

# Certification of Ergonomists in Europe



Dr Margaret Graf  
Eur.Erg.  
CREE President

Hungarian Ergonomic Society Conference, 2013

# The European Ergonomist (Eur.Erg) registration system

- *Historical perspective*
- *CREE Aims and organisation*
- *Requirements for registration as a European Ergonomist*
- *The registration process*
- *Impact on the ergonomics profession and future perspectives*

# Why ?

## A look to the past

- *In the 70's and 80's*

- increasing awareness of ergonomics as a discipline,
- in several countries inclusion of ergonomics in regulations concerning working conditions.

- *The European context*

- December 1989 : the « EU Framework Directive» on Health and Safety at work. All workers must have access to health and safety professional services. (Generally understood to include ergonomists)



# Why ?

## Original aims

- Anticipated demand for ergonomists but almost no system for assessing professional competency !



wish to distinguish between self-proclaimed and academically qualified ergonomists

- Differences between countries in ergonomist training systems



wish to establish guidelines for training programs

## Some historical landmarks

- July 1991: first discussions at IEA Congress in Paris
- 1992-3: First minimum requirements (HETPEP)
  - Setting up of the “Centre for Registration of European Ergonomists” (CREE)
- 1994 first 20 Eur. Erg. registrations
- 2007 Major revision of minimum requirements
- May 2013 - 43rd CREE meeting: first time in Hungary
  - Approx. 400 registered ergonomists
  - 15 ergonomics societies are members of CREE

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# CREE Aims

1. **Provide framework** for assessing professional competence of ergonomists
2. Define a **minimum standard** useful for people requiring the services of professional ergonomists
3. Leave **flexibility for training institutions** in designing ergonomics courses
4. Assist the **mobility** of qualified ergonomists between countries.
5. Promote the **professional image** of ergonomists

# CREE structure and organisation

- *CREE members are national organisations*
  - either within a European ergonomics society (APERGO, ES, GfA, NES, SIE, SwissErgo ...)
  - or distinct organisations set up by the national ergonomics society (SRe/NVvE, ARTEE/SELF)
- *CREE Council :*
  - 1 representative from each member organisation
  - 4 Board members (President, Secretary General, Treasurer, Webmaster/Publicity Officer)



# The CREE Council (June 2012)



13 Representatives and  
4 board members

# The CREE Board - November 2012



## Board members

- President, Maggie GRAF
- Secretary, David O'NEILL
- Treasurer, Dirk DELARUELLE
- Publicity, Ernst KONINGSVELD



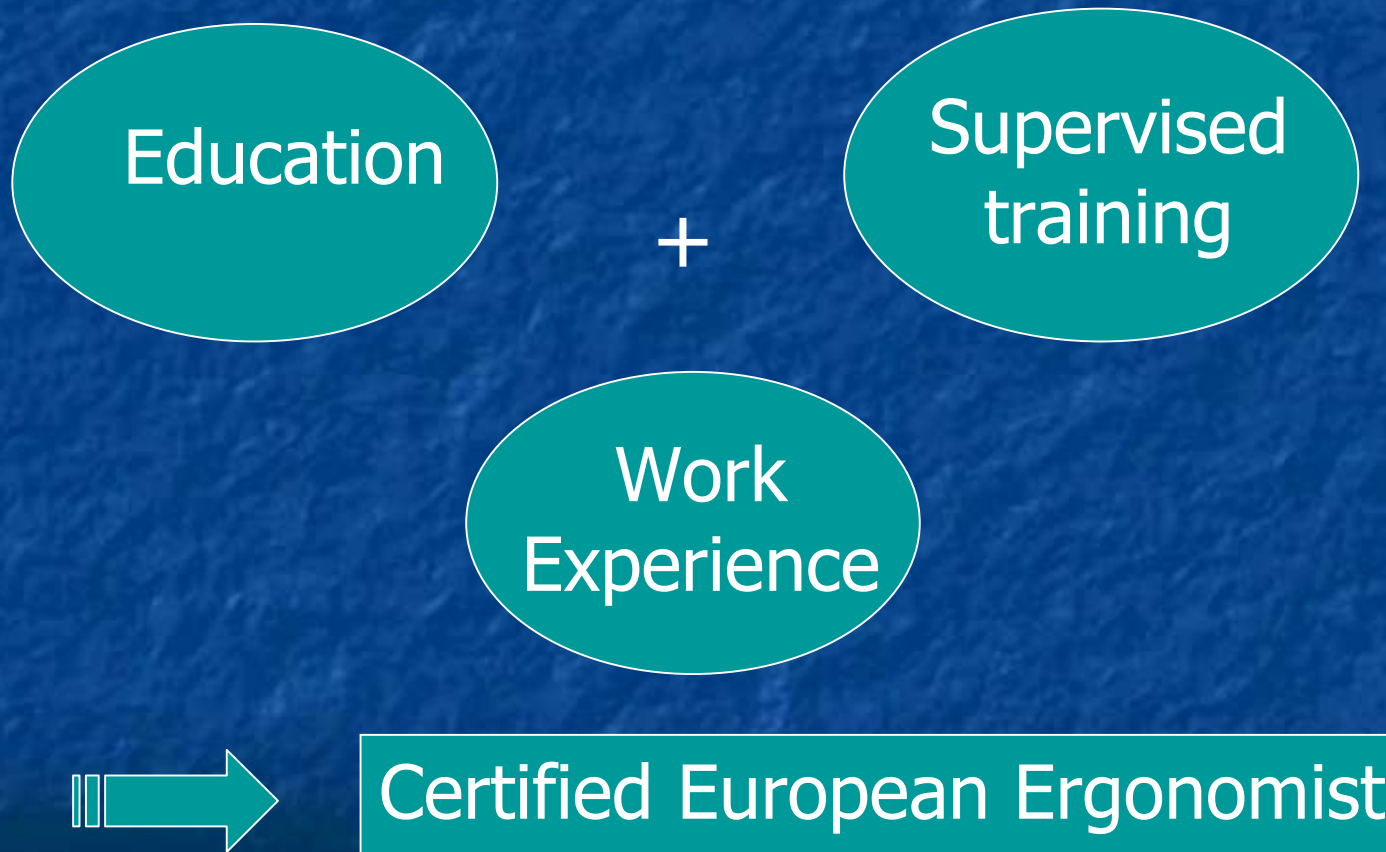


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# Minimum Requirements for Registration as a European Ergonomist



# Minimum Requirements

- ***Education*** : courses, laboratory exercises, project work at the academic level  
(> 1 year ergonomics + 3 year Bachelor Degree)
- ***Training*** : learning by doing in supervised situations (> 1 year)
- ***Experience*** : unsupervised professional practice (> 2 years)

# Education requirements

- *Courses and seminars :*
  - a minimum of 60 ECTS (or equivalent in contact hours)
  - assessed in 10 areas of knowledge
  - specialisation is possible in physical, cognitive or organisational ergonomics but basic training is necessary in all of these areas (min. 2 ECTS in each).
- *Laboratory exercises*
- *Integration of knowledge in practical project*  
(min. six weeks or 240 h)



# 10 Areas of knowledge

(at least 2 ECTS in each / **at least 48 in yellow marked courses** )

- Principles of Ergonomics
- Populations and General Human Characteristics
- Design of technical systems
- Research, evaluation and investigative techniques
- Professional issues
- **Ergonomics: Activity and/ or Work Analysis**
- **Ergonomic Interventions**
- **Ergonomics: physiological and physical aspects**
- **Ergonomics: psychological and cognitive aspects**
- **Ergonomics: social and organisational aspects**

# Minimum requirements: Examples of training topics within areas of knowledge

Area of Knowledge	Recommended Topics
A. Principles of Ergonomics	Definitions Aims Approach Introduction to complex systems User-centred design Theory of ergonomics practice.
B. Populations and General Human Characteristics	Anatomy, Physiology and Biomechanics Work physiology Cognition Perception Circadian Rhythm Age and gender differences Disabilities
C. Design of Technical systems	Design for assembly Production system design (e.g. mechanization, automation, cycle time, buffers, variation) Materials handling Design for maintenance Architectural design

# The ergonomics education requirements

Each applicant for Eur.Erg. registration needs to provide **evidence of education** in all Areas of Knowledge and the ability to integrate this knowledge into **ergonomic projects**.



# Training and experience

## Minimum requirements

- *Supervised training :*
  - currently provided by very few ergonomists in Europe
  - this requirement may be replaced by one more year of independent experience
- *Experience :*

independent professional practice performed as main activity for a minimal duration of 2 years after the education period and supervised training end

# Minimum requirements for assessment of experience

*The assessment of the **quality** of  
professional work is based on **project  
reports** and professional references.*

# Minimum requirements for assessment of experience (1)

- 1. Appropriate analysis of customer needs in regard to ergonomics design.*
- 2. Appropriate interpretation of findings of human/machine/system investigations.*
- 3. Documents findings appropriately.*
- 4. Appropriately determines the compatibility of human capabilities with planned or existing demands.*



## **Minimum requirements for assessment of experience (2)**

*5. Develops a plan for ergonomics design or intervention.*

*6. Makes appropriate recommendations for changes.*

*7. Implements recommendations to improve human performance, health and well-being.*

*8. Evaluates outcomes*

*9. Demonstrates professional behaviour and does not work outside his/her area of competence.*

# Prolongation of registration

- *Every 5 years*
- *Must show that they keep up to date*
- *Principle occupation must be ergonomics*

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# The Eur. Erg. registration process

*A two-level procedure :*

- *1 - assessment at the national level*
- *2 – assessment at the European level (by the CREE)*

## Some key points for ensuring quality

- *Registration procedures designed so as to meet the EN45013 norm requirements*
- *Mechanisms to avoid biased evaluations by national assessment boards :*
  - assessment of NAB members at the CREE level
  - appeal committees at all levels
  - regular monitoring of national procedures by the CREE Board and meetings with the NAB (rotating location of Council meetings)

## Some key points for ensuring quality

- *Fairness of assessment* promoted at the CREE level by the large variety of educational backgrounds, practices and cultural traditions represented within the Council
- Side-effect : lengthy processing system



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# **The Eur. Erg. title**

## **Effects on the ergonomics profession**

- the title has been accepted as a quality criterion, required in some instances, eg when applying for public funding or when answering public orders, work in some multinational enterprises
- ergonomics training curricula have been created or modified in several countries to match the education model requirements
- the registration system has had little impact on ergonomists mobility throughout Europe: few ergonomists change country

## The Eur. Erg. title

### What significance for the outside world ?

- A label whose value depends on CREE and NAB's good practices
- A quality label, but not a conformity label
- A new type of ergonomics degree ?  
NO, but professional practice recognition  
through a peer-review process  
at the European level  
for a limited period of time



# Future aims

- Giving added value to the Eur.Erg. title - Options considered so far :
  - Promoting exchanges and organizing special events for Eur.Erg's
  - Promoting a Eur.Erg. network that includes various EU agencies
  - Improving the networking of Eur.Erg.'s with potential employers
- Improving the social and political recognition of ergonomists at national and European level (Collaboration with FEES?)

# Some of the other challenges ahead

- Welcoming “new” European countries in the registration system
- Balancing the needs of small societies with those of the larger societies.
- Making the CREE more professional as a certifying body
- Networking with other IEA registration systems and assisting new registration bodies.

Thanks for your support of our  
profession