

"9 arguments" why professional regulation for engineers is essential for Europe (adopted by the ECEC Executive Board in Vienna, 1st September 2013):

For the European Institutions, liberalisation and deregulation of the liberal professions seem to be the solution for generating more economic growth.

Is that true?

"9 arguments" why professional regulation for engineers is essential for Europe:

For the ECEC, professional regulation represents a

- Guarantee for the best academic engineering education
- Guarantee for the best practical experience
- Guarantee for continuing professional development
- Guarantee for the best practice and state of the art
- Guarantee and legal basis for the equality of engineering services in Europe
- Guarantee for self-regulated Chambers as public authorities
- I. Quality is a Public Interest

The quality of engineering services has many aspects:

Argument No. 1: Quality is Safety:

The safety and reliability of infrastructure, buildings, plants and products are a matter of health and safety. Additionally, Europe is an area prone to earthquakes, floods and avalanches and consequences of these natural disasters can have extremely unfavourable consequences for society. Engineers have a huge responsibility when it comes to adapting to these challenges. For example, Italy spends 10 billion euro each year on reconstruction after earthquakes. With the same amount of money, nearly all buildings (housing) could be improved to withstand earthquakes within 10 years – with no casualties.

Only professional regulations regarding the necessary level of qualifications, professional conduct and continuing professional development can ensure that only engineering services are provided that can guarantee the safety of our infrastructure and built environment.

Argument No. 2: Quality is Sustainability:

The quality of engineering services goes beyond the requirement of safety. A knowledge-based society must be based on the intelligent use of resources to allow the prospect of producing more while consuming less and must ensure that technological advances are achieved and applied in a creative, conscious and ethical manner.

Only professional regulations regarding the necessary level of qualifications, professional conduct and continuing professional development can ensure that only engineering services are provided that can guarantee quality and sustainability.

Argument No. 3: Quality and Project Costs (Lifecycle Costs):

Engineering services are intellectual planning services which create unique prototypes. They are the basis of a project and have initial influence on all other parts. Therefore, only high-quality engineering services can guarantee that the costs of a project do not explode due to weak design. This is in the interest of each consumer/client, as well as in the public interest and especially in cases of public procurement.

Only professional regulations regarding the necessary level of qualifications, professional conduct and continuing professional development can ensure that only engineering services are provided that can guarantee quality and cost limits.

II. Information Asymmetries (Consumer/Client Protection):

Argument No. 4: Information Asymmetries and Complexity

Consumers/clients are faced with engineering services that are highly complex with fast-changing and innovative technologies. The information asymmetries between consumer/client and engineer can be huge, even in cases in which the client is a "smaller" public authority. Information asymmetries will never be offset by the internet information society or any blog. The huge amount of knowledge contained in a technical education can never become everybody's knowledge.

Only the supervision of self-regulated professional Chambers can ensure that the sound knowledge of engineers is always used in the consumers'/clients' interest.

Argument No. 5: Information Asymmetries and Transparency

Engineering services are manifold, so it is often necessary to define very detailed specifications before awarding a contract. This is in most cases beyond the possibilities of a consumer and often even of a specialised public procurement authority.

Only general specifications such as the German HOAI (Honorarordnung für Architekten und Ingenieure) can provide full transparency about the engineering services required for a project.

Argument No. 6: Information Asymmetries and Costs

Due to the high complexity of engineering services and their technologies, it is difficult and in some cases impossible for clients/consumers to compare the content of offers. Often they are unable to evaluate the different quality of offers, which leads to decisions based on the lowest price only. This runs contrary to the interests and intentions of the consumer/client and results in a lack of quality in the project, unfulfilled expectations in design and exploding unforeseen costs.

Only professional regulation about the necessary level of qualifications, professional conduct and CPD can ensure that all offers have to fulfil a certain level of quality and that a consumer/client is not in danger of accepting an offer below that level. General specifications such as the German HOAI can provide full transparency about the engineering services required for a project and make comparisons possible. As a result, fixed specifications are the most cost-efficient way to arrive at a contract for knowledge-based engineering services.

Argument No. 7: Information Asymmetries and Responsibility

As it is not possible to fully rule out problems during a project, clear personal responsibility is very important and reassuring for consumers/clients.

Only professional regulation about professional conduct, responsibility, insurance and shareholding can guarantee personal responsibility and therefore utmost security for consumers / clients.

III. Innovation and the Engineer's Spirit

Argument No. 8: Guarantee for the Engineer's Spirit and Innovation

Due to the high costs of the necessary academic education of engineers, regulation of the profession guarantees high quality, innovation and sustainability as a benefit for clients and society. Due to their closeness to their clients, engineers can react flexibly to changing needs. A sound economic basis keeps the engineer's mind free for innovative ideas and the best solutions for their clients.

Regulation promotes the competition of quality.

Argument No. 9: Future Challenges

Learning by doing can never be the basis of engineering services for overcoming serious problems and challenges in Europe and the world such as climate change, sustainable buildings and infrastructure, disaster risk, energy, hunger and peace.

Regulation helps to overcome future challenges.