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## Section 6 - Professional Practice and Education

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### International Ergonomics Association

#### Professional Standards and Education Committee

### Core Competencies in Ergonomics: Introduction Version 4, Oct. 2001

1. Any mature discipline and profession requires understanding of its core competencies. Also, the exercise of defining core competencies is itself well worthwhile, because it prompts a profession to look closely at itself, its goals and its perceived contribution to society. Once complete, it provides a record of standards by which the profession can ensure quality of performance.

2. Competency standards do not themselves represent an outline of certification requirements, although they may be a resource for the certification process. Nor do they represent a curriculum document for the purposes of accreditation, although they may help direct the development of a curriculum.

#### DEFINITION OF COMPETENCY

3. A competency is a combination of attributes underlying some aspect of successful professional performance. An outline of core ergonomics competencies should describe what it is that ergonomists are able to do in practice.

#### TERMS

4. Ergonomics competency standards have been developed in terms of Units, Elements and Performance Criteria, which is the accepted format.

**Units of Competency** reflect the significant major functions of the profession or occupation.

**Elements of Competency** describe the identifiable components of ergonomics performance which contribute to and build a unit of competency.

**Performance Criteria** describe the standards expected of performance in the ergonomist's work. Expressed in terms of outcomes and professional ergonomics performance, they provide the basis on which an expert assessor could judge whether the performance of the ergonomist reached the standard acceptable for professional practice.

#### SCOPE OF ERGONOMICS

5. The scope of ergonomics is broad, across many domains. Ergonomists can be involved in both pro-active and retrospective problem solving. The contexts for ergonomics practice are diverse and ergonomics must relate to the workplace, transport, the home or to leisure activities, or to the use of a variety of products. The IEA Core Competencies must acknowledge this diversity and should be interpreted with this breadth of scope in mind.

#### USES OF CORE COMPETENCIES

6. Ergonomics core competencies could be used in a variety of ways. These include:

- the development or review of curricula in ergonomics;
- the accreditation of new and existing ergonomics educational programs;
- the development of comprehensive and equitable assessment processes for the evaluation of a person's professional competence;
- the recognition by ergonomics certification authorities of the competency of graduates holding qualifications in ergonomics conferred by recognised institutions;
- the assessment of competence of eligible overseas qualified ergonomists seeking to practise in another country;

- the assessment of eligible ergonomists who have not practised for a defined period of time and who are seeking to re-enter the profession or to be re-certified;
- the development of continuing education programs offered by the Federated Societies;
- the determination of need for continuing professional education by employers
- the preparation of public information defining ergonomics roles and responsibilities.

#### **BENEFITS OF NATIONAL (AND INTERNATIONAL) COMPETENCY STANDARDS**

7. Those who have been involved with the application of Competency Standards have found them of benefit in the following ways:

- national consistency
- chance to examine the profession and its scope
- better definition of the profession
- basis for communication at a national (and international) level
- a resource for education establishments and curricula
- provision of a more equitable basis for certification
- quality assurance

#### **REVIEW OF COMPETENCY STANDARDS**

8. Any set of competencies has a limited life and this IEA document will be reviewed on a regular basis.

#### **PRESENTATION**

9. The core competencies have been presented in two formats “Summary” and “Full”

10. The **Summary** version presents the Units and Elements of ergonomics competency as a concise overview, without detailed specification or performance criteria. It is expected that any assessment of an individual or programme would require evidence of competence across these summary elements.

11. The **Full version** presents a complete set of Units, Elements and Performance Criteria to illustrate the standards of performance required of an ergonomist. This Full version can be used to illustrate and give more detail on examples of, and criteria for, professional performance against which judgement can be made. There is no intention that any one ergonomist be expected to meet all these performance criteria in depth for all areas of ergonomics research and application, but they should be aware of all and be competent in a significant number.