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Message to ISSMGE from the Vice President for Europe Professor Ivan Vaníček



Dear professional colleagues, during the new ISSMGE Board Meeting in Moscow in June of this year I was asked to prepare the first Vice President message to our society members. The reason is that my message should be not only a report about the situation in Europe but also it should be connected with a very sensitive question for most of us - how to improve the image of our profession - geotechnical engineering generally. In agreement with this fact my message is divided into two parts.

A very comprehensive report about the situation in Europe was presented by Prof. Roger Frank only 2 years ago (ISSMGE Bulletin, Vol. 2. Issue 2, June 2008). Therefore I will concentrate only on the last year activities and what we are preparing for the future. My advantage is that Roger is still a member of the ISSMGE board as an appointed member so my contact with him is very close and I can share with him some older experiences.

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Starting with the young generation, the 20th European Young Geotechnical Engineers Conference was arranged in Brno, Czech Republic, at the end of May and beginning of June in 2010. Thirty one national societies accepted the invitation and supported their delegates. Only two delegates applied for a financial support from ISSMGE. The organizers from the Geotechnical Department of the Technical University Brno arranged this activity in a grand style and all papers were published in the conference materials: "Geotechnical Engineering 20 - view of young European geotechnical engineers" together with the view of ISSMGE representatives (Prof. J.L. Briaud - president, Prof. J. Atkinson, the founder of these activities and Prof. S. Lacasse) who also played the role of discussion leaders. The delegates also positively accepted the presentation of two Czech specialists from the contractor's firms. I am very glad that the tradition of the EYGEC conferences is very attractive as the colleagues from the Netherlands are prepared to arrange the next 21st EYGEC in Delft at the beginning of September 2011 and our colleagues from Sweden offered to arrange the following occasion in 2012.

Message to ISSMGE from the Vice President (continued)

Professor Ivan Vaníček

More than 20% of attendees from Brno moved directly to Bratislava, Slovak Republic, where the 14th Danube-European Conference on Geotechnical Engineering was arranged. The tradition of this European Regional Conference was founded 46 years ago as one of the opportunities to collect professional engineers from in those days' two parts of Europe. I am very glad that this tradition is now getting a new role as the main theme of the conference: "From research to design in European practice" this new role implies. Prof. H. Brandl played for the entire time a very important integrating role and therefore all involved countries voted for the place of the next DEC in Vienna to celebrate the 50th anniversary of this tradition. Serbia in the name of Prof. Maximovic declared their interest to arrange the following DEC in Belgrade in 2018.

However, the most significant activity in Europe is prepared in Athens, XV European conference SMGE, September 2011. Up to now more than 300 abstracts have been received from Europe and some others from outside of Europe. The Conference Advisory Committee had a meeting in Athens at the beginning of July and realized that the Organizers are devoting great care to this event and therefore we can expect that this activity will be a great success as the previous ones in Madrid and Prague were. The main theme of the conference is: "Geotechnics of Hard Soils - Weak Rocks". The colleagues from UK have the long-run interest in arranging the next one in Edinburgh (2015).

Another European Regional conference organized on a 4-year basis is the Baltic Sea Conference which follows the EC SMGE. The German Geotechnical Society has just published the first Bulletin for this activity proposed to be held in Rostock in June 2012.

Very active in Europe are also European Regional Technical committees. All existing committees declare the interest to continue their work also for the next period, namely ERTC 3 on "Piles foundations", ERTC 7 on "Numerical methods in geotechnical engineering", ERTC 10 on "Evaluation of Eurocode 7", ERTC 12 on "Evaluation of Eurocode 8", and ERTC 16 on "Education and Training in Geotechnical Engineering". All are very active. In the first half of this year ERTC 10 arranged a workshop in Pavia, Italy, and ERTC 7 a symposium in Trondheim, Norway. Practically all of them are also planning to arrange workshops in Athens in close cooperation with the organizers of the XV ECSMGE. As the activities of Technical Committees are playing a specific role in the frame of ISSMGE, we are now proposing to establish additional ERTCs. Up to now there are only 3 very rough proposals for the new ERTC - Ageing of earth structures of transport engineering; Utilization of large volume waste in geotechnical engineering, and finally Utilization of geo-energy. The idealistic view is some sort of a combination of work of TC with the proposed research activities supported from EU. Maybe the coordination of this view with the view of ELGIP platform (European Large Geotechnical Institutes Platform) can bring some positive results.

In Europe there are many other activities, either organized in cooperation with international TC or on the national basis. The most significant one was arranged in Moscow in June 2010 in cooperation with 5 different TCs. This event does not need more specification as you were informed about this conference in the June Issue of ISSMGE Bulletin. Provided that these activities are arranged under the umbrella of ISSMGE, more information can be found on the web pages of our society. Some national conferences are also accepting papers or lectures in one of the world languages. The best way how to become acquainted with the activities in these countries is to join such national conferences. In this case I recommend contacting the relevant national society of ISSMGE.

The questions of the prestige of Geotechnical Engineering generally and the problems of ISSMGE specifically are very often discussed in our community. There are different comparisons, however even when compared with different branches of Engineering our profession is evaluated rather in the lower half.

Message to ISSMGE from the Vice President (continued)

Professor Ivan Vaníček

We have discussed this problem also during the January ISSMGE board call meeting in connection with the cooperation with other sister societies, as the initial aim of the proposed Federation was to present our geo-engineering profession in front of the “policy makers” jointly. The conclusion of our president to this discussion was the recommendation to prepare very short notes which can be used for the improvement of our professional image in future. Therefore please accept the following notes as a starting point to the discussion to this matter.

Arguments which can be used for a better recognition of our profession at the civil engineering level

- a) Our profession has a specific position among structural Eurocodes as Eurocode 7 - “Geotechnical design” is not only a material code as codes for concrete, steel, timber, masonry structures, but also a general code, as ground is in the interaction with all other structures and also with the help of EC 7 the action applied from the ground on the other structures can be determined.
- b) The risk associated with geotechnical design (either for geotechnical structures or for the above mentioned interaction with ground) is much higher than for other structures - argument - we can test an extremely low part of the ground or a geotechnical structure, let us say one millionth, even when the expected nonhomogeneity is very high. Sometimes the quality checking of a geotechnical structure is indirect; e.g. for earth structures it is via dry density and moisture content.
- c) An extremely high risk is also associated with the third dimension - e.g. the failure of many kilometres long dikes and tunnels in the weakest place can cause depreciation of such a structure as a whole.
- d) The control of geotechnical structures (from the view of quality, ageing or maintenance) is more complicated as a significant part is under the surface and is not visible.
- e) The quality of the design and performance can be approved even after a very long period, especially for activities in the field of Environmental Geotechnics (e.g. for earth structures of environmental engineering as landfills, tailing dams, spoil heaps; for underground repositories or for subsoil remediation, decontamination).

Where these arguments can be used

- during our own activities as national and international conferences - e.g. on the occasion of the 75th anniversary of ISSMGE; at the conferences where all civil engineers are present as well as in civil engineering journals; on the national level as e.g. on the level of Institution of Civil Engineers.
- during the first lectures in our profession to show our students where the position of geotechnical engineering is. Note that each national society can prepare a very short presentation (6-10 slides) about very important practical examples in their country where the role of our profession can be emphasized. These presentations can be put on the web pages of our society and each member can use them for his/her presentation.

Arguments which can be used on a more general level: to draw more attention to our profession for better evaluation in society, for higher support of our research activities or for higher support of our profession on the academic level.

- A) Our profession is associated with *higher risks* - see e.g. point ad a).
- B) Our profession can help to *improve the quality and safety of old structures* as the interaction with ground is the most sensitive place.
- C) Our profession, with respect to the above mentioned point, can help to *protect our cultural heritage*, especially historical buildings from the view of foundation ageing or bedrock deterioration.
- D) Our profession is playing an extremely important role during *natural hazards* (as landfills, floods, earthquakes, volcano activities, hurricanes, tsunami etc);

Message to ISSMGE from the Vice President (continued)

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- E) Our profession can help to solve some *energy problems* - with the help of geo-energy utilization;
- F) Our profession can significantly *protect our environment* - ground together with ground water especially when solving the problem of waste deposition or problems associated with old ecological burdens.

Where and how these arguments can be used:

- i) Together with sister societies (ISRM, IAEG)
 - on the academic level - to achieve higher recognition of geo-engineered subjects;
 - on the research level - to achieve higher recognition on the level of different grant agencies (on the domestic and international levels) namely in the phase of research projects planning. We also have to try that all our achievements published in different journals, proceedings, books are registered on some official lists (e.g. on the list of Thomson Reuters).
- ii) On the level of different information media - first of all via TV, radio, web pages, via all new electronic instruments - where all scientific and practical applications solving difficult problems mentioned under points A-F are discussed or described.
- iii) Via invitation of policy makers on any level to join us in our activities (conferences, seminars etc.) where the above mentioned points are discussed and described or via invitation to places where we are proposing to solve some actual problem which interests media and citizens.

Finally I would like to express my belief desire that all of you will start to think about other arguments which can be used and also about the best form of utilization of these arguments. After the discussion on the level of each society the ISSMGE board can prepare the last version for the strategy of the improvement of the prestige of our profession. With high expectations I am waiting for your responses.