

# PROFESSIONAL ERGONOMIST CERTIFICATION BY THE ERGONOMICS SOCIETY OF SOUTH AFRICA

## 0 PREAMBLE

0.1 It was considered that all statutes have to match both the requirements of the IEA as the endorsing instance, and the facts and needs of the South African context.

Appendix A provides an overview of the certification criteria of other IEA endorsed certification bodies compared to this draft.

Appendix B shows the criteria for IEA endorsement of certifying bodies (Version 4 from Oct 2001) that have been used to check the proposed charters against.

0.2 The document refers (without further notice) to

0.3.1 The IEA guidelines of process of endorsing a certification body (Version 2 from Oct 2001, see [http://www.iea.cc/browse.php?contID=edu\\_endorsement](http://www.iea.cc/browse.php?contID=edu_endorsement))

0.3.2 The criteria for IEA endorsement of certifying bodies (Version 4 from Oct 2001, see Appendix B or [http://www.iea.cc/browse.php?contID=edu\\_criteria](http://www.iea.cc/browse.php?contID=edu_criteria))

0.3.3 Core competencies in ergonomics according to IEA (Introduction Version 4 from Oct 2001, see [http://www.iea.cc/browse.php?contID=edu\\_introduction](http://www.iea.cc/browse.php?contID=edu_introduction); and Core Competencies Version 3 from Oct 2001, see [http://www.iea.cc/browse.php?contID=edu\\_competencies](http://www.iea.cc/browse.php?contID=edu_competencies))

0.3.4 IEA Guidelines on standards for Accreditation of Ergonomics Education Programs at Tertiary (University) Level (Version 2 from Oct 2001, see [http://www.iea.cc/browse.php?contID=edu\\_accreditation](http://www.iea.cc/browse.php?contID=edu_accreditation), in particular sections 'Ergonomics curriculum overall coverage' and 'Content of ergonomics curriculum')

0.3.5 Jahn, D.W. (2006). A Guide of Certification in Professional Ergonomics. In B. Marras & W. Karwowski. *Fundamentals and Assessment Tools for Occupational Ergonomics*. CRC Press.

0.3.6 Strasser, H., Zink. K. (2007). Modular course provision for professional ergonomists with micro- and macro-ergonomics design competency in the system 'human being-technology-organisation'. *Theoretical Issues in Ergonomics Science* 8 (4), 349-363.

0.3.7 Rules and documents from the IEA endorsed certification bodies:

- a) CREE - Centre for Registration of European Ergonomists (<http://www.eurerg.org/>, particularly 2012\_01\_CREE\_Minimum\_Requirements\_V11.pdf),
- b) BCPE - Board of Certification of Professional Ergonomists (<http://www.bcpe.org/>),
- c) CCCPE – Canadian Certification Council for Professional ergonomists (<http://www.ace-ergocanada.ca/>),

- d) BCNZE - Board for Certification of New Zealand Ergonomists (<http://www.ergonomics.org.nz>),
- e) Australian Register of Certified Professional Ergonomists (<http://www.ergonomics.org.au>),
- f) JES Japanese Ergonomics Society, that recently received accreditation from IEA for certification ([http://www.ergonomics.jp/cpe/index\\_e.html](http://www.ergonomics.jp/cpe/index_e.html) ).

## APPENDIX A

Minimum Requirements of other IEA endorsed certification bodies (Dec 2007) + South African drafts.

Country	Designation	Theory /Education	Practice	Further requirem.
Australia	Certified Professional Ergonomist	<p>≥3 yrs. Undergraduate degree in Ergonomics</p> <p style="text-align: center;">OR</p> <p>Postgraduate Diploma or Coursework Masters in Ergonomics</p> <p style="text-align: center;">OR</p> <p>≥4yrs University level qualification in a related field incl. major component in Ergonomics</p>	<p>Expertise demonstrated by 1 major and 1 minor work sample</p> <p style="text-align: center;">AND</p> <p>≥4 yrs. Full time practice</p>	Active Membership in Ergonomics Society for ≥2 yrs.
Canada (CCPE)	Canadian Certified Professional Ergonomist	Ergonomics Courses (curriculum 700 hrs + 8weeks field work)	<p>≥4yrs experience incl. 1 mentored year</p> <p style="text-align: center;">OR</p> <p>≥5yrs experience</p>	
	Ditto (mature)		≥10 yrs of experience	
	Associate Ergonomist	same as CCPE, but awarded if practical experience requirements are not yet met.		
Europe (CREE)	European Ergonomist	≥1 yrs devoted to ergonomics courses (curriculum 660 hrs)	<p>≥1yrs of supervised training or examined project work</p> <p style="text-align: center;">AND</p> <p>≥2 yrs of unsupervised professional experience</p>	Total time of training expected ≥6yrs of which min ≥4yrs dedicated to ergonomics
Japan (JES)	Ergonomics practitioner (option 1)	3 yrs. Professional ergonomics training at College or graduate school	≥2 yrs job practice	written exam + interview
	Ergonomics practitioner (option 2)	Any college degree	≥7 yrs job practice	written exam + interview
	Ergonomics practitioner (option 3)	Any college degree	≥10 yrs job practice	3 full-fledged ergonomics practices
New Zealand	Associate New Zealand Ergonomist	≥3 years academic formation in any field, at least 1 year in ergonomics (corresponds to 500 to 700 hrs ergonomics education)	≥1 year of supervised training	
	Certified New Zealand Ergonomist (Route A)		≥1 year of supervised training + 2 years of professional practice experience	≥1 year of experience have to be gained in New Zealand
	Certified New Zealand Ergonomist (Route B)	Master degree in any field	Peer-reviewed publications or equivalent + ≥6 years experience (post masters degree)	≥2 years of experience have to be gained in New Zealand
South Africa (previous draft)	Certified member of ESSA	<p>MSc in Ergonomics or a closely related field (≥5 yrs)</p> <p style="text-align: center;">OR</p> <p>BSc in Ergonomics or similar (≥3 yrs) + a course in Ergonomics</p>	CV with ≥5 pieces of written work (e.g. ergonomics projects report, research report)	written exam + interview
	Ergonomics	Matric + qualification in an allied field	≥2 yrs of relevant	written exam +

	Facilitator	+ one or more courses in Ergonomics	experience working in Ergonomics	interview
South Africa (this draft)	Certified Professional Ergonomist	Masters degree (≥5 yrs) AND Ergonomics courses (curriculum 660hrs) included in or additional to academic degree.	≥4 yrs of relevant experience working in Ergonomics, -25% if mentored	written exam only if not enough evidence can be witnessed
	Certified Ergonomics Associate	Bachelor degree (≥3 yrs) AND Ergonomics courses (curriculum 360hrs) included in or additional to academic degree	≥2 yrs of relevant experience working in Ergonomics, -25% if mentored	ditto
USA (BCPE)	Certified Professional Ergonomist	Masters Degree in Ergonomics or equivalent AND ≥560hrs of ergonomics training	≥3 yrs full time professional practice in ergonomics	written examination
	Certified Ergonomics Associate	Bachelor's degree from accr. Univ. AND ≥200hrs of ergonomics training	≥2 yrs full time professional practice in ergonomics	written examination

## **APPENDIX B**

IEA Mechanisms and procedures for endorsement

**(Version 4 from Oct 2001, see [http://www.iea.cc/browse.php?contID=edu\\_criteria](http://www.iea.cc/browse.php?contID=edu_criteria)).**

1. The IEA Certification Endorsement Sub-Committee has been established with approved terms of reference. The IEA will charge a fee of \$1.00 per member of the Society or Body applying for endorsement, with a minimum of \$100 for endorsement with a five year life; renewal will cost 50% of the original fee. No refund is available for unsuccessful applications. The Review Group appointed will follow a set of guidelines.
2. In considering the IEA endorsement of a certifying body concerned with the certification of individual practising ergonomists, the IEA will apply the following criteria.

### **Features of the certifying body**

3. The certifying body should:
  - be acceptable to any relevant Federated Society
  - be national or international in scope.
  - be separate and independent from any educational body or institution.
  - have a governing body comprising certified ergonomists, the balance of which reflects the range of interests of practising ergonomists and ensures impartiality.
  - be responsible for formulation of policy matters relating to operation of the certifying body.
  - demonstrate clearly the line of responsibility, the reporting structure and the relationship between the assessment and certification functions.
  - have the financial resources to conduct the certification procedure efficiently.
  - be operated for no profit.
  - be explicit about its legal status.
  - be staffed by personnel knowledgeable about ergonomics and competent for the functions for which they are responsible.

### **Operation of the certifying body**

4. In considering applications for certification, the certifying body should have regard to the following features:

### **Eligibility of applicants**

5. The eligibility criteria used by the certifying body should:
  - be defined clearly, and should include specific reference to qualifications, supervised experience, professional experience in ergonomics and any forms of evidence required for the certification process.

- not be dependent on whether the person is a member of a relevant ergonomics Society, although such membership will be available as strong prima facie evidence.
- be non-discriminatory in terms of gender, ethnicity, religion, or physical status.
- be related to contemporary ergonomics theory and practice.
- refer to requirements for recent individual's practice.

### **Procedural information for applicants**

6. The procedural information provided by the certifying body to applicants should include:
  - literature clearly outlining the formal procedures to be followed by the applicant in seeking certification.
  - the deadlines for applying for certification in any year.
  - information on all fees relevant to the process.
  - the process used by the certifying body in evaluating the suitability of the applicant for certification.
  - the standards of competency to be applied in all aspects of the review.

### **Certification processes followed**

7. The processes followed by the certifying body should:
  - be properly documented.
  - be in accordance with the minimum IEA criteria for certification.
  - include statements and rules relating to the current process of certification and policies relating to the granting of certification.
  - be reviewed regularly to ensure their currency in relation to ergonomics practice.
  - include a documented appeal mechanism.
8. Where an examination forms part of the review:
  - the standards expected should be relevant to current practice and should be clearly defined.
  - mechanisms should exist to ensure confidentiality of the examination and its outcomes.
  - the form of evaluation should be a valid test of the competencies assessed.
  - methods used by the certifying body to test the reliability of the assessment should be described.

### **Selection and guidance of certification personnel**

9. When appointing certification personnel:
  - The certifying body must have access to a pool of qualified and competent certification personnel and to other facilities to carry out a certification review initially and for re-certification purposes; assistance from Federated Societies or other relevant bodies may be sought

- The certifying personnel must be competent in the areas in which they will make evaluations.
- Up to date information on relevant qualifications, training and experience of certifying personnel should be maintained.
- Clear guidelines relating to duties and responsibilities of certifying personnel will be provided by the certifying body.

### **Feedback to applicants**

10. The certifying body should have established processes for giving adequate feedback about deficiencies to applicants who have not attained certification.

### **Records**

11. The certifying body should:

- keep a record of all policies and regulations relating to its process.
- keep a confidential record of details of each certification procedure followed for individual applicants.
- publish an annual report, including reference to numbers of applicants and outcomes of the process.
- maintain an up-to-date register of ergonomists who have been certified, and make it publicly accessible.
- publish its financial statements annually.

### **Re-certification processes**

12. The certifying body must have already established, or be developing, a re-certification process. That process should:

- define the period of currency for any certification awarded.
- address criteria relevant to the applicant's competence in relation to contemporary practice in ergonomics.

13. Reference has been made in this document to European Standard EN45013.