

# IEA Technical Information “Human Factors and Sustainable Development”

- General Information -

## General information on IEA Technical Committees

### **A TC and its Sub-Committees (SC) have three main roles:**

- 1) to discuss issues related to the TC's focus and activity plan (e.g. via online platforms and meetings scheduled at conferences where several TC members participate) ,
- 2) to coordinate research, practice and standards issues pertaining to the TC domain through networking and collaboration with associated bodies such as ISO, ILO, WHO, ICOH and so forth,
- 3) to organize scientific events endorsed or co-sponsored by IEA (conferences, workshops, symposia, panels and demonstrations

Furthermore, a TC and its SCs are expected to support the IEA triennial congresses by organizing one or several scientific paper sessions or a panel discussion (including call for and review of papers, organizing workshops etc.).

## Why a TC on HF and Sustainable Development?

- ❑ The perspective on sustainable development is relatively new for HF/E, but not the underlying ideas and approaches
- ❑ Basis for sustainability of human resources: enduring workability and employability – dominant elements of HF/E ever since
- ❑ Concepts of social sustainability: preventive OHS, human-centered design of work, employee participation etc. – HF/E contributes to preserve or build up human and social capital
- ❑ Sustainable development as a *three dimensional* concept: that means, that
  - analyzing or designing work and organizations requires to consider all dimensions and their interrelations;
  - the preconditions for and impacts of work, exceeding the individual and microergonomic level, are getting increasingly relevant (e.g. the interdependencies with society, natural environment)

## Domains of Interest

They include, but are not limited to:

- ❑ Equal integration of economic, social and environmental aspects and goals into ergonomic analysis and design.
- ❑ Research on economic, social and environmental aspects of work on a macro-level.
- ❑ Conceptualization and realization of a stakeholder approach in ergonomic research and design.
- ❑ Human Factors in Corporate Social Responsibility approaches.

The TC will not act in isolation, but benefit from existing activities:

- ❑ Longtime engagement of HF/E to improve working and living conditions in IDCs as well as in DCs
- ❑ Contribution of macroergonomic change management to establish more sustainable behavioral patterns/ to promote the diffusion of “sustainability innovations”

## Main Objectives of the Technical Committee

- ❑ To improve and increase the knowledge about the contribution of ergonomics to corporate and societal sustainability concepts.
- ❑ To improve knowledge transfer from HF/E to the academic community dealing with sustainable development.
- ❑ To strengthen the relationship between human factors specialists/ergonomists and other actors in this field.
- ❑ To promote ergonomics as a stakeholder oriented approach.
- ❑ To promote the role of ergonomics in realizing sustainable development to the public at large.

## The TC's Sub-Committees (in Nov. 09) I

### ❑ **Sub-Committee 1:** “Theoretical Perspectives on Human Factors and Sustainable Development”

- E. g. - researching on the conceptual links and synergies between both approaches,
- developing complementary insights by integrating “human factors” and “sustainable development” perspectives.

### ❑ **Sub-Committee 2:** “Sustainability and Risk Management”

- E. g. - integration of HF/E to risk management tools,
- highlighting the central relevance of prevention for HF/E and sustainable development,
  - combining macro- as well as microergonomic principles for a comprehensive management of social and environmental risks.

## The TC's Sub-Committees (in Nov. 09) II

### ❑ **Sub-Committee 3:** “Human Factors and Sustainable Development in Global Value Creation”

- E. g. - highlighting the relevance of ergonomics to improve working and living conditions in a systemic manner,
- researching on the possibilities of HF/E to improve the effectiveness of or even to overcome “codes of conduct”,
  - focusing on the contributions of HF/E to realize more social, environmental and economic sustainability in global value creation

### ❑ **Sub-Committee 4:** “Ergonomics and Design for Sustainability”

E.g. dealing with both "human factors" and "sustainable development" approaches applied to industrial, architectural and environmental design