Three legs of developing synergies between the academic and professional worlds in Poland

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It is typical and natural for Poland that most of the university staff is working in the industry. Why ? There are three reasons: money, money and ... money. It means that there are the same actors (and a couple of actresses) playing roles in the theatre of professional world and in the theatre of academic world. It is good and bad together. Good because the academic teachers have a professional experience and can include practical aspects into teaching. Bad because theoretical subjects (mathematics, physics, mechanics, computational methods, etc.) are usually separated from more practical subjects – and the theoretical base of the teaching is increasing.

There are three "legs" of developing synergies between the academic and professional worlds in Poland:

- Committee of Civil Engineering and Hydroengineering of Polish Academy of Sciences,
- Polish Chamber of Civil Engineers,
- Polish Union of Civil Engineers and Technicians.

Unfortunately the three "legs" are not equal, so there are no correct synergy between the two worlds. Let me show this idea on the picture below.

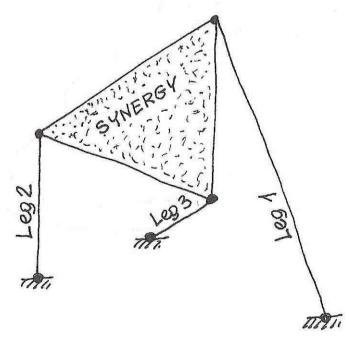


Figure 1. Sloping plane of the synergy between the academic and professional worlds.

It is difficult to say which "leg" is the most important. From the academic point of view the Leg 1 (the longest) should be ordered to the Committee, Leg 2 to the Chamber and Leg 3 (the shortest) to the Union. But, the point of view depends on the point of observation, so, we can ask professional engineers to look for a different classification.

Committee of Civil Engineering and Geoengineering of Polish Academy of Sciences.

www.english.pan.pl

Committee of Civil Engineering and Geoengineering is placed in the Division IV – Technical Sciences – of Polish Academy of Sciences.

There are 26 members of the Committee, most of them from universities or scientific institutes, but some of them are from "professional world".

There are the following sections in the Committee:

- Concrete Structures,
- Mechanics of Structures and Materials,
- Management in CE,
- Hydroengineering,
- Geotechnics and Underground Infrastructure,
- Building Materials and Building Physics,
- Metal and Timber Structures,
- Engineering Communication,

with more than 200 scientists and practicing engineers working together in the field of:

- Examination of building structures during design, building and exploitation,
- Modernization and reparation of the structures,
- Loads acting on the structures,
- Interaction of the structure and foundation,
- Building materials,
- Environmental engineering,
- Hydrotechnical structures,
- Roads and bridges,
- Management.

Polish Chamber of Civil Engineers.

www.piib.org.pl

Polish Chamber of Civil Engineers is a trade self-government, next to legislative institutions, regulative structures, economy and business, constitutes an important pillar of the State of law. The activity of the trade self-government of civil engineers is regulated by the following provisions:

- The Building Law Act and acts on trade self-governments of architects, civil engineers and town planners,
- Ministerial regulations: on independent technical functions in the building industry,
- Internal resolutions: the statutes and rules and regulations of the chamber.

The Chamber groups over one hundred thousand engineers and technicians with building qualifications in the following specialities: architecture, construction and building, roads, bridges, demolition, railway, telecommunication, installations of heating, ventilation, gas, water, electrical and power systems and devices.

The Chamber membership is compulsory and only those entered into the list of its members are entitled to perform independent functions in the building industry.

The tasks of the trade self-government include, in particular:

• Exercising supervision over diligent and scrupulous performance of the profession by members of chambers,

- Representation and protection of professional interests of its members,
- Establishing the rules of the ethics of the profession and supervision over the observance thereof,
- Granting and refusing/taking away building qualifications in particular specialities and conferring the title of building expert/surveyor,
- Recognition of professional qualifications of foreigners,
- Cooperation with local government administration and local government bodies, as well as with other trade self-governments and associations,
- Providing opinion on minimum program requirements in respect to the professional education of civil engineers as well as making proposals regarding these issues,
- Trade self-government's assets and business management,
- Providing opinion on draft normative acts regarding the building industry,
- Conducting proceedings regarding the professional and disciplinary liability of members of trade self-governments,
- Organization and administration of mutual aid institutions and other forms of material assistance to members of trade self-governments,
- Keeping the lists of members of trade self-governments.

Polish Union of Civil Engineers and Technicians.

www.zgpzitb.org.pl

Polish Union of Civil Engineers and Technicians is a self-governments association on the scientific and practical profile. They have 30 branches in Polish towns with thousands of members from scientists, via engineers to technicians working the field of civil engineering. The main tasks of the Union are:

- Training of civil engineers and technicians,
- Organizing the conferences,
- Organizing and sponsoring the competitions,
- Publishing the newspapers in the field of civil engineering,
- Recommendations for building industry companies,
- Providing opinion on the building law.