

## On the IEA strategy: mapping HFE performance knowledge

Linda ROSE<sup>1</sup> and Christina JONSSON<sup>2</sup>

<sup>1</sup>*KTH, The Royal Institute of Technology, School of Technology and Health, Department of Health Systems Engineering, Unit of Ergonomics, Huddinge, Sweden*

<sup>2</sup>*Nordic Ergonomics and Human Factors Society, NES*

**Abstract** In order to support the implementation of the IEA strategy of Human Factors/Ergonomics (HFE) the objective of this pilot-project is to map the current awareness, knowledge and strategies regarding how HFE can be used in optimizing system performance and how and to what extent such strategies are applied in organisations today. The methodology used is that each board member of the Nordic Ergonomics Society's national boards has a talk with a key stakeholder, using a semi-structured question area guide during the spring 2014. The gist of the results from each talk regarding four core areas will be summarised and analysed and will be presented at the ODAM-NES 2014 conference.

**Keywords:** Human Factors & Ergonomics, System Performance, Decision Makers.

### 1. Introduction

The objective of Human Factors/Ergonomics (HFE) is to “optimize human well-being and overall system performance” [1]. In 2012 IEA presented HFE strategies for developing the discipline and profession [2]. HFE has a large potential to contribute to the design of well-functioning systems where both HFE objectives are met. While well-being has been much in focus within HFE, there is a gap of knowledge regarding how HFE can contribute and contributes to system performance.

In this pilot-project the overall objective is to map the current awareness, knowledge and strategies regarding how HFE can be used in optimizing system performance and how and to what extent such strategies are applied in organisations today. In addition, the objective is to promote the establishment of contacts between actors in the HFE societies and dominant stakeholders in organisations. In a first step to achieve this, the objective is to carry out a limited number of talks with dominant stakeholders, analyse and summarise the outcomes of these.

### 2. Methods

The following methodology for the mapping activity, planned to be carried out during the spring 2014, will be used. Each board member of the national societies within the Nordic Ergonomics Society, NES, has a structured talk with one person who represents a dominant stakeholder - either a system expert or a system decision maker. The talk is based on four semi-structured question areas regarding: 1) the stakeholders awareness on how the working environment affects the performance of the stakeholders organisation, 2) the stakeholders and her/his organizations' view on the relationship between the working

environment and factors such as productivity, quality and financial outcome in her/his organization, 3), what, if any, strategies the stakeholders organization has regarding working environment/ergonomics and human factors in relation to the system performance of the organization and if so, what actions that are taken. 4) In addition, the stakeholder will also be given the opportunity to express what kind of support she/he would like to have to promote how working environment/ergonomics and human factors can optimize the organizations overall system performance, i.e. to form a “wish-list”.

The talks are suggested to be recorded and afterwards the core of each talk is summarized and grouped in the above mentioned question areas, where also the positions/roles of the participating stakeholders are stated. The results from all the Nordic national societies are gathered and analysed. The results will be presented at the ODAM-NES 2014 conference.

### 3. Results

At the conference the results from the mapping will be reported. Based on these concrete action plans for further work will be formed.

As support to the NES national societies' board members, a power-point presentation has been made and in addition to this also guiding texts have been developed as a support. These have been sent out to get feed-back on the material from the NES board and the national societies' boards, and key persons within the IEA who are engaged in the IEA strategy (Dul et al., 2012). The material has been adjusted after feed-back from these groups and forms the structured base for the talks.

### 4. Discussion

This pilot project is an applied project aimed as a step in implementing the IEA strategy. If the project results are considered as satisfactory by the NES board, this or a similar approach may be used in a larger applied study including research and dissemination. The project can also serve as a model and as inspiration for other HFE societies around the world.

#### References

- IEA – International Ergonomics Association. 2013. *Definition of Ergonomics*, from: [http://www.iea.cc/01\\_what/What%20is%20Ergonomics.html](http://www.iea.cc/01_what/What%20is%20Ergonomics.html)
- Dul J, Bruder R, Buckle P, Carayon P, Falzon P, Marras WS, Wilson JR & van der Doelen B (2012) A strategy for human factors/ergonomics: developing the discipline and profession, *Ergonomics*, 55:4, 377-395.