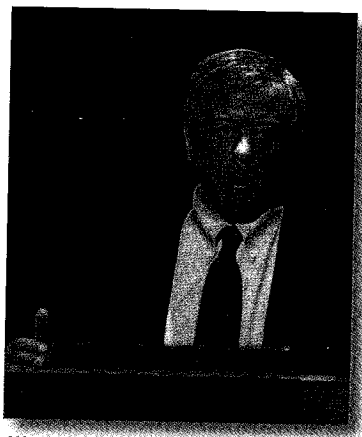


Proposal for CONTINUING PROFESSIONAL DEVELOPMENT OF ENGINEERS IN PORTUGAL

Authors: Alfredo Soeiro (Professor at the University of Porto) and José Vieira (Professor at the University of Minho)

A proposal for Continuing Professional Development (CPD) of Engineers in Portugal was analysed by the National Directive Board (CDN) of Ordem dos Engenheiros in its meeting of July 2008. As a result of this Board meeting, an internal committee was created to study and further develop this proposal to a decision stage.



Alfredo Soeiro

1. Objectives

The proposal has two main objectives:

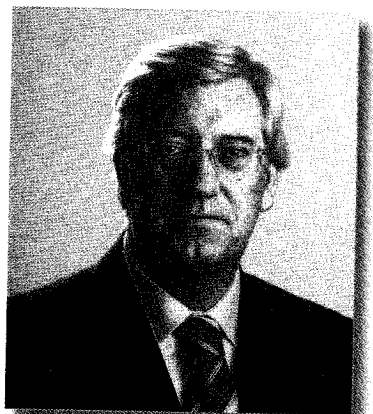
- Ensure a regular updating of knowledge and skills of Portuguese Engineers.
- Provide Ordem dos Engenheiros with a system that guarantee quality of training for its members.

These two objectives can be sought as independent issues in terms of schedule of implementation and/or in terms of program. However they are linked to a CPD global strategy to targets those engineers interested in CPD and to enables to Ordem dos Engenheiros in promoting CPD at a national level.

2. Regular update of Knowledge and Skills

The proposed CPD system resulted from the analysis of systems in place in several countries and regions where CPD is required or recommended, with adequate adaptations to the Portuguese reality. The main features of the system are:

- A record of professional updated activities developed in successive periods of three years. Assessment of a portfolio containing the updated activities developed in each triennium will be made.
- The training activities in a triennium should have a minimum of the equivalent of 120 hours face to face training. Different training forms are allowed: e-learning, work based learning, project learning, research, etc. A correspondence system will be adopted to measure all of the training activities in face to face hours.
- Ordem dos Engenheiros will decide whether the training during each period of three years should be compulsory or voluntary. In any case the achievement of reaching a minimum score intends to establish the difference between the updated members and the other members.



José Vieira

3. System of Quality Assurance

To ensure minimum quality levels for the CPD actions, two alternatives are proposed:

- Accredit each training activity.
- Accredit training centres for engineers in CPD.

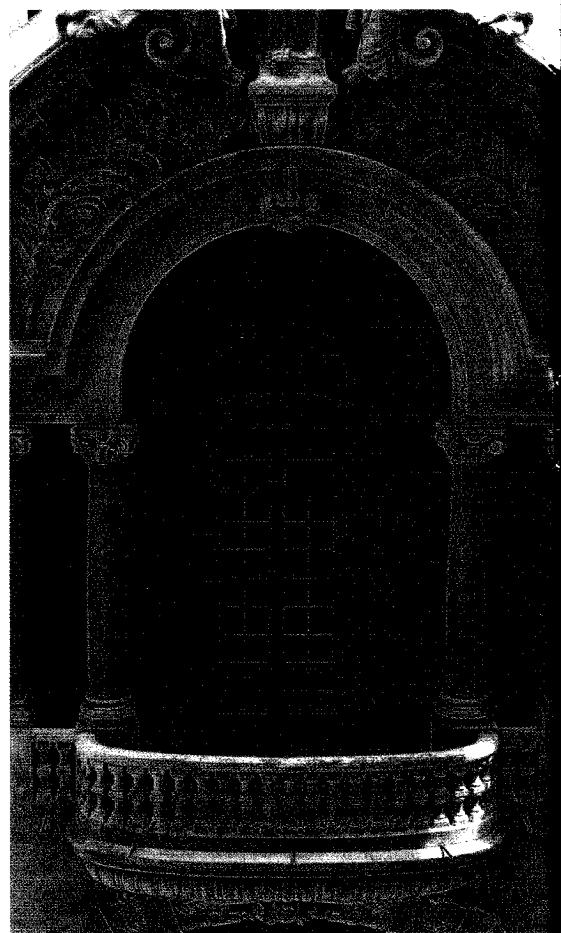
The authors recommend the second alternative. If adopted this alternative, training centres not accredited at a first stage are encouraged to submit their proposals applying to the first approach obtaining, in that way, recognized curricular experience.

The characteristics of these alternatives are the following:

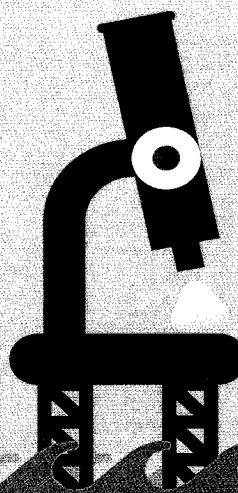
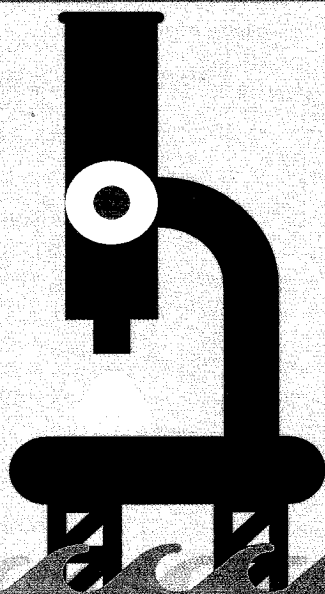
- Singular training activities accreditation - CPD quality assurance is established throughout a verification process established according to a quality manual to be adopted. The assessment of each proposed training activity will be made by an independent entity

to be created by the Ordem dos Engenheiros.

- Accreditation of CPD centres - The accreditation of CPD centres will follow the EFQM (European Foundation for Quality Management) model, which is adopted by IACEE (International Association for Continuing Engineering Education). This worldwide association tested and validated the method in various centres of CPD, in Europe and in the USA. This method allows a self-assessment made by each centre which is then validated by the independent accreditation entity created by Ordem dos Engenheiros. It is also proposed that this independent entity can be linked to IACEE for advice and validation procedures. During this evaluation process, each centre will receive an evaluation rating ranging from 0 to 1000 points. According to the classification obtained and the threshold level adopted, the centre will be accredited or will be refused.



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