Multi-level cross-cutting register of certified engineers

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Content

- Introduction (or target groups for certification)
  1. Certification systems, which were implemented in Ukraine
  2. Three key elements for correct certification
  3. Cross–cutting register
  4. Proposed novelties/new certification levels
- Summary (or invitation for cooperation)
Introduction (I). Ukraine in the world/Europe

<table>
<thead>
<tr>
<th></th>
<th>Europe</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>42 200 000</td>
<td>6</td>
</tr>
<tr>
<td>Territory</td>
<td>603 628 sq. km</td>
<td>2</td>
</tr>
</tbody>
</table>
Introduction (II). Local demands

- EXPORT
- INVESTMENT
- EMIGRATION
Introduction /Global trends

- 17 UN SDGs;
- Multinational projects, e.g. New belt – new road;
- Excess/shortage engineers in certain areas;
- Creation of new production facilities by multinational companies;
- Professional experience instead of diploma
- ..... 

Common Training Framework:
- Min level of knowledge and skills for enough competence/qualification
Introduction/support of this idea

- Activities were started in 2009
- Today we have support from:
  - Government;
  - Business;
  - 40+ technical associations
The EUR ING title delivered by FEANI is designed as a guarantee of competence for professional engineers, in order
* to facilitate the movement of practicing engineers within and outside the geographical area represented by FEANI's member countries and to establish a framework of mutual recognition of qualifications in order to enable engineers who wish to practice outside their own country to carry with them a guarantee of competence
* to provide information about the various formation systems of individual engineers for the benefit of prospective employers
* to encourage the continuous improvement of the quality of engineers by setting, monitoring and reviewing standards
Mobility is important for Engineers because of the demand for flexible deployment on an international basis and different availability of engineers across national borders. Engineers and Employers require a tool that shows a comparable educational profile whose recognition is based on international standards and is easy to use for professionals and employers.
1. Other implemented systems

- ECCE Engineering Card;
- SPE Petroleum engineering certification (OPECountries);
- Local licenses for civil engineers;
- Licenses for civil engineers in Europe

Austria; Bulgaria; Croatia; Cyprus; Czech Rep; FYR of Macedonia; Germany; Hungary; Italy; Montenegro; Poland; Serbia; Slovakia; Slovenia; Spain
2. Three key elements for correct certification of engineers

- Good education
- Professional experience
- Continuing Professional Development
2. Three elements: education & accreditation

Founders (1989):
- Australia; Canada; Ireland; New Zeeland; United Kingdom; USA

Members after 2000:
- China; Turkey; India; Japan; Korea; Russia; Malaysia; Taiwan; Singapore; Honking; South Africa; Sri-Lanka

Associated members:
- Bangladesh; Mexico; Pakistan; Peru; Philippines

ENAEE (2006):
- France; Germany; Poland; Russia; Italy; United Kingdom; Ireland; Portugal; Romania; Turkey; Switzerland; Spain; Belgium
2. Three elements: additional

Professional experience:
• Difference from country to country;
• Company name

Continuing Professional Development

European Engineering Education Database
3. Cross-cutting register/Labor book
I  Certificates for future engineers, which are school/university students now

II  Primary confirmation of qualification

III  Certificates for high skilled engineers

IV  Highest qualification levels

3. Cross-cutting register/Bands
## 3. Cross-cutting register/initial filling

<table>
<thead>
<tr>
<th>IV</th>
<th>Highest qualification</th>
<th>National honorable titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>High skilled engineers</td>
<td>FEANI EUR ING</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SPE Petroleum eng certification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Licenses for civil engineers/Ukraine</td>
</tr>
<tr>
<td>II</td>
<td>Primary qualification</td>
<td>FEANI Engineering Card</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ECCE membership Card</td>
</tr>
<tr>
<td>I</td>
<td>Future engineers</td>
<td></td>
</tr>
</tbody>
</table>
4. Novelties/Project leader

Archimedes screw

Jobs/Wozniak computer

Ford assembling Line

Paton Bridge

Diesel engine
4. Novelties/university students
4. Novelties/school students
## 4. Novelties/completed (?) register

<table>
<thead>
<tr>
<th>IV</th>
<th>Highest qualification</th>
<th>International Honorable Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>National honorable titles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Certification for project leader</td>
</tr>
<tr>
<td>III</td>
<td>High skilled engineers</td>
<td>FEANI EUR ING</td>
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<tr>
<td></td>
<td></td>
<td>Licenses for civil engineers in Europe</td>
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<td></td>
<td></td>
<td>SPE Petroleum eng certification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Licenses for civil engineers/Ukraine</td>
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<tr>
<td>II</td>
<td>Primary qualification</td>
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<td></td>
<td></td>
<td>ECCE membership Card</td>
</tr>
<tr>
<td>I</td>
<td>Future engineers</td>
<td>Card of Future engineer (for university)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Card of Future engineer (for school)</td>
</tr>
</tbody>
</table>
5. Invitation for cooperation

- System, which is based on local experience: a) no info about Asian or African certification systems; b) no links to North American system(s);
- Management: decision is on the level of authorized technical association; country level is for appeals only;
- Legislation: should be similar manuals for each level;
- Approximately 6 months for model demonstration;
- Joint efforts are much more efficient;
- Welcome to cooperation!!!
THANK YOU FOR YOUR ATTENTION!