



MEETING OF THE IEA EXECUTIVE COMMITTEE
Draft Minutes

April 6, 2022
Online Meeting

Executive Committee:

President: José Orlando Gomes (JOG)

Vice-President and Secretary General: Maggie Graf (MG)

Vice President and Treasurer: Thomas Alexander (TA)

Past President and Chair of Awards Committee (PPA): Kathleen Mosier (KM) (ex officio)

Chair of Communication and Public Relations Committee (SC CPR): Jonathan Davy (JD)

Chair of Development and Promotion Committee (SC DP): Elina Parviainen (EP)

Chair of International Development Committee (SC ID): Anindya Ganguli (AG)

Chair of Professional Standards and Education Committee (SC PS&E): Takeshi Ebara (TE)

Chair of Science, Technology and Practice (SC STP): Nancy Black (NB)

Chair of Information Communication Technology (SC ICT): Takashi Kawai (ex officio)

Chair of IEA2024 Congress Organising Committee: Myung Hwan Yun (MHY) (ex officio)

Chair of ad hoc Future of Work Task Force (FOW): Andrew Thatcher (ATh) (ex officio)

Chair of ad hoc Strategic Development and Implementation (SDI): Andrew Todd (ATo) (ex officio)

Staff: Aleksandra Gamper, IEA Office Administrator (Adm)

Meeting was recorded with permission of participants. The recordings may be distributed to co-chairs. Copies of Standing Committee Reports were circulated prior to the meeting and all participants were requested to read these in advance as the agenda allowed time only for questions and comments.

Agenda Item / Presenter	Discussion, decisions, action item
1. Opening of meeting. President's report JOG	<p>Greetings. Meeting commenced at UTC 13:00. Recorded.</p> <p>Ref 1</p> <ul style="list-style-type: none"> • Gratitude to the EC for their work on P2DT • Report on the transition to the new leadership • Commitment to 7 policies created by Dr. Yushi Fujita and developed by past ECs • Recognition of joint efforts and significant progress in collaboration between the committees • Anticipation of the next offline EC meeting
2. Report from VPSG MG	<ul style="list-style-type: none"> • Draft minutes of last Executive committee meeting November2021 accepted with no changes. • Employment of Aleksandra Gamper as new office administrator • Updating of contact lists and website information, some changes to simplify navigation (ongoing) • Organisation of webinars (Professional Certification, Journal Club on MSDs, Exoskeletons upcoming) <p>Offers for Council meeting 2022:</p> <ol style="list-style-type: none"> 1. Delft, Netherlands. October 30-November 1 or November 4-7 (Healthcare Systems Ergonomics and Patient Safety, HEPS2022 on 2-3 November) 2. Merida, Mexico. October 8-10 (VII Congreso Latinoamericano de Ergonomia on 5-8 October)
3. Report from VPTr TA	<p>Ref 2</p> <ul style="list-style-type: none"> • Report on the transfer of files, information and accounting software • Revenues and expenditures in 2021 • Balance sheets in 2020 and 2021 • Issues and recommendations: search for new funding opportunities, maintaining existing sponsors, compliance with Swiss NPO legislation, accounting software, guidelines for smooth transfer of tasks

<p>4. Report from SC PS&E TE</p>	<p>Ref 3</p> <p>Takeshi Ebara reports on the results of the number of the committee's meetings. The SC has defined a tentative plan for 2022-2024 based on the P2DT framework and set five directions of work:</p> <ul style="list-style-type: none"> • Development of an education tool kit based on new HFE core competencies through hands-on training to quickly respond to the demands of "Society 5.0" • Development and implement an independent system and/or supportive structure for the moderation/accreditation of HFE education programs • Projects in Indonesia • Accumulation of experience on establishing master/PhD programs in HFE (cases in Argentina, Brazil, Colombia) • Maintenance and update of HFE Educational map
<p>5. Report from SC ICT TK</p>	<p>Ref 4</p> <p>Takashi Kawai presents the SC ICT plan to enhance IEA communication efficiency with technical tools, to assist with the development of IEA Webinar Project, IEA Congress Model Project and other ongoing projects.</p> <ul style="list-style-type: none"> • Request from the participants to clarify the purpose and functionality of tech services used (Dropbox, Slack, website, and DocuWiki).

<p>6. Report from SC ID AG</p>	<p>Ref 5</p> <p>Anindya Ganguli presents a comprehensive plan for the international development that covers the following topics:</p> <ul style="list-style-type: none"> • University networking for PhD / Masters programmes • Certification • IEA Ergonomics society networks (BRICSPlus and ACED) • Database of HFE professionals / academicians / researchers • Collaboration with Industry / Allied professionals / professional bodies (Occupational Health, Physiotherapy) • HFE Webinars and on-line courses • Training the Trainers • New Affiliated Societies <ul style="list-style-type: none"> • Participants note many points for collaboration with the Education Committee. • Elina suggests differentiation of new competences for Industry 4.0 vs 5.0 • Nancy offers to share documents used to establish a new standing committee which may be useful when setting up new affiliated societies.
<p>7. Report on IEA2024 MHY</p>	<p>Ref 6</p> <p>Myung Hwan Yun confirms that the next congress is being prepared in accordance with the schedule, reports on new appointments, the readiness of the tentative program and the intention to use MetaVerse platform during the congress. He proposes to hold the 2023 executive meeting in Korea.</p>
<p>8. Report from SC CPR JD</p>	<p>Ref 7</p> <p>Jonathan Davy reports on the committee's strategic plan for years 2022-2024. He defines the purpose of the committee and states the key strategic areas of focus for the CPR committee. Then, he presents short term, medium term, and long term plans, outlines the strategies to promote the IEA and its internal and external stakeholders, and also names a number of distinct programs aimed at promoting IEA, such as the IEA webinar program, Early Career Coalition support program and the IEA external partner program.</p> <ul style="list-style-type: none"> • Jonathan encourages EC to take a leading role in using the social media. The participants request an instruction on how to effectively spread out a message and how use functionality of social media.

<p>9. Report from SC DP EP</p>	<p>Ref 8</p> <p>Elina Parviainen shares a strategic plan designed by the SD DP which includes: creation of a digiversion of the CM vers 1.1. and its integration into the IEA Web pages, description of a Hybrid/full virtual congress, piloting CM, transferring and utilizing experiences from IEA 2021.</p> <p>Elina urges the EC to work together on defining a clearer and more transparent view of the IEA and its projects and to use Congress, website and media to collaboratively deliver a clear picture of the IEA and HF&Ergonomics.</p> <ul style="list-style-type: none"> • Maggie suggests holding a separate congress session on the work of IEA. • Elina proposes developing a system of measurable criteria to assess the efficiency of the Congress. This system will be explained in CM to help future Congress organisers.
<p>10. Report from SC STP NB</p>	<p>Ref 9</p> <p>Nancy Black presents a detailed strategic plan for Science Technology and Practice (STP) standing committee. The plan includes three directions of the SC support: TC support, publication support, administrative support.</p> <ul style="list-style-type: none"> • To further improve the documents Kathleen suggests using both terms, Human Factors and Ergonomics, consistently in all documents.
<p>11. Report from PPA KM</p>	<p>Ref 10</p> <p>Kathleen Mosier reports on the current status of the present awards and the strategic plan of the development in this domain.</p> <p>As for the annual awards, more people are now eligible for the awards. Development strategies include expanding number and prize amounts of the awards, formalisation of selection process, and efficient funding management.</p> <p>Kathleen reports on WHO-IEA and ILO-IEA collaboration to improve IEA visibility and promote the value of the HF/E field.</p> <ul style="list-style-type: none"> • Kathleen urges participants to advertise the awards, especially the ones designated for early career professionals. • Anindya notes that the Kingfar application process is not user-friendly and proposes a two-step selection to attract more applicants.

<p>12. Report from FOW AT</p>	<p>Ref 11</p> <p>Andrew Thatcher and Wei Zhang propose the following objectives for the committee:</p> <ul style="list-style-type: none"> • Establishment of Task Force with regional representatives. • 2022-2023 Webinar series: by prominent and emerging E/HF community members. Regional representation. • 2023 Webinar series: by prominent E/HF industry stakeholders (e.g., ILO, EU Beyond Work, etc.) • 2023-2024 Opinion piece production: compile short opinion pieces from the webinars into a single discussion document for distribution. • 2023-2024 Special Issue production in a prominent journal (e.g., Ergonomics, Applied Ergonomics, or Human Factors) curated by Andrew Thatcher and Wei Zhang. <p>The presentation generates heated discussion.</p> <ul style="list-style-type: none"> • Inequality in the distribution of technology leads to very different future of work for different parts of the world. • Elina raises the question of the role of HF&Ergonomics in Industry 4.0 vs Industry 5.0. • Kathleen emphasises that human needs have to be in the centre of technological development, not the technology itself. • José urges experts to act in response to the rapid tech revolution. • Participants agree with Thomas's remark that the domain of "Artificial Intelligence" includes a lot of questions in terms of HF/E.
<p>13. Report from SDI AT</p>	<p>Ref 12</p> <p>Andrew Todd reports on the SDI committee's work on the overall P2DP framework for development, implementation and dissemination of EC and SCs activities for years 2021-2024. Andrew plans to prepare a coherent and comprehensive document that will cover the topics discussed during this meeting.</p>
<p>14. Next meetings MG</p>	<p>The next EC meeting venue is to be determined by the Council vote and will be announced soon. The meeting is planned to be hybrid, so everyone could join, however, participation in person is preferred and highly anticipated.</p>

Meeting closed at UTC 15:40

REF = referenced documents for agenda item

IEA President's Report

June 2021 to March 2022

José Orlando Gomes

This report outlines the activities of the IEA President since June 2021 oriented by the IEA mission and goals, as well as the IEA 7 Policies. The IEA has been facing an extraordinary challenge in the last two years, operating its activities in virtual mode, including its biggest event, the XXI Triennial Congress of the IEA, organized very successfully by the Association of Canadian Ergonomists, in June 2021.

The IEA has been operating virtually since 2020, led by Prof. Kathleen Mosier and the EC. This greatly facilitated the transition process to the new EC, the implementation of co-chairs, and the replacement of the IEA administrator. Planning activities, guided by the IEA 7 Policies and using as a basic tool the P2DT tool kit, previously developed by Yushi Fujita and Andrew Todd, have begun and are being implemented with the support of the Strategic Development and Implementation Ad Hoc Committee.

The new EC members understood the current delicate and complex moment and have risen to the tasks of activity planning and meeting daily demands in an exemplary way. Their quick engagement, cooperation, and ongoing support have been fundamental in planning new EC activities while continuing all previous projects.

As you know, since 2015, the IEA has adopted a policy-driven approach. Seven policies that set forth a framework for developing general areas of activities and milestones aligned with IEA's mission and goals were introduced. Its mission and goals are specified in its By-laws as follows:

- The mission of the IEA is to elaborate and advance ergonomics science and practice, and to expand its scope of application and contribution to society to improve the quality of life, working closely with its constituent societies and related international organizations.
- The main goals of the IEA are:
 - 1 To develop more effective communication and collaboration with federated societies.
 - 2 To advance the science and practice of ergonomics at an international level.
 - 3 To enhance the contribution of the ergonomics discipline to global Society.¹

IEA 7 Policies list and related IEA goals:

1. Stakeholders' engagement – Related to Goal 3
2. Collaborate with and reinforce IEA Networks – Related to Goals 1 and 3
3. Contribute to Science, Technology, and Practice – Related to Goal 2
4. Identify roles of IEA in promoting Education, Certification, and related matters – Related to Goals 1 and 3.
5. Reinforce the infrastructure of IEA - Related to Goals 1, 2, and 3
6. Reinforce relationships with external organizations (existing and new) – Related to Goal 3
7. Maintain a future focus for HF/E - Related more to the mission of IEA itself

The main task addressed by the new EC team during these nine months has been the preparation of a strategic plan for the entire mandate. The plan's main goals are to fulfill the mission and objectives of the IEA, guided by the 7 Policies, in the sense of producing more collaboration within of the EC itself, and also with the other levels of the IEA structure which are the FS/AS's, the IEA Networks, and

external stakeholders with which the IEA already has a long tradition of cooperation, as well as new ones that are under development.

Finally, a great effort is being made to strengthen the IEA's infrastructure to deal with the new challenges of virtual operation, which seems here to stay.

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 other EC members' reports and presentations.

Activity	2021	2022
Conferences and Meetings (virtual)	Indonesia, Bolivia, Colombia (SURA), Chile, Mexico, Spain, Colombia (PhD Program), Brazil, Uruguay, India, Peru, Ecuador, HFES, Ulaergo, ACED, FEES, BRICSplus, ADEA/Argentina, Tsinghua/Kingfar, and ISSA. (24x)	SURA, ICOH, Tsinghua/Kingfar, FEES, JES, Colombia (PhD Program). (9x)
Conferences and Meetings (f2f)	Argentina (2x)	Cuba (4x)
EC meeting (virtual)	November 6 th (2x)	
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 Committees meetings	6x	6x
Ad hoc Committees meetings (FoW and SD&I)	7x	4x
Technical Committees meetings	ATWAD, and structuring of new TC's: Resilience Engineering (2x)	structuring of new TC's: Resilience Engineering, and Informal Work (preliminary name) (1x)
Journal Work Special Issue on IEA Triennial Congress	article review (3x)	article review (8x)

Reference:

1. Fujita et al (2021). The Seven Policies of IEA. IEA doc.

2021 Treasurer's Report

April 6th, 2022

Thomas Alexander,
VP and Treasurer

General Actions

Transition during 2nd half 2021 and handing over, including:

- Registration to Swiss commercial register,
- UBS bank,
- consulting agency,
- New media and formats (Slack, dropbox,...)

Transfer of files, information, accounting software etc.

2021 Revenues & Expenditures to Dec 31st (US\$)

2021 P&L Statement to December 31 st			
Revenues		Expenditures	
FS & AS Membership Dues	\$38,563	Meeting	\$0
Sustaining Member Contribution	\$39,256	Representation & Outreach	\$0
Capitation Fees	\$18,157	Office	\$31,253
Funds Contribution	\$0	Awards Committee	\$16,000
Exchange Rate Gains	\$0	ID Committee	\$0
Interest	\$0	PSE Committee	\$0
Miscellaneous	\$4,716	STP Committee	\$0
		DP Committee	\$0
		CPR Committee	\$0
		Historian	\$0
		Grants	\$0
		Bank charges	\$598
		Exchange Rate Losses	\$329
		Website	\$8,252
		Miscellaneous	\$8,483
Total Revenues	\$100,692	Total Expenditures	\$64,194
Summary of operations			\$35,778

Balance Sheet Dec 31st, 2020 (US\$)

Assets		Liabilities	
Savings Account	\$154,484	Dues Advanced Received	\$225
Term Deposit	\$200,000	Accounts Payable	\$20,525
Seed Money Receivable	\$15,000	Earmarked Funds	\$15,355
		Total Liabilities	\$36,105
		Equity	
		Total Equity	\$333,705
TOTAL	\$369,810	TOTAL	\$369,810

The 2020 financial statement presented above differs from the one presented on May 8, 2021 due to adjustments made by the accountants to reflect a closing day exchange rate difference.

The differences, expressed in USD, are:

- increase in current assets (bank accounts): 98 USD
- increase in accounts payable: 918 USD
- decrease in IEA equity: 821 USD

Revised Balance Sheet Dec 31st, 2021 (US\$)

Balance Sheet – Dec 31st, 2021 - (US\$)			
Assets		Liabilities	
Cash and Cash Equivalents	\$439,535	Prepaid Membership Dues	\$193
Term Deposit	\$0	Accounts Payable	\$21,672
Seed Money Receivable	\$0	Earmarked Funds	\$48,187
		Total Liabilities	\$70,052
		Equity	
		Total Equity	\$369,483
TOTAL	\$439,535	TOTAL	\$439,535

2021 Cash Flow Summary to Dec 31st (US\$)

Cash Flow (US\$)	
Summary of operations, Year 2021, up to Dec 31 st	
Forwarded from 2020 @ 2021 Exchange	\$154,810
Cash Revenues (+) (includes dues advanced this year)	\$100,467
Cash Expenses (-) (does not include depreciation)	-\$63,767
Seed moneys sent (-) and received (+)	\$15,000
Funds disbursed (-) and received (+)	\$32,832
Investment Fund Liquidation	\$199,983
Exchange rate and transfer costs, etc.	\$17
Revenues (Advanced)	\$193
2021 Cash Flow	\$284,725
Available to be forwarded to 2022 @ 2021 Exchange	\$439,535

Issues & Recommendations

- It is necessary to continue to explore new and/or existing funding sources, in new ways, to guarantee sustainability.
- 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.

Issues & Recommendations

- The IEA accounting system has suffered necessary adjustments for compliance with Swiss NPO legislation.
- IEA's 2021 financials will be provided to its accountants using the Banana Accounting software.
- The IEA accounting system has undergone incremental changes for better reporting but there are still opportunities for improvement, both procedural and structural, to facilitate operation and reduce workload, e.g. detailed transaction data done, dues control pending.

Strategic plans for Professional Standard and Education (PSE) committee of IEA

We are now trying to frame some value-added demands made by each member for taking initiatives during the period of 2022-2024. Please note that the following are tentative, as a first step in making plans based on the P2DT framework.

1. Development of education tool kit for HFE core competencies collaborating with CNAM (Paris) and JES/CPEJ (Japan), proposed by Takeshi Ebara(chair) and Tahar Hakim Benchekroun (co-chair)

- Develop and conduct “hands-on training” with a real-world problem collaborated with Prof Hakim, CNAM, and JES/CPEJ, by multidisciplinary teams working together with inviting various domain specialists/practitioners such as accident prevention, occupational safety and health, and human-centered design.
- The new HFE core competencies put stress on applying the systems approach, and recent social demands in Japan focus on so-called "Society 5.0", building a human-centered society that balances economic advancement with the resolution of ecological problems by a system that highly integrates cyberspace and physical space. Such disruptive technologies using AI, VR/AR, and/or MetaVerse will transform the traditional work into quite new ones. HFE needs to provide an education tool kit for professionals based on new HFE core competencies through hands-on training to quickly respond to such demands for harmonizing disruptive technologies and human well-being.

2. Moderation Processes for HFE Education Programmes, proposed by Marion Edwin (sub-committee chair)

- Develop and implement an independent system and/or supportive structure for the moderation/accreditation of HFE education programs that lead to HFE certification by IEA endorsed certifying bodies.
- The bodies that carry out HFE certification rely on the outputs of HFE education programmes. These HFE education programmes are (often) under the control of academic institutions, with programs dependent on the expertise of teaching staff and influenced by many other factors in the education system. Despite that the certification of HFE professionals has reliance on educational outputs, there is little guidance on how HFE certification bodies might verify that the HFE education programme meets the standards for HFE professional certification.
- "ISO/IEC 17024:2012 Conformity Assessment – General requirements for bodies operating certification of persons" suggests that certifying bodies must have means of establishing that the education bodies providing HFE education are educating to the standards required by the HFE certifying body.

3. Potential Projects in Indonesia (similar to Malaysia & Thailand), proposed by Yassierli (co-chair)

1) Set-up Certification Body in Indonesia

- No certification body yet for Professional Ergonomist (like BCPE). Only 3 persons have CPE.
- Learning from the leading Malaysia ergonomics society working on the establishment of certification body.

2) Increasing Quality of Ergonomics Education

- For Master/PhD program, ergonomics is an option under Industrial Engineering/Public Health Program
- No standard ergonomic courses yet
- IEA standard core-competencies have not yet disseminated

3) Increasing research impact

- About 500 active members of the Indonesian Ergonomics Society. Of these, about 40 members hold Ph.D.
- Need to discuss ideas for conducting high-impact research for those without a Ph.D. degree.

4. How to establish master/PhD programs in HFE, proposed by Mario Vidal (co-chair)

1) How to build up and structure a master's degree in HFE in Argentina

2) How to establish a national program composed of master's courses in Ph.D in Brazil

- Building up a national Ph.D. program in Brazil by collaborating with professors in architecture, health science, human science, etc. is the new challenge for Brazil, for ABERGO.

3) Support the continuation of the PhD program in Colombia

5. Maintenance and update of HFE Educational map

<https://iea.cc/global-hf-e-education-map/>

- IEA provides global educational institution map of HFE on the IEA website, developed by Max Chang, past PSE chair.
- To date, the current map provides only information about which institution can educate HFE in PhD, master, or undergraduate course.
- We want to figure out how to provide it to the stakeholders more effectively. What kind of information should be added? or what kind of function is needed for stakeholders?

Cochairs

Mario Vidal (Latin America, Brazil), Yassierli (Asia, Indonesia), Tahar Hakim Benchekroun (Africa, Paris),

Certification sub-committee chair

Marion Edwin (Oceania, New Zealand)

International Development Standing Committee

➤ **Chair** Anindya Ganguli India

➤ **Co-Chairs per Region:**

- Martin Rodriguez, ADEA, Argentina
 - Paulo Antonio Barros Oliveira, ABERGO, Brazil
- } **Latin America**

- Nelson Ekechukwu, ESN, Nigeria – **Africa**

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

- Liang Ma, CES, China
 - Jennifer Guterrez, HFESP, Philippines
- } **Asia**

Stakeholder-wise

1. **University networking for PhD / Masters programmes**
2. **Certification**
3. **IEA Ergonomics society networks (BRICSPlus and ACED)**
4. **Database of HFE professionals / academicians / researchers**
5. **Collaboration with Industry / Allied professionals / professional bodies (Occupational Health, Physiotherapy)**
6. **HFE Webinars and on-line courses**
7. **Training the Trainers**
8. **New Affiliated Societies**

Initiatives and Plans – 1 A

University Networking for Ph.D programmes

- **Support for the development of a PhD program in Colombia** focused on HF/E as a collaboration between the National University of Bogotá and the University del Valle. This program will be the **PhD program in Spanish in Latin America**. On December 2, 2021, a meeting was held with the team of the Colombian professors, who formulated and are implementing the program, and IEA.
- **Asia:** Benchmark on the Ph.D. program developed in Latin America and develop a **collaborative Ph.D. program in Asia**.

Initiatives and Plans – 1 B

University Networking for Masters programmes

- **IEA-ADEA-National Technological University in Argentina:** development of a master's program to support the development of HF/E in South America and other Spanish-speaking countries in the region.
IEA-SOPERGO Peru: development and implementation of a master's program in HF/E at the University Cientifica del Sur (private university), Lima, and a continuing education course at the National University of Engineering (public university) in Lima.
IEA-SOCHERGO Chile: collaboration on the development and implementation of a master's program in HF/E at the University of Valparaiso, Valparaiso City, and a continuing education course on HF/E at the University of Atacama in the north of Chile.

Initiatives and Plans – 2

Certification

- **IEA-SURA Collaboration:** IEA has been collaborating with SURA (a large insurance company) to support the development of HF/E in Latin America. On 20th January 2022, the plan for an HFE Certification Programme was unveiled.
- IEA will help societies or HFE networks to build their own certification programmes

Initiatives and Plans - 3

IEA Ergonomics society networks

- **IEA BRICSPlus Network:** collaboration in activities such as webinars, collaborative research on Covid-19, collaborative supervision of graduate students, development of common strategies for publishing, a network website design, as well as supporting activities at each country's national congress on HF/E: Abergo, IREA, HWWE (ISE), CES, and ESSA.
- **IEA ACED Network:** collaboration in activities such as webinars, collaborative research, collaborative supervision of graduate students, development of common strategies for publishing, a network website design, as well as supporting activities at each country's national HF/E conferences.
IEA-ACED has been working with to collaborate on organization of HF/E societies in Bangladesh, Vietnam, and Brunei.

Initiatives and Plans – 4

Databases

- Prepare a list/database of **professionals** in HF/E and share the list/database to the **industry**, so that they could have connections and recruit/consult talents in different countries.
- Prepare a list/database of **academicians/researchers** in HF/E and share the list/database to the **academic and research institutes**, so that they could network among themselves for collaborative research and to facilitate selection of referees/examiners for dissertations from this list/database.

Initiatives and Plans – 5

Industry / Allied professionals / professional bodies (Occupational Health, Physiotherapy)

- Collaboration with Industry, Allied professional bodies to increase awareness and networking.
- Examples from India, to be replicated in other countries appropriately:
 - Joint webinars with **Confederation of Indian Industry**;
 - Membership of **National Standards Body (BIS)** as an Industry Representative and taking active part in development of Indian ergonomics standards;
 - **Occupational Health Professionals** (support of their bid for **ICOH** conference in India, and collaboration in seminars / webinars);
 - **Physiotherapists** (partner for **Premus 2023**, 11th International Scientific Conference on the Prevention of Work-Related Musculoskeletal Disorders in India).

Initiatives and Plans – 6

HFE webinars and on-line courses

- Start offering **webinars** to raise awareness and entice interest in Human Factors and Ergonomics in region-wise.
- Development and implementation of an **online course for ergonomics** basic certificate courses for baseline HFE knowledge, using private educational portals or the online education initiative (e.g. Govt. of India's **NPTEL**)

Initiatives and Plans – 7

Training the Trainers

- Focus on development of ergonomics faculty in the developing nations with emphasis on:
 - **Local language**
 - Local conditions
 - Integration into existing programmes
 - **Thrust on stakeholder collaboration – to create awareness and need**

Initiatives and Plans – 8 New Affiliated Societies

- Target to integrate into the IEA fold as affiliated societies
 - Bangladesh
 - Vietnam
 - Brunei
 - (Also Cambodia, Laos, United Arab Emirates, Qatar, Central Asia countries, and the Iranian Ergonomics Society).



ESK
Ergonomics Society of Korea



BETTER LIFE ERGONOMICS
FOR FUTURE HUMANS

(Progress Report #3)

22nd Congress of International Ergonomics Association

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

April. 6, 2022



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> (tentative)
- Main Content : Opening Ceremony, Parallel sessions, Symposia sessions, Special sessions, Exhibition, Ergonomic Design Award
- 1,500 attendees (1,000 foreigners) – Conservative Forecast

Organizing Committee

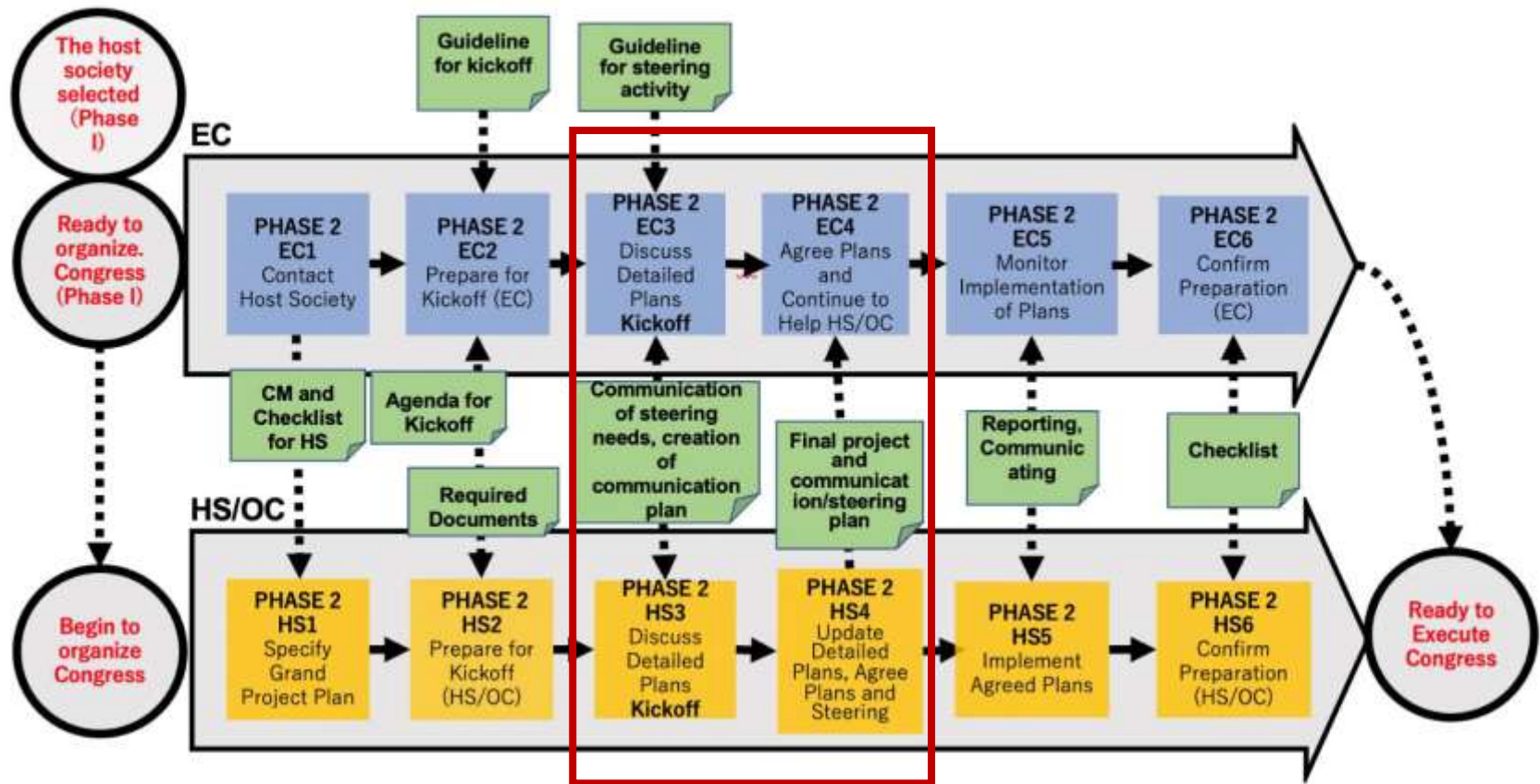
	Name	Affiliation	Major roles
Honorary Chair	TBD		
General Chair	TBD		
ESK (Ergonomics Society of Korea) Chair	Jaehee Park	Hankyong National Univ.	
Organizing Chair	Myung Hwan Yun	Seoul National Univ.	Organizes and manages the committees
Program Committee Chairs	Woojin Park	Seoul National Univ.	Organize conference scientific programs
	Taezoon Park	Soongsil Univ.	
Special Program Committee Chair	Yong Gu Ji	Yonsei Univ.	Organize workshops and special sessions
Secretary General	Gwanseob Shin	UNIST	Assists the Organizing Chair
Public Relations Committee Chair	Hong-In Cheng	Kyungsung Univ.	Promotes the conference and manage SNS
Design Competition Committee Chair	Yong-ku Kong	Sungkyunkwan Univ.	Organize design competition
Publication Committee Chair	TBD		Coordinates content production
Finance Committee Chair	TBD		Plans budgets and seeks sponsors
Exhibition Committee Chair	TBD		Organizes industrial forums and exhibition
Chair of IAB (International Advisory Board)	Sungho Han	POSTECH	
IEA Council Members	Inseok Lee	Hankyong National Univ.	

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. 04. 28 ESK Domestic Conference (LG R&D Center)
- 2022. 08 (Conference Planning w PCO)
- 2023. 8. (Contract w PCO)



IEA Conference Model 1.1



Developing Detailed Plans

- Current activity on Organizing Committee
 - Developing detailed plan and deliverables
 - Refining organizing committee structure and positions
 - Drafting conference components – parallel sessions, invited sessions, tutorials, awards, etc.

PHASE2 EC2 >>		PHASE2 EC3 Discuss Detailed Plan (EC)	>> PHASE 2 EC4
PHASE2 HS2 >>		PHASE2 HS3 Discuss Detailed Plan (HS/OC)	>> PHASE2 HS4
Responsible Person:			
Inputs		Activity	Output
Due:			Due:
From:			To:
<ul style="list-style-type: none"> • Detailed project plans • Guideline for steering 		<ul style="list-style-type: none"> • HS/OC and EC discuss the detailed project plan and develop common understanding on details. • Discuss how to steer. 	<ul style="list-style-type: none"> • Common understandings on details and steering • Feedback from EC to HS about possible supplemental needs in the plans

Major Milestones (tentative)

- 2022. 12 : 1st Call for Papers
- 2023. 05 : Distribution of Brochures
- 2023. 05 : 2nd Call for Papers
- 2023. 08 : Abstract Due
- 2023. 10 : Distribute Authors Instructions
- 2023. 01 : Open Registration
- 2023. 01 : Distribute Provisional Program
- 2023. 02 : Paper Due
- 2023. 05 : Early Registration Due

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)

1. 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)

2. 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

4. HEALTHCARE AND HEALTHY WORK

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

5. 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
5. Human Simulation and Virtual Environments, Work with Computing Systems (WWCS), Process control
6. Transport Ergonomics and Human Factors (TEHF), Aerospace Human Factors and Ergonomics
7. 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
10. 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. AI Human Factors
11. Vehicle Ergonomics
12. Physical User Interface

MetaVerse Conference



- 1st Try for MetaVerse Platform
- Available both On-line and Off Line
- Probably be perfectly executable in 2024.

Financial Support Schedule

- 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

Jeju Tour Information Desk & M.I.C.E Card, 20 USD for every registration)

by Jeju Convention & Visitors Bureau

Conference Center

Convenience - ICC JEJU

- World-class convention venue, ICC JEJU
- Relaxing atmosphere in harmony with nature
- Efficient layout and Conveniently located near from accommodations and tourist resources



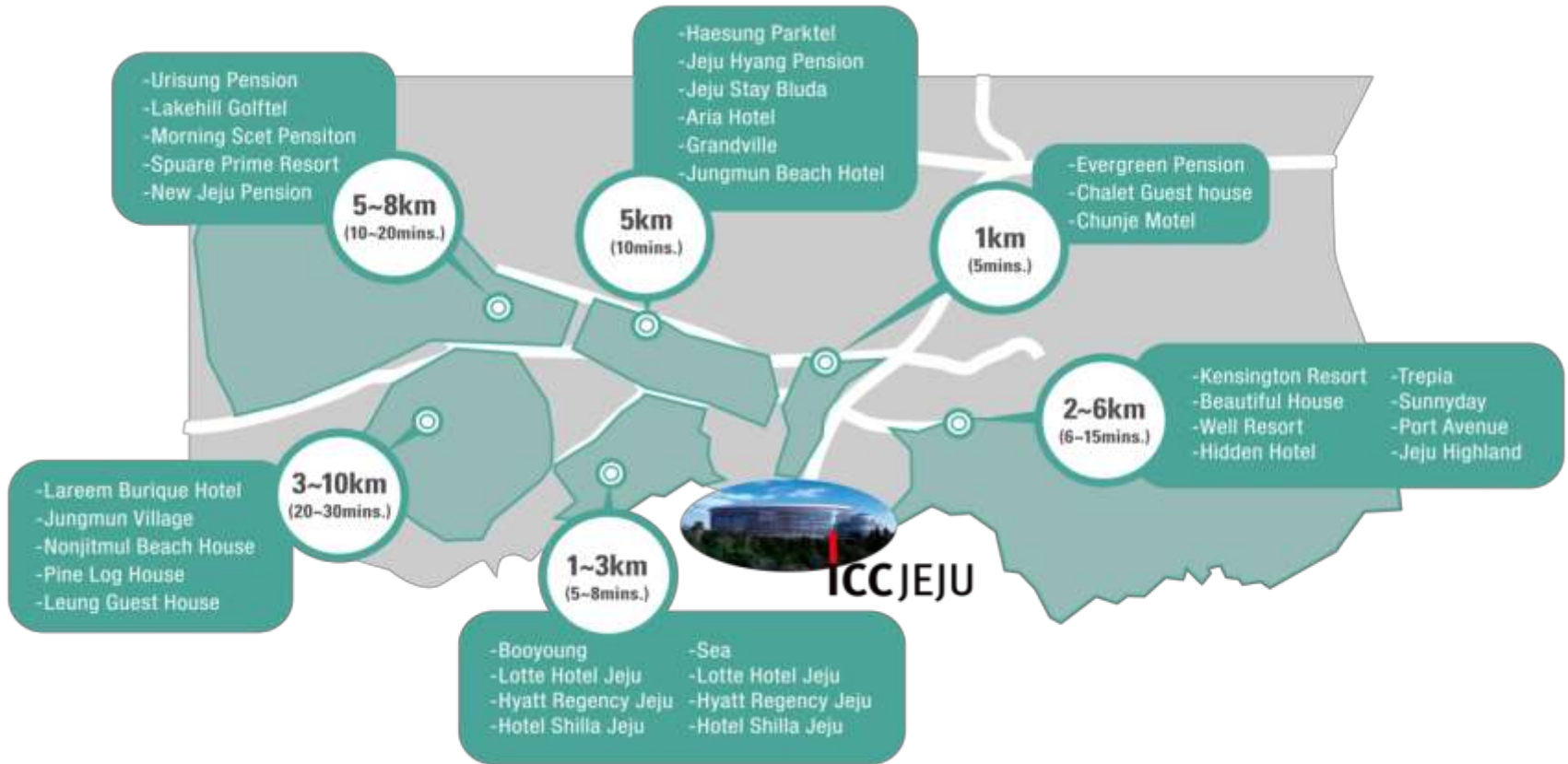
Accommodations

- Wide range of options (5-star hotels, budget accommodations, traditional hotels)



- 2,100+ rooms within 5 min. distance
- 3,400+ rooms within 20 min. distance

2,274 hotel rooms within (10min. By car) from ICC JEJU (estimated)



- Access (from Jeju, From Seoul, From other Asian Hub)
- Self-serviced Accommodation (Air B&B, Local Housing etc...)

COMMUNICATIONS AND PUBLIC RELATIONS COMMITTEE: IEA

Provisional planning: 2022 – 2024

Committee members: Jonathan Davy (CPR Chair); 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); Noorzaman Rashid (Strategic advisor); Aleksandra Gamper (Website manager and secretariat); Michelle Robertson (senior liaison with external stakeholders); Maggie Graf (IEA Secretary-General)

Introduction and Purpose of the committee

The Communication and Public Relations (CPR) Standing Committee promotes awareness of the IEA and HFE on a global basis. It maintains and facilitates interaction with internal stakeholder groups (federated and affiliated societies, standing committees, technical committees) and international partner organizations, disseminates information about IEA-related publications, events and news, assists in developing and distributing IEA publications, coordinates donations of educational materials related to HFE and any other activities aimed at supporting the growth and development of high quality HFE through the promotion of academic programs in ergonomics.

In light of aims and guiding principles of IEA, the key strategic areas of focus for the CPR committee are:

1. To improve on and diversify the methods of communication with and between internal and external stakeholder groups.
2. Promote the HFE profession and enhance the IEA's presence on and use of social media platforms (e.g. Facebook, Twitter, LinkedIn).
3. To promote events and activities of the IEA and its stakeholders. This may be achieved through:
 - a. The promotion and sharing of high quality research and practice of HFE through the "IEA webinar program"
 - b. The support and promotion of events, activities and publications that emanate from the IEA's Technical Committees (TCs), IEA networks and federated societies.
4. Enact and leverage the existing MOUs with external stakeholders through IEA executive liaisons.
5. Provide support to the Early Career Coalition, composed of ECRs (researchers) and ECPs (professionals) and other early career groups such as students to ensure the sustainable growth of HFE.

Plans for 2022 – 2024 (please note that short term = over the next few months; medium term = over the next year and long term = over the next two years and beyond)

Promotion of and communications with Internal and External stakeholders to further the development and practice of high quality HFE

A key function of the CPR committee, in collaboration with the IEA Executive, Standing and ad hoc committees is to facilitate interactions between and within internal stakeholders and between the IEA (and its internal stakeholders) and external stakeholder groups in an attempt to realise the aims of the IEA seven policies document. Critical to this is the creation of streamlined processes of information sharing between the internal stakeholders and CPR committee as well as a strategy by which any events or announcements are to be distributed.

Strategies to promote the IEA and its internal and external stakeholders:

Improve the presence and use of social media platforms of the IEA, including LinkedIn, Facebook, Twitter and Instagram and mailing lists (through the News Briefs) to promote the IEA and its activities with (and knowledge of these activities) internal and external stakeholders.

Promotion of HFE discipline of HFE and HFE scientific community by sharing the latest developments in the science and practice through the organization of IEA webinars and their diffusion through the YouTube channel.

Promotion activities/focus areas for internal and external stakeholders can include, inter alia (negotiated with relevant stakeholders):

Promotion of IEA publications in collaboration with IEA executives (ILO/IEA Checkpoints; Checkpoints on Agriculture; Healthcare; history of the IEA).

Promotion of IEA technical committees, their activities, publications and events in collaboration with STP chair (as outlined in the projects below).

Profile and promote IEA networks, their activities, publications and events in collaboration with Chairs of International Development and Development and Promotion

Profile and promote IEA federated societies and their events (on social media and through the NewsBriefs)

Promotion of IEA awards (linked to the Congress and achieved through the NewsBriefs and social media)

Promotion of the need for the development of high quality HFE education programs in countries lacking in such programs in collaboration with the ID standing committee

Update and make visible the 'Ergonomics Event Calendar/Event calendar that includes important external stakeholder events and dates' on the IEA website, which is regularly shared on social media and our website about events around the world.

Required actions and timelines: While events and announcements have started to appear on various IEA, there is a need for more professional support with graphics, short videos and gifs to improve the visual appeal of the content posted. There is thus a need for a graphics designer to form part of the CPR team (*short term*). Regular interaction between CPR and internal stakeholder groups around events and announcements in an attempt to coordinate the support of and communication around internal stakeholder events and announcements (Figure 1). This can be facilitated through standing committee chairs and directly with federated societies. Communication with other internal

stakeholders (TCs, Networks) needs to become more streamlined (*short to medium term*). In order to create a better-connected network that may circumvent bottlenecks at various levels, internal stakeholders (active TCs, Federated societies, Networks) are encouraged to establish social media platforms, which will help with the promotion of and communication with a wider audience (*medium term*). Connections with external stakeholder groups, via social media, will also help with co-promotion and co-marketing of events.

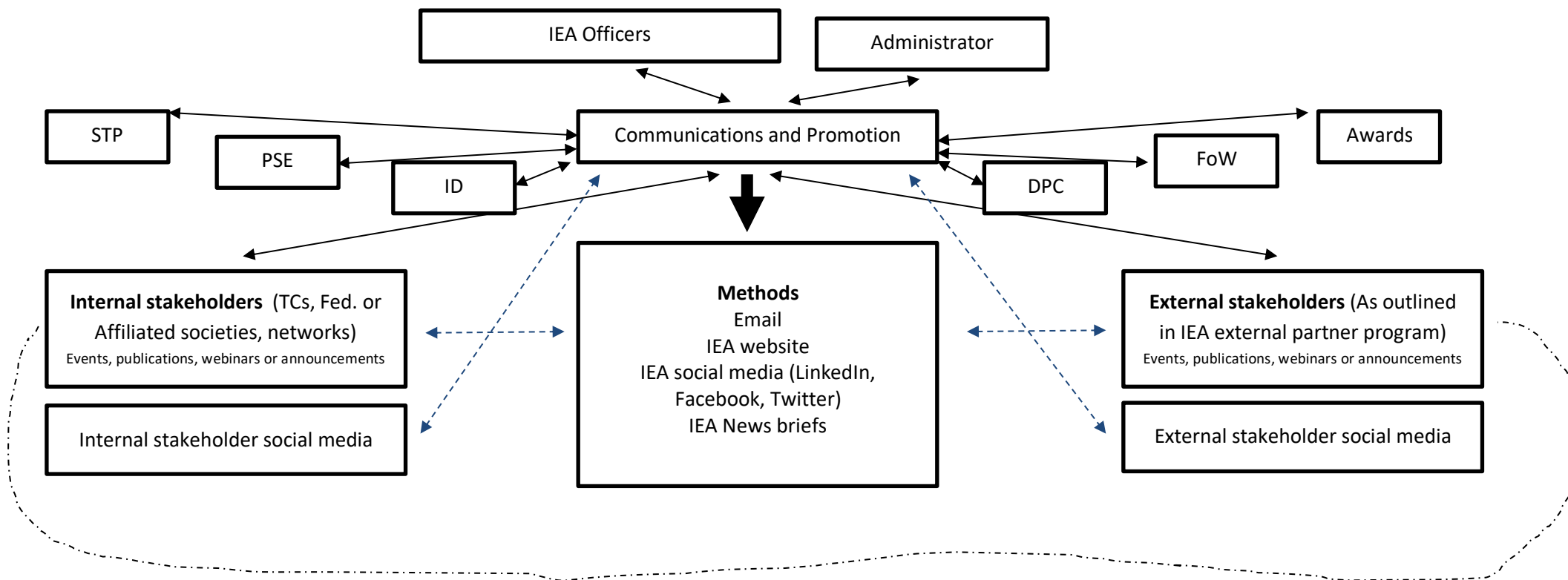


Figure 1: Overview of IEA stakeholder groups and envisaged lines of interaction (and possible methods for) between internal and external stakeholders to meet and aims of objectives of the CPR committee. **Solid black lines** = direct communication with CPR for the purposes of sharing announcements or news; **blue dotted lines** = indirect interactions through IEA and stakeholder communication methods and social media where events of interest can be ‘picked up’, shared and distributed; **black dotted lines** = intended or possible outcomes of interaction.

Distinct programs aimed at promoting HFE

1. IEA webinar program

a. IEA- coordinated webinar program:

Background: With the advent of the pandemic, there was a need to transition to communication and information sharing, facilitated by various online meeting platforms such as Zoom. To date, there have been three IEA-coordinated Webinars during the course of 2021 (Responses to COVID 19 – 14 May 2021; Work from home webinar – 5th of May 2021 and Professional Certification and IEA-Endorsement webinar in October of 2021 all of which are accessible here: <https://www.youtube.com/channel/UCDnjCjRcYB7rBR2PJFw6k6w>). Potentially, over the next three years, the aim is to have at least four IEA-coordinated webinars per year. The IEA coordinated webinar program aims to take a global approach by involving different IEA stakeholders such as federated societies and IEA networks representing different geographical areas, different technical committees and academic partners.

Potential needs and targeted stakeholders: In light of ease with which these webinars can be hosted and advertised, the IEA-coordinated Webinar program is an important strategic activity that aims to offer a platform for both internally and externally sourced stakeholders to share the latest developments in the science and practice of HFE around the globe. These webinars are aimed not at only the internal stakeholders (IEA standing committees - STP, PSE, ID, D&P, ad hoc committees – FoW, technical committees, IEA networks, federated and affiliated societies and professionals or students), but also external stakeholders who may have an interest in or overlapping scope of practice linked to the webinar contents (some of whom are mentioned in the IEA external partner program).

Potential role of CPR and other internal stakeholders: The IEA officers have the requisite resources (IEA Zoom licence) to set up registration links for these events, while the website, various social media platforms and communications (through various emailing lists and the IEA Newsbriefs) can facilitate the promotion of these events.

Required actions and timelines: Share webinar preparation plan with TCs and other internal stakeholders (*short term*) and develop a yearlong plan for IEA-coordinated webinars (*short to medium term*) with the intention of setting a similar scheduling beyond 2024.

b. IEA Technical committee and standing committee webinar support and promotion:

Background, potential needs and targeted stakeholders: In line with the IEA-coordinated webinar program, the CPR committee, in partnership with the Chairs of the STP standing committee and the various chair of the IEA's technical committees have begun to develop a program where the IEA's technical committees, have, been able to schedule and promote their own webinars. To date, there have been three of these events (two hosted on the IEA's zoom platform - Human-Robot-Interaction on 15 December 2021 (IEA Robotics TCs) and Musculoskeletal Disorders (MSD) Journal Club hosted by the IEA TC on Musculoskeletal Disorders and one hosted by the IEA TC on Affective Design entitled Affective design (<https://www.youtube.com/channel/UCDnjCjRcYB7rBR2PJFw6k6w>). These webinars are aimed at both internal and external stakeholders and are scheduled by the TCs, individuals or other groups involved in similar research or areas of practice.

Potential role of CPR and other internal stakeholders: The TC, group or individuals hosting may host their own webinar using their own platform or they may use IEA's Zoom platform while working with the secretariat, administrator and CPR committee to place an advert on the website and social media platform and Newsbriefs and continuously promote the event.

Required actions and timelines: Share IEA-coordinated webinar plan with TCs and other internal stakeholders (*short term*) and facilitate, with the help of the STP committee and the TC chairs, the development of a yearlong plan of scheduled webinars (*short to medium term*) with the intention of setting a similar scheduling beyond 2024 (*medium to long term*).

2. Early Career Coalition support program

Background and potential needs: The ECC comprises ECRs (researchers) and ECPs (professionals) and other early career groups such as students, which are an important stakeholder group that need to support to ensure the sustainable growth of HFE within federated societies and across the globe. Following engagements with various members of the ECC at previous IEA Congresses, there has and continues to be various barriers to ECC development and progression in the field of HFE. These barriers include, but may not be limited to: a continued lack of awareness of HFE and its purported benefits; a lack of or poor integration of HFE into existing curricula at Universities; a lack of representation (and therefore, involvement in decision making processes) at board level within federated societies, networks and even at the IEA level; linguistic barriers for ECCs (and established professionals) from Culturally and Linguistically diverse backgrounds due to the dominance of English at international HFE events; lack of job opportunities post study and financial constraints that affect participation in local and international meetings (given that ECCs are often grouped with more experienced professionals/academics who are often funded by their employers).

Targeted stakeholders: Following these engagements, there are a variety of key strategic steps that can be implemented at an IEA level (both in the standing committees and as part of the Congress organising model), at a federated society level and at an institutional level (possibly through the University network) that may assist in providing more support to the ECCs looking to develop a career in HFE. This includes continuing to build relationships with and show the value of HFE to cognate disciplines, while working with ID and PSE committees to continue to develop education programs across the world. There is a clear need for the various standing committees names here to work closely in this regard to coordinate, plan and implement this plan. This could be a potential discussion point at the IEA EC meeting.

Potential role of CPR committee and other stakeholders: While this framework is still in development (in the form of a publication for the IEA 2021 special issue in the Journal WORK) some initial steps will focus on developing and eventually launching a survey among the IEA TCs that focuses on exploring the TC Engagement with Students and Early Career HFE Workers. This is currently being piloted with one or two TCs before it is officially launched. This survey will also be shared with federated societies with this data helping to inform future strategies around how to better support and develop ECCs. There is a need to work with the D and P committee, ID and PSE, FoW and Congress organising committees to develop events aimed at supporting and developing ECCs.

Actions required: Complete special issue manuscript for WORK journal (*short term*), develop and pilot ECC engagement survey with a small number of TCs (*short to medium term*), launch finalised version of survey and share with the remainder of the TCs and possibly federated societies (*medium term*). Work with other standing committees (STP, PSE, ID, PD, FoW and Congress Organising committee) to co-produce strategies and events aimed at supporting ECCs (*medium to long term*).

3. IEA external partner program

Background, targeted stakeholders and potential needs: In an attempt to promote, grow and demonstrate the relevance of HFE, the IEA has established various relationships with a number of key external stakeholders including the World Health Organisation, the International Labour Organisation, the International Commission on Occupational Health, the International Standards Organisation, the International Occupational Hygienists Association, the International Society for Quality in Health Care, the Foundation for Professional Ergonomics, the International Council on Systems Engineering, the Institute of Industrial and Systems Engineering, the Applied Ergonomics Society and a not yet formalised relationship with the International Social Security Association – Machine and System Safety. These relationships, most of which are facilitated through memoranda of understanding, require regular interaction, co-production of publications, policies and guidelines, the co-promotion and co-marketing of events and attendance of symposia and events.

Potential role of CPR committee and other stakeholders: Appointed liaisons (Kathleen Mosier, Michelle Robertson, Thomas Alexander, Jose Orlando Gomes, Maggie Graf, Sara Albolino, Elina Parviainen, Yushi Fujita and Nancy Black, in collaboration with other TCs or standing committees) have been and continue to be responsible to liaise and engage with and report on interactions with external stakeholder groups on a bi-annual basis, while also advising on how the IEA CPR standing committee can assist in the promotion of an external stakeholder's events or publications. Along with the IEA Executive, the liaisons may also explore the establishment of additional relationships with relevant partner organisations or institutions to further the IEA's seven policies. Of particular interest is the establishment of additional relationships with the academic institutions through the promotion of collaboration with Universities for the development of HFE learning programs at all levels (undergraduate and postgraduate curricula).

Actions required: Establish a clear event plan for each organisation, with the help of the liaisons, which can be integrated into an existing IEA event planning (webinars, symposia or conferences) which will facilitate timeous awareness raising and co-promotion (*short to medium term – likely yearly*). Develop outline of intended production of co-written statements, policies or guidance documents (*medium to long term*).

Development and Promotion Committee (DP) targets and main activities for the term 2022-2024

PD Committee 2019-2021

Creation of CM

Elina Parviainen
Yushi Fujita

PD Committee 2019-2021

Implement and develop CM

Elina Parviainen
Aleksander Volosiuk
Yushi Fujita

Activities and Work groups

- Elina Parviainen, **coordinating and facilitating activities in PD**
- Aleksander Volosiuk, **Creation of digiversion of the CM vers 1.1. and implementation to IEA Web pages in co with Takashi Kawai.**
- Nancy Beck / Patrick Neuman, **creation of description for organizing Hybrid and full virtual congress (to be added in CM)**
- Elina, Nancy, Myung Hwan Yun and **EC standing committees, piloting CM, Transferring and utilizing experiences from IEA 2021 (Nancy, Patrick, Myung) → Elina, Jose , Andrew / PD work teams in cooperation with standing committees, Roles and activities of EC STC in cooperation with organizing HS/OC of the IEA Triennial Congress in relation to: 7 polices of IEA, IEA Strategy and IEA CM vers 1.1 (including OP IEA)**
- Elina, Noorzaman Rashid/ **EC standing committees/ PD work teams, piloting CM with IEA 2027**

Projects /
Sub
activities

Activity for Standing committees: **Familiarizing to CM, especially Chapter 3. More information from Elina → separate meetings with each standing committee**

Recommendation for IEA Officers: **Marked research for IEA based on the outputs from Standing committees → EC put up a project for this (utilization of the 7 polices)**

IMPORTANT IN ALL ACTIVITIES IS THE **DEVELOPMENT OF THE STRUCTURE AND ACTIVITY OF IEA (EC)** BY DEVELOPING COMMUNICATION, DOCUMENTATION AND TRANSPARENCY IN EC → NETWORKING INTERNALLY AND EXTERNALLY IN IEA WILL BECOME TRANSPARENT → **ENHANCING AND EASENING THE PROMOTION OF HFE AROUND THE WORLD**

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

The Science Technology and Practice (STP) standing committee, led by Nancy Black (NB, Chair) with Rosemary Seva (RS, co-chair, TCs), Karen Lange Morales (KLM, co-chair, Publications) and input from Technical Committee (TC) chairs will advance 13 initiatives within the areas of TC Support, Publications, and administration over the period of 2022-2024. These are organized by timeframe into short (within the next six months), medium (within the next 12 months) and long-term (within the next 24 months). We have structured these following the P2DT elements in table form to create this document.

TC support (led by Rosemary Seva, RS, unless otherwise noted):

- TC1. Revise TC handbook document** to clarify policies and responsibilities. This will reinforce the efficient communication between TC Chairs and co-chairs and the STP executive. We expect this will ensure all TC executives know what is expected of them, facilitating their work in that role. (Short term)
- 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. (Medium term)
- 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. (Short-term & ongoing)
- TC4. Guidelines to support Journal Special Issues led by TCs.** Building from NB's experience of special issues from IEA2021, this will support future Special Issues associated with IEA Triennial Congresses and will directly benefit TC Scientific Organizers and Scientific Journal partners with IEA and STP being indirect stakeholders. Led by NB with STP executive support. (Long term)

Publication support (led by Karen Lange Morales, KLM, unless otherwise specified)

- Pub1. Complete C-suite "ergonomics in a nutshell" document** under the direction of past STP co-chair publications, Andrew Thatcher. This publication will communicate appropriate information to the CEO-level industry people including benefits, importance, and case studies from multiple environments around the world. This initiative has involved CIEHF for organizational and publication support and multiple contributing E/HF experts via focus-groups and document revision. Stakeholders include IEA and E/HF practitioners and document users in the C-suites of the world. (Short term)
- Pub2. Prepare "Ergonomics in a nutshell" document for Project Managers** (operational managers). Following the template of the C-suite document (Pub1), led by STP with key support from E/HF experts for Project Manager knowledge users. (Medium term)

- 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. (Long term)
- Pub4. Complete publication of IEA2021 Special Issue for Journal WORK.** Led by NB with editors from IEA past Executive Committee (Kathleen Mosier, José Orlando Gomes, Thomas Alexander, and Sara Albolino). Expected completion by June 2022, supporting initiative TC4. (Short term)
- Pub5. Developments from EQUID publications for knowledge translation into new formats to encourage application.** Led by KLM with STP executive support, for knowledge users in the IEA community. (Long term)

Administration initiatives

- 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. (Short term, ongoing)
- Ad2. Support IEA Triennial Congress Management Planning group.** NB will actively support knowledge translation from IEA2021 to future triennial congresses led by Elina Parviainen’s CPR group.
- 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.
- Ad4. 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. This will continue the initiative begun by past STP Chair Thomas Alexander.

ModifiedP2DT_Awards_ILO_WHO

Kathleen Mosier, IEA Past President and Awards Chair

Step 1: Identify a value-added topic:

Promoting awareness and visibility of the human factors/ergonomics (HF/E) discipline in designing devices and work systems is an important value added topic allowing IEA to better leverage and utilize international organizational relationship opportunities to expand our public relations and outreach efforts, promoting the value of the HF/E field.

IEA 7-Policies:

1. Stakeholder engagement
2. Co-operate with and IEA Networks
3. Contribute to Science, Technology, and Practice
4. Identify roles of IEA in Professional Standards and Education
5. Reinforce IEA infrastructure
6. Reinforce relationships with external organisations
7. Maintain future focus of HFE

Step 2: Identify project details (What do we currently know)

Awards

1. Annual Awards: IEA Fellow, IEA/Kingfar, IEA/Tsinghua
2. New Triennial Award: Thomas R. Waters MSD Memorial Scholarship Award

Outreach and external collaborations

1. WHO – Collaborative documents
2. ILO – Collaborative documents; ILO Convention/Recommendation

Step 3: Identify needs

Awards

1. Candidates
2. Selection process
3. Selection committees

WHO

1. Engagement from WHO and IEA representatives, collaborative process

ILO

1. Engagement from ILO and IEA representatives, collaborative process

Step 4: Identify stakeholders

This step has two different matrixes for stakeholders. Firstly, internal stakeholders responsible for the implementation of strategy. These stakeholders should be involved (using participatory HFE principles) from the conceptualisation to implementation of activities. Secondly, external stakeholders who are potential target audience (both actively and passively), therefore the level of engagement and participation should be dependent on the level of participation, etc.

Table I: Internal stakeholders

Stakeholder Type	Stakeholder Level			
	Global Level	Regional Level	National Organization Level	Individual Level
System Influencer	IEA Executive committee	IEA Networks	IEA Federated societies	Members of federated societies
System Decision Maker	Awards Chair Award Selection Committees CPR Standing committee IEA EC	IEA members in LIMC		IEA Fellows IEA/Kingfar and IEA/Tsinghua selection committees (Mario Vidal, Chair) Triennial award selection committees

System Expert	Previous Awards Chairs CPR Standing Committee Future of work Chair	IEA Networks IEA Standing committee co-chairs FoW co-chairs	Federated societies' technical committees	Past Awards Chair (Yushi Fujita) Juan Carlos Hiba
System Actor	Awards nominators	IEA Networks		Award recipients

The specific external stakeholders will change according to the specific topic being presented, however it is possible to build an idea of who these would be (i.e. a view of target audience – so this includes some internal stakeholders as well).

Table II: External stakeholders

Stakeholder Type	Stakeholder Level			
	Global Level	Regional Level	National Organization Level	Individual Level
System Influencer	WHO, ILO Tsinghua University Kingfar	Tsinghua University Kingfar	CDC, Elsevier, Triennial Award sponsors	ILO - Dr. Shengli Niu, Labour Administration, Labour Inspection and Occupational Safety and Health Branch WHO – Dr. Neelam Dhingra, Unit Head, WHO Patient Safety Flagship
System Decision Maker	IEA, WHO, ILO Tsinghua University Kingfar			Same as above Award selection committees
System Expert				
System Actor				Collaborative document contributors

Step 5: Stakeholder relationships

The following table allows us to map the relationships between various stakeholders both internal and external. This can continue to grow as relationships made explicit. Plotted below is the external stakeholder relationships. TBD

	Stakeholder A IEA	Stakeholder B Tsinghua and Kingfar	Stakeholder C CDC, other triennial award sponsors	Stakeholder D WHO	Stakeholder E ILO
Stakeholder A IEA					
Stakeholder B Tsinghua and Kingfar					
Stakeholder C CDC					
Stakeholder B WHO					
Stakeholder C ILO					

Step 6: Identify potential benefits

Awards: Prestige, honor for sponsors, awardees; Cash for some awardees; IEA as source and disseminator of awards; Advancing HFE

WHO: Document and case studies on HFE in health care and patient safety for all WHO constituents; advance HFE through work with WHO

ILO: Documents on HFE and work for all ILO constituents; Convention and Recommendation on HFE in the workplace; advance HFE through work with ILO

Step 7: Develop strategies

Awards Strategy:

1. Advertise/expand the reach of award announcements to provide broader coverage and range of applicants (IEA NewsBriefs, Constant Contact, website)
2. Expand the number and prize amounts for IEA/Tsinghua and IEA/Kingfar awards through extended MOU
3. Formalize selection process, include honoraria for selection work in award agreements
4. Create an effective cost/benefit ratio for awards/IEA efforts/IEA benefits

JOINT WITH CPR

IEA-WHO Strategy:

- 1) Co-create with international experts a practical guidance document on the application of human factors and ergonomics (HF/E) principles to patient safety,
- 2) Identify and develop case studies to demonstrate effective interventions and application of human factors and ergonomics principles for improving patient safety
- 3) Dissemination of the practical guidance document “Applying HF/E to Healthcare for Patient Safety” and related HF/E patient-safety case studies
- 4) Create new 3-year collaborative plan

IEA-ILO Strategy:

1. Advertise/promote IEA/ILO document ‘Principles and Guidelines for Human Factors/Ergonomics Design and Management of Work Systems’
2. Revise and publish IEA/ILO report on ‘HFE and Manual Handling in the Workplace’
3. Assist Shengli Niu in creating ILO Convention/Recommendation on HFE and Manual Handling in the Workplace



Future of Work Task Force 2022-2024

Co-Chairs:
Andrew Thatcher
& Wei Zhang

- Establishment of Task Force with regional representatives. Help direct other aspects of the programme.
- 2022-2023 Webinar series. Webinars by prominent E/HF community members and emerging E/HF community members. Regional representation.
- 2023 Webinar series. Webinars by prominent E/HF industry stakeholders (e.g., ILO, EU Beyond Work, etc.)
- 2023-2024 Opinion piece production. Consolidate the webinar presentations into short opinion pieces. Compiled into a single discussion document to be distributed to federated societies and networks.
- 2023-2024 Special Issue production. A Special Issue of a journal (e.g., Ergonomics, Applied Ergonomics, or Human Factors) curated by Andrew Thatcher and Wei Zhang.

IEA'S FUTURE OF WORK TASK FORCE

We are proposing the following work programme for the 2022-2024 period. The work programme is given in approximate order (bearing in mind that opinion pieces might follow shortly after a webinar and not necessarily after the entire webinar series has run its course).

- 1) Establishment of Task Force with regional representatives. Networks and member societies will be contacted for nominations to serve on the IEA Future of Work Task Force. We expect somewhere in the region of 5 to 7 regional representatives that will oversee the Task Force programme in their respective region. In some regions this might develop into regional "observatories" or task teams, but it is not the expectation for all regions.
- 2) 2022 Webinar series. The webinar would be focused on the following questions: What do you think will be the important issues for the future of work (specifically for your region)? What are the implications of the future of work for E/HF (specifically, how can E/HF prepare for the future and what sorts of opportunities for contributions can E/HF offer)? How can E/HF contribute to the dialogue about the future of work? What are the implications for "decent" work? The webinars will be hosted live and shared on the IEA's YouTube channel.

Webinars by prominent E/HF community members. i.e., Prominent, senior E/HF community members who have a long history of change and understanding about work and the impact of work on the E/HF profession. Many of these people may also be close to retiring and therefore we would also want to capture their thoughts and ideas as a form of institutional knowledge. A potential list of prominent E/HF community members might include: David Woods, Erik Hollnagel, Neville Stanton, Waldemar Karwowski, Juan Carlos Hiba, Paul Salmon, Patrick Neumann, Peter Hancock, Tim Bentley, David Caple, Yushi Fujita. Younger, next-generation E/HF community members will be paired with the prominent E/HF members and will serve as the respondents. The young E/HF community members are the ones who still have the longest work lives ahead of them. They must live with the consequences of the decisions that are made today. They therefore have the biggest stake in thinking about and molding the future. An emerging list of webinar presenters might include people like Gemma Read, Abigail Wooldridge, Enid Montague, Sarah Coppolla, Michelle Aslanides. Please note though that the prominent E/HF speaker and the young E/HF respondent will be selected by the regional Task Force representatives.

- 3) 2023 Webinar series. Webinars by prominent E/HF industry stakeholders. There are many different stakeholders include big business, NGO's, and other international organisations. These stakeholders have either been investigating the changing nature of work for longer period of time than the E/HF community (e.g. the ILO, the EU Beyond Work programme, the World Refugee Programme) and/or will be the recipients of the changing nature of work (e.g. corporates). Once again relevant industry stakeholders will be identified by the regional Task Force representatives.

- 4) 2023-2024 Opinion piece production. The next phase of the project would be to consolidate the webinar presentations by the webinar presenters into short opinion pieces. These will be compiled into a single discussion document to be distributed to federated societies and networks. The individual opinion pieces (as well as the consolidated document) would be distributed to IEA stakeholders and through the public mouthpieces of societies and networks. Ideally we would like each federated society and network to nominate a person who would be responsible for: (a) assisting with a translation of the consolidated document into the dominant regional language/s; (b) disseminating the consolidated document to members and relevant stakeholders within their ambit; (c) coordinating responses and commentary on the consolidated document; and (d) reporting back to the Task Force on the commentaries and responses.

- 5) 2023-2024 Special Issue production. A Special Issue of a journal (e.g. Ergonomics, Applied Ergonomics, or Human Factors) curated by Andrew Thatcher and Wei Zhang. We propose that these papers are written by the “young researcher” group having listened to (and reflected on) the webinars by the established names and/or feedback from federated society (and networks) in the E/HF field and the external stakeholder groups.

Co-Chairs

Andrew Thatcher (South Africa) Wei Zhang (China)

IEA Executive Committee Meeting 6th April 2022



Andrew Todd Report

Strategic development Ad-hoc committee Details

Category	
Value-Added topic	A systemic approach to defining and implementing of IEA activities based on stakeholder needs for the 2021-2024 term of office
Outline	Provide the IEA with a strategic framework for the development, implementation and dissemination of executive committee and standing committee activities for the 2021-2024 term of office
Needs	<p>There is a need for:</p> <ol style="list-style-type: none"> 1. A tool to support the development and implementation of IEA activities in the 2021-2024 term of office 2. The IEA to understand who their internal and external stakeholders are and to align activities with an understanding of the needs of these stakeholders 3. Alignment of the EC and standing committee activities (i.e. not silos but integrated to support implementation of IEA 7 policies) 4. Support the development of the business plan with appointed external stakeholder
Activities	<ol style="list-style-type: none"> 1. Support (through presentations, meetings, discussions, etc) the IEA EC and SC to develop their plans for the term of office based on the P2DT framework 2. Use the P2DT developed by IEA EC and SC to develop overall P2DT that frames and articulates the various IEA activities for the 2021-2024 term of office 3. Use P2DT to disseminate overall plan and activities to both internal and external stakeholders 4. Use P2DT to discuss and implement IEA business plan
Stakeholders	<ol style="list-style-type: none"> 1&2. EC and SCs 3. Internal stakeholders (F/S, A/S and IEA Networks) and relevant external and stakeholders as identified in the EC and SC P2DT presented at 6th April meeting 4. IEA EC, Council and potential business plan implementation company
Benefits	Clear articulation, implementation and dissemination of IEA EC and SCs activities for the 2021-2024 term of office to various internal and external stakeholders