA.

#### **Communications and Public Relations Committee**

Chair: Jonathan Davy

**Committee members**: Sara Albolino (Co-chair and webinar programme coordinator); Sadeem M. Qureshi (ECC and outreach coordinator); Katie Buckley (ECC and outreach coordinator); Sma Ngcamu-Tukulula (IEA NewsBriefs editor); Kathleen Mosier and Michelle Robertson (senior liaison with external stakeholders); Maggie Graf (Secretary General and VP of IEA).

The committee and its various arms have continued to work towards creating better awareness about the activities of the IEA and its representative, its technical and appointed task teams, and its federated societies. Below is a brief overview of what has been achieved since the report submitted in the September meeting in Delft.

#### Social media presence for promotion

The presence of the IEA and its activities continues to increase on social media platforms, including LinkedIn, Facebook and Twitter, particularly concerning webinars and when relevant, exciting publications become available. One positive observation is the increased network of internal stakeholders connecting with the IEA's social media platforms. This creates a virtual network to disseminate and share material from the IEA effectively while offering internal stakeholders (federated societies and technical committees) the chance to link their activities to the IEA's platforms. We appreciate the support that we have received from the officers and other members of the executive, technical committee chairs and societies in relation to the dissemination of material through social media.

#### **IEA Newsbriefs**

Under the editorship of the Sma Ngcamu-Tukulula, the IEA NewsBriefs continue to offer the latest updates on IEA-related activities, calls for award nominations and other exciting opportunities linked to HFE globally. The spotlight on the federated societies continues to work well and offer unique insights into the inner workings of these societies. My sincere thanks go to Sma and Anindya Ganguli for their work around setting up this aspect of the NewsBriefs, which appears to be working well.

#### **Early Career Community Development**

Following the publication of the article entitled 'Barriers and Opportunities to Support Early-Career Academics and Professionals in Human Factors/Ergonomics - Revisiting Reflections from IEA2015, IEA2018 and IEA2021' in the IEA 2021 Special Issue in the journal WORK, we have and will continue to engage with the IEA officers on action plans that have emanated from our engagements over the findings published in this article. Such deliberations have included:

- Encouraging IEA federated societies to include members of the ECC in their boards
- Establishing a standing or ad-hoc committee dedicated to ECC activities
- Including an ECC Vice-chair as part of the CPR committee who will drive all activities related to the ECC through the committee
- More regular (at least quarterly) online interactions across various geographical areas where ECCs can engage with their region's officers and pre-eminent scholars/practitioners.
- Inclusion, more formally, of ECC members on the organising committee of the IEA Congresses, which is reflected in the IEA Congress model. This could aid the organising committee of each congress to ensure that activities aimed at profiling or promoting the ECC are given due consideration.

Following a survey of the (at the time) IEA's 25 Technical committees regarding their activities around the ECC, Katie Buckley and Kai Yin Davidson-Khor have compiled an initial report which will be submitted to the executive soon. Some key preliminary highlights include:

- Few of the responding TCs (4 out of the 16 who responded to the survey) reported collecting information on the ECC group.
- In terms of active recruitment of ECCs, only three TCs reported having processes in place to do this, with many, however, indicating an interest in being more involved in this regard.
- Specific methods of recruitment or engagement (either in place or as part of TC planning) included: surveying members; creating special interest groups; making attendance at events free or at a reduced cost for ECC; using social media and having more online events; including ECC in event planning; creating special sessions and publication issues aimed at engaging with ECC; promoting IEA level recognition and excellent awards; holding summer schools. It was noted that the IEA's support in these initiatives would be appreciated.
- Identified barriers to ECC engagement and participation included: communication, fiscal challenges and status differences (between TCs).

The finalised report will include more detail on the above and various recommendations linked to these findings.

#### External stakeholder engagement activities

Senior members of the IEA executive continue to work with various external stakeholders to build areas of common interest and overlap. To date, we continue to work with representatives from International Labour Organisation, the World Health Organisation and most recently, Kathleen Mosier has been engaging with the International Society of Pharmacovigilance (ISOP). ISOP is a professional, independent, not-for-profit society open to anyone interested in the safe and effective use of medicinal products. ISoP aims to foster science and learning in pharmacovigilance in all countries. For ISoP, pharmacovigilance includes any area that contributes better knowledge and understanding of the safe and effective use of medicines, pre-and post-marketing. The proposed MoU has been tabled with the IEA Executive and will be discussed at the upcoming Executive Council meeting.

While more detail is provided in Kathleen Mosier's report, I would like to extend my sincere gratitude to Kathy and other members of the broader executive and IEA for their work towards developing the guidance document on Applying HFE to Health Care for Patient Safety. Additionally, I appreciate Professor Paul Bowie (NHS Scotland) attending the WHO's Global Experts' Consultation "Implementing the Global Patient Safety Action Plan 2021-2030: Pandemic and beyond in late 2022.

Additionally, the IEA executive has constituted an Ad Hoc committee on HFE Standardization, headed by the past president of the IEA, Yushi Fujita and other IEA stakeholders and specialists. The committee's recommendations have been submitted to the executive for consideration.

In closing, I wish to express my sincere appreciation for the broader committee and their efforts to take the CPR Committee's work forward. I have also valued the support and encouragement of the IEA executive for the committee's work, principally through opening the space to discuss concerns during the officer's weekly meetings. This has been important in keeping connections between the officers and the standing committee chairs. I would support this being a practice that continues going forward.

### Information & Communication Technology Report for EC Meeting

May 2023 Takashi Kawai

#### Mission

Promote the use of IEA website and ICT tools to enhance communication.

#### Member

Takashi Kawai (Chair)
Maggie Graf (VPSG)
Aleksandra Gamper (Administrator)
Kian Leong (Web Developer)

#### **Progress**

#### 1. Website maintenance

We regularly update the content on the IEA website and resolve technical issues. In particular, we reconsidered the design of the top page with extensive vertical scrolling and redesigned it into a more concise format, which was then implemented. Specifically, we reduced the spatial information density and the blank space by converting headlines into a carousel-type user interface. Below figure shows the top page before (left) and after (right) the redesign.

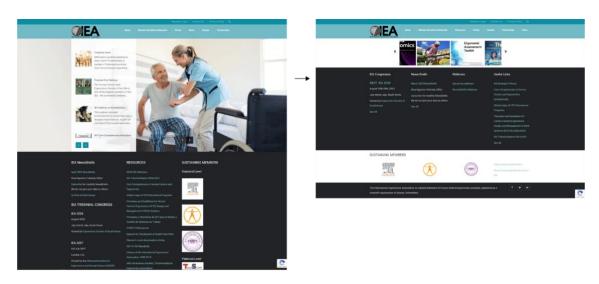


Figure the IEA top page before (left) and after (right) redesign

Currently, we are planning improvements to the user interface on the member ara to encourage the use of the download feature. At the same time, we are also looking into enhancing the usability of our Webinar YouTube Channel.

#### 2. Collaboration with other Committees

One of our important roles is to collaborate with other committees and promote the use of the IEA website and ICT tools. Until now, we have worked with the Development and Promotion Standing Committee to provide server space for the digital version of the Congress Model. The Digital Congress Model by Dr. Aleksandr Volosiuk is very well made, and we expect it to be utilized soon.

We are willing to actively collaborate with other committees if there are ways in which we can contribute.