1. FEANI Policy on Continuing Professional Development (CPD)

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“FEANI affirms that there is an on-going need for Continuing Professional Development (CPD) of engineers in Europe.

CPD is the acquisition of knowledge, experience and skills, as well as, the development of personal qualities. It contains both the acquisition of new skills, to broaden competence, and the enhancement of existing skills to keep abreast of evolving knowledge.

CPD is the core of life-long-learning of professional engineers at all levels of proficiency. It is a prerequisite for the maintenance of high professional standards throughout an engineer’s professional life.

CPD enables the employability and mobility of individual engineers. It enhances their career in the fast moving world of technology and strengthens their professional satisfaction and well-being. CPD may act as a personal job assurance in the turbulent global job market.

CPD is ultimately the individual’s personal responsibility. However, it has to be planned and it requires the cooperation, encouragement and support of employers, as well as, professional and academic institutions.

CPD is of crucial importance for sustaining the competitiveness of European industry in the global market, where competitive advantage can be gained from the application of high-end skills to leading edge technologies. In this context, FEANI has outlined the following guidelines:

- Encouragement to the National Member Organisations
- Recommendations for the individual engineers”
2. Credits for CPD

CPD credits are only an indicator of the commitment of engineers to professional development and to practice improvement. Credits are a numeric appreciation of the CPD activities and may contribute to the assurance of quality improvement of engineering practice.

3. Purpose of proposal

This document is a proposal to define procedures to register and acknowledge CPD performed by engineers. It is based on current practices by national engineers associations like Engineers Australia (https://www.engineersaustralia.org.au/) and Engineers Ireland (http://www.engineersireland.ie). It may be used by any engineering association to record CPD activities of its members. It may be used also by any engineering association to verify CPD periodic requirements of its members.

4. Types of CPD

CPD activities that can be accounted are classified as follows:

1. In-company training courses or lectures.
2. Formal post graduate academic courses.
3. External training courses.
4. Service in professional engineering organization activities.
5. Technical visits or assignments.
6. Updating professional development based in individual study.
8. Preparation and technical publication in a journal or a book related with the profession.
9. Teaching or instructing in CPD related activities with the profession.

5. Credit Based Scheme of CPD

It is considered that the average of 40 credits per year is the minimum total of CPD for an engineer. One credit is considered, in general, equivalent to one hour of participation in the CPD activity. There are maximum values that can be considered for each type of CPD when calculating the yearly average. The procedures and limits to account the CPD credit values are:
<table>
<thead>
<tr>
<th>Type of CPD</th>
<th>Maximum values of credits/hours</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In-company training courses or lectures</td>
<td>No limit*</td>
<td>Taken in a lecture room or in a virtual environment.</td>
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<tr>
<td>2. Formal post graduate academic courses</td>
<td>No limit*</td>
<td>All such activities will involve some form of assessment.</td>
</tr>
<tr>
<td>3. External training courses</td>
<td>No limit*</td>
<td>Recognised institution or training provider.</td>
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<tr>
<td>4. Service in professional engineering organization activities</td>
<td>Limit of 15 credits in average per year</td>
<td>May include serving in a volunteer capacity on boards and committees; being a member on higher education accreditation visits; assisting with CPD audits; mentoring a colleague for work experience purposes; contributions to participation in technical standards.</td>
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<tr>
<td>5. Technical visits or external assignments</td>
<td>Limit of 5 credits in average per year</td>
<td>Must be able to demonstrate how it has extended knowledge and skills related with the profession.</td>
</tr>
<tr>
<td>6. Updating professional development based in individual study</td>
<td>Limit of 5 credits in average per year</td>
<td>For any learning activity undertaken it is necessary to demonstrate how it has extended knowledge and skills related with the profession.</td>
</tr>
<tr>
<td>7. Preparation and presentation of a technical paper in a conference</td>
<td>Limit of 10 credits in average per year</td>
<td>Papers subject to critical peer review prior to publication.</td>
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<tr>
<td>8. Preparation and technical publication in a journal or a book</td>
<td>Limit of 20 credits in average per year</td>
<td>Publication must be related with the profession.</td>
</tr>
<tr>
<td>9. Teaching or instructing in CPD related activities with the profession</td>
<td>Limit of 15 credits in average per year</td>
<td>This type is not considered for engineers that are members of higher education or research institutions</td>
</tr>
</tbody>
</table>

* Sum of credits from 1., 2. and 3. is 25 in average per year
6. Examples of Credits for CPD

1. In-company training courses or lectures.
   a. In-company training
      “PLC programming” 2d (2x7h)
      “How to use Windows 8” 1d 7h
      “Improve Meeting Efficiency” 1d 7h
   b. Equals 28 credits as possible
   c. Consider 28 credits

2. Formal post graduate academic courses.
   a. Postgraduate course
      “Project management” 150 contact hours
      “Safety management training” 60 contact hours
      E-course
      “Online course nanotechnology” 40 hours (equiv.)
   b. Equals 250 credits as possible
   c. Consider 250 credits

3. External training courses.
   a. Course
      “Working with Office 2013” 2d 13h
      “EEx equipment class regulations” 1d 6h
      “CE and the new machinery directive” 3d 20h
      Webinar
      “ERP in the cloud” (0,5d) 3h
      E-course
      “Management for engineers” 20h (equiv.)
   b. Equals 62 credits as possible
   c. Consider 62 credits

4. Service in professional engineering organization activities.
   a. Attended 3 FEANI EMC meetings in one year - 8 hours each x 3 = 24 hours
   b. Equals 24 credits as possible
   c. Consider limit - 15 credits

5. Technical visits or assignments.
   a. Three technical visits to construction sites of one day - 8 hours x 2 = 16 hours
   b. Equals 16 credits as possible
   c. Consider limit - 5 credits

6. Updating professional development based in individual study.
   a. Specialization group workshop on BIM in construction - 32 hours
   b. Equals 32 credits as possible
   c. Consider limit - 5 credits
   a. Presentations in three conferences of reviewed papers - 16 hours x 3 = 48 hours
   b. Equals 48 credits as possible
   c. Consider limit - 10 credits

8. Preparation and technical publication in a journal or a book related with the profession.
   a. Article in the journal “Technical Management” (2 pages) - 30 Hours
   b. Equals 30 credits as possible
   c. Consider limit - 15 credits

9. Teaching or instructing in CPD related activities with the profession.
   a. Instructor of course “Machine Safety” 2d 6h
      “Project costs” 0,5d 3h
   b. Equals 9 credits as possible
   c. Consider 9 credits

In this example the engineer presents a total of 74 credits that is well above the average required of 40 credits.

a) 340 (28 + 250 + 62) credits for 1., 2. and 3. - consider 25 credits;
b) 25 + 15 + 5 + 5 + 10 + 15 + 9 = 74 credits

7. Registering CPD Credits

Each engineer should provide in a period of one, two or three years its own record of CPD. This can be done by filling a digital e-portfolio at its national engineering association or at the FEANI site. Providing the information about the CPD activities can be done at any time. The credits of CPD for each engineer should be reported within the periodicity required by national engineering association or by FEANI. The digital e-portfolio should have the following fields:

a) Name and contacts
b) National engineering association member
c) Each type of the nine CPD fields with description and an example (hyperlink) will have the possibility to:
   - enter the name of CPD activity
   - enter the description of CPD activity
   - enter the duration in hours (or equivalent in hours)
   - enter the credits required (automatic limitation)
   - upload the documents that support the registration of the CPD activity
   - authenticate the user