



Report of the Technical Oversight Committee for the term 2017 – 2021

Pierre Delage, chair

This report of the Technical Oversight Committee (TOC) for the term 2017 – 2021 also contains some thoughts, conclusions and suggestions resulting from the two terms made by Pierre Delage as Chair of the TOC (2013 – 2017 under ISSMGE President Roger Frank and 2017 – 2021 under President Charles Ng).

1. Introduction

The 37 Technical Committees (TCs) of the ISSMGE are the foundation on which the technical and scientific activities of the ISSMGE are based. They are managed by a Chair and a Secretary and, if deemed necessary, a Vice-Chair. They are composed of four members appointed by the Chair (with voting right), of members (two members per Member Society, with voting right) and of corresponding members (with no voting right, no limitation in number). Members and corresponding members are nominated through their Member Societies, who are also in charge of putting their names in the TC website. The functioning of the TCs, based on a volunteer basis, is supervised by the Technical Oversight Committee and defined in the [“Guidelines for ISSMGE Technical Committees and ISSMGE Honour Lectures”](#) (revised in November 2019, called “Guidelines” in the following, see Section 5 below). The Guidelines state that TCs are *“forum for discussing, developing and applying specialist geotechnical knowledge related to the behaviour of geo-materials, geotechnical engineering and engineering for society”*, with the following objectives:

- 1. Develop and disseminate knowledge and practice within the topic of the TC to the membership of the ISSMGE.
- 2. Establish guidelines and technical recommendations within the topic of the TC.
- 3. Assist with technical programs of international and regional conferences organised by the ISSMGE.
- 4. Interact with industry and overlapping groups working in areas related to the specialist area of the TC.

Briefly, it can be stated that, within active TCs during the past term, items 1 and 3 have been fairly well carried out, whereas item 2, which is much more time consuming, is not often done. In some applied TCs close to industry and practice, item 4 is correctly carried out. Item 1 can only be correctly performed when regular TC meetings are organised by TC officers. However, the question of the dissemination from the TC membership to ISSMGE membership arises. It should involve the contribution of Member Societies through their TC members, which is not always guaranteed and not easy to check.

Useful information aimed at introducing TC officers to the management of TCs is provided in the [TOC website](#), together with some updates. TC officers are responsible for managing their TC website (including the TC membership), based on the [User Guide for TC Officers](#) prepared

by the TC webmasters. In this regard, the TOC is very grateful for the two webmasters (Alexandros Tsavalas and Kostis Tsantilas) for their constant reactivity and efficiency.

2. Composition of the Technical Oversight Committee

The TOC is composed of the Vice Presidents of the ISSMGE Regions, who were the following during the last term:

- Africa: Etienne Marcelin Kana (CTGA - Comité Transnational des Géotechniciens d'Afrique)
- Asia: Eun-Chul Shin (Korea)
- Australasia: Philipp Robbins (New Zealand) – formerly Gavin Alexander, deceased in 2020
- Europe: Mario Manassero (Italy)
- North America: Timothy Newson (Canada)
- South America: Alejo Sfriso (Argentina)

The idea with this composition was to have the Vice Presidents following more closely the activities of the TC in their region. It wasn't finally not so successful, for some reasons.

3. TC activities

An important concern of the TOC was to make sure that the activities conducted by the TCs under their officers' leadership was satisfactory and in line with the Guidelines, so as to be useful and beneficial for the ISSMGE and for geotechnical engineering practice. There is no use for ISSMGE in having inactive TCs. The functioning of TCs is based on a volunteer basis and it is not easy to impose anything. There is no problem with motivated officers, but some problems may occur in the case of officers (perhaps somewhat seduced by the prestige of the title) who might not have realised the expectations of the appointment, which is rather more than making use of their own technical and scientific expertise. TC inactivity can frustrate motivated TC members, though they often do not express this until asked directly. Besides inactivity, the lack of an international dimension (in cases where most officers coming from the same country, and/or managing all their events in their own country) is also poorly appreciated by TC members. All these issues are closely followed by the TOC and discussed when necessary during ISSMGE Board meetings. Note also that some TCs may have some dormant members, which is not useful and can now be corrected thanks to changes made in the Guidelines (see below).

The main conclusion drawn by the TOC is that the level and quality of TC activities strongly depend on the personal motivation of the Chairs. Given the way they are appointed (see below), most Chairs do have the relevant expertise. Managing of a TC is a volunteer activity, and some Chairs find it difficult to mobilise all the time and energy needed for developing relevant and satisfactory activity. The solution to this issue is not straightforward. It is indeed possible (but not easy) to change the TC Chair in some extreme cases, but not in "average" cases where it is obvious that the level of activity less than expected. In the case where the TC Chair has been changed (easier at the end of their term of appointment), it is not necessarily easy to find a replacement, even in the case of hot topics in which a TC is obviously needed. During the two last terms (2013 – 2017 and 2017 – 2021), some changes have been successful, with good restarts of the TC, but some others not, depending on the personality of the new Chair. In some (rare) cases, a motivated Chair may also have been disappointed by the lack of reactivity of their members, who didn't follow the Chair proposals by lack of reactivity/motivation.

The monitoring of TC activity is made by using a Table in which various activities are recorded, as seen in Section 9. Points are given for various activities, finally resulting in an indicative but

imprecise ranking. The Table is not used for TC awards (for which the TOC is, surprisingly, not consulted at all), but it provides a way to distinguish between very good TCs, good ones and problematic ones.

Three items are given more importance:

- The regular running of administrative meetings, which has been significantly favoured by the pandemic, with a generalised use of on-line meetings (3 points). Such meetings are considered essential to animate and promote the TC culture and the sense of community among TC members. Regular meetings are unfortunately still not managed by some TCs, though they have been strongly encouraged to do so in the future. They appear in the Table at low ranking levels;
- The running of a series of specific conferences regularly organised by the TC (3 points). These conferences are considered quite important since they regularly provide to TC members and to the profession an idea of the main progresses and achievements made in the field of the TC. They can be run by TCs well established in their field. Note however that some active ISSMGE TCs may not have their own series of conferences, in some domains like numerical methods, for instance. Publishing conferences proceedings in Open Access is strongly encouraged and most often followed by officers. Note that the ISSMGE IT Group led by Dimitrios Zekkos now provides through the ISSMGE website a useful system of paper management for ISSMGE Conferences;
- The maintaining of an updated website (1 to 3 points) with relevant information (either within the ISSMGE website or within specific TC website).

Other items include the managing of ISSMGE Honour Lectures and Bright Spark lectures. ISSMGE Honour Lectures are now only presented within the TC specific conferences, so TC with no specific conference cannot have an Honour Lecture. Participation to ISSMGE Conferences through specific workshops are also considered, together with contributions to other initiatives like the Virtual University, the Time Capsule Project, the Case History Journal, newsletters, surveys...

Observation of the Table shows a clear distinction between active TCs, with scores above 10, and TCs with problems, with scores below 6 (note that some of them are starting ones, so the ranking does not apply). All good TCs hold regular meetings and many of them organise a specific conference series. The situation of low ranked TCs is discussed within the Board to end up with appropriate conclusions with respect to their status. Some exchanges are also made with the TOC to help clarify the reasons of poor ranking, in an attempt to improve things. In the case of clearly identified problems, the TOC, following the Guidelines and after consultation and discussion during Board meetings, has two options:

- 1. Trying to restart the TC by changing the chairmanship;
- 2. Stopping the activity of the TC.

During the term, the Chair of TC206 (Interactive design) has been changed and the restart has been quite successful thanks to the motivation of the new chair. A change in Chair has also been made in TC214 (Soft soils) and, more recently in TC107 (with its name changed from “Lateritic soils” to “Tropical residual soils”, with an on-line international seminar recently organised). Conversely, the change in chair of TC207 (Soil-Structure Interaction and Retaining Structures) has not been considered successful by the Board. Considering also a low level of past activity, this TC has been recently disbanded (note that any suggestion to re-activate it would be welcome).

4. ISSMGE Honour Lectures

The procedure that TCs have to follow to propose a new ISSMGE Honour Lecture is described in detail in the Guidelines. The list of the ISSMGE Honour Lectures is presently as follows:

- TC101: BISHOP Lecture – Laboratory testing ([TC101 website](#))
- TC102: MITCHELL Lecture – Site characterization ([TC102 website](#))
- TC104: SCHOFIELD Lecture – Physical modeling ([TC104 website](#))
- TC106: BLIGHT Lecture - Unsaturated Soils ([TC106 website](#))
- TC202: PROCTOR Lecture – Transportation Geotechnics ([TC202 website](#))
- TC203: ISHIHARA Lecture - Earthquake ([TC203 website](#))
- TC204: FUJITA Lecture – Underground construction ([TC204 website](#))
- TC209: McCLELLAND Lecture – Offshore geotechnics ([TC209 website](#))
- TC211: MENARD Lecture – Soil Improvement ([TC211 website](#))
- TC212: POULOS Lecture – Deep foundations ([TC212 website](#))
- TC215: ROWE Lecture – Environmental geotechnics ([TC215 website](#))
- TC220: DUNNICLIFF Lecture – Field Monitoring ([TC220 website](#))
- TC301: KERISEL Lecture – Monument preservation ([TC301 website](#))
- TC304: LACASSE Lecture - Risk ([TC304 website](#))
- TC306: BURLAND Lecture - Education ([TC306 website](#))
- TC308: Energy Geotechnics Honour Lecture ([TC308 website](#))

5. Changes in the Guidelines (rev. 2019)

The changes made in November 2019 in the revised version of the Guidelines, with the substantial contribution of Prof. Neil Taylor, Secretary General, are summarised below. These changes, aimed at improving the functioning of the TCs, resulted from observations of how they work, from exchanges with TC officers during the TOC – TC meeting held during the Reykjavik European CSMGE in 2019 and from informal discussions and e-mails with TC officers and TC members.

The changes are as follows:

- The length of the term of appointment of TC members is 8 years. It can be renewed for 4 years upon proposal of the TC chair and approval by the TOC. Approval will be based on evidence of active and essential participation;
- The chair may suggest to the ISSMGE President and the TOC to remove or replace inactive members;
- Normally, the venue for TC ISSMGE Honour Lectures shall be within a specific conference arranged by the TC;
- Newly created TCs are submitted to a two years probationary period prior to being formally confirmed by the Board;
- A new chair who has some responsibilities in other TCs (Vice-chair or Secretary) should resign from those positions;
- To reflect the international nature of TCs, TC chairs are strongly encouraged to select a Secretary and a Vice Chair from a different MS to that of the Chair.

6. Changes in TC Chairs

The term of TC Chairs is of four years and can be renewed once, leading to a maximum Chairmanship of 8 years. Particular attention has been paid to ensure clear and sound changes in TC Chairs, with open calls among all the members (nominated, chair nominated and corresponding) followed by e-mail votes by TC members (nominated and chair nominated). Although the participation of members was not necessarily significant in all cases (sometimes

smaller than 50%, indicating low involvement¹ of some members), the Chair was selected based on the largest number of votes received. In some cases, in which there was some risk of conflict of interest/loyalty with a Chair too much involved in favouring a candidate, a secret e-mail vote was organised by the TOC Chair in conjunction with the Secretary General. It seems that this nomination procedure worked well, providing the necessary legitimacy to the new Chair. Once selected among the TC, the personality has to get the support of his/her Member Society prior to be proposed by the TOC to the ISSMGE President for official appointment.

7. Creation of new TCs

As stated in the Guidelines, the creation on new TCs results either from personal initiatives of ISSMGE members (who propose a new topic that they find of interest and explain how they plan to deal with it within the new TC) or after some discussion within the Board about important topics to cover. If accepted by the Board (with possible modifications suggested), the TC is started. The new TCs started during the last term are the following:

- TC309 – *Machine learning* (2017), proposed and chaired by Dr. Zhongqiang Liu (NGI)
- TC219 - *System performance* (2019), proposed and chaired by Prof. Gang Zheng (Tianjin U., China)
- TC220 – *Field Monitoring in Geomechanics* (2019), proposed and chaired by Dr. Andrew Ridley (Geo-Observations) in the prolongation of a series of successful conferences already existing on this topic
- TC221 – *Tailings and Mine Waste* (2020), resulting from discussion within the Board and managed with the help of the Vice-President of South America, Prof. Alejo Sfriso. The Chair is Prof. Ramon Verdugo (Universidad de Chile)
- TC222 - *Geotechnical BIM and Digital Twins* (2021), chaired by Magnus Rømoen (NGI)

The start of these new TCs has been successful and they usefully complement the technical and scientific fields covered by the ISSMGE, extending the abilities of geotechnical engineers in topics of importance.

8. Concluding remarks

The activity of TCs is of utmost importance for the technical and scientific achievements of the ISSMGE. Significant attention has then been paid to facilitate and support the managing of TCs by officers, and to help ensuring satisfactory activities in TCs. Good activity is mainly based on the willingness of the TC chairs, who are nominated following a clear and open procedure. The reactivity of TC members is another important component, and it is now possible, thanks to the revised version of the Guidelines, to refresh the TC membership when necessary. The close following of TC activities helps suggesting improvements, when needed, in conjunction with the Board, so as to ensure the significant technical and scientific achievements of ISSMGE.

¹ The low involvement may be due either to personal reasons – member not motivated – or by disappointment of motivated members resulting from poor activities conducted in the TC.

9. Table of TC activities

Website	Honour lecture	Bright Spark lecture	Reg. admin. meeting telecons	Specific Conf. Series	Open access proceedings	Task force	Interaction TCs	Case History Journal	Newsletter, Journal, review papers, Youtube, on line workshop, survey	Wk or Session ERC Reykjavik	Session ARC Tai Pei	ISSMGE virtual U.	TCP - TC meeting	TCP - TC contribution	SoA, SoP, Guidelines	TC Workshop Sydney	Note
3	1	1	3	3	1	1	1	1		1	1	1	1		1	1	21
3	1	1	3	3	1	1	1	1		1	1	1	1	1	1		21
3	1	1	3	3	1		1	1	1	1		1	1		1		19
3	1		3	3	1		1		1	1		1	1		1	1	18
3	1		3	3	1	1		1	1	1			1	1	1		18
3	1		3	3	1		1	1	1	1		1	1	1			18
3	1	1	3	3	1	1			1	1	1		1				17
2		1	3	3		1	1	1	1	1			1	1		1	17
3	1		3	3	1		1			1			1		1	1	16
2	1		3	3		1	1	1		1	1		1	1			16
3		1	3	3	1	1	1	1		1			1				16
2		1	3	3	1	1	1	1					1		1	1	16
2	1	1	3	3					1	1			1	1	1		15
2	1	1	3	3	1			1		1		1	1				15
3			3		1		1	1	1	1			1		1	1	14
3		1	3	3	1		1	1					1				14
2	1	1	3	3	1					1		1	1				14
1	1	1	3	3	1		1			1		1	1				14
3			3				1			1	1	1	1	1	1		13
2	1	1	3	3	1					1			1				13
3	1		3	3			1		1				1				13
3			3				1	1		1		1	1	1			12
2			3			1	1		1	1			1	1		1	12
2			3	1					1	1		1	1	1			11
2			3			1	1	1		1			1	1			11
1		1	3			1	1		1				0				8
2			3				1		1				0				7
2	1			1				1		1			1				7
2	1						1	1		1			0				6
2			3										1				6
2							1	1	1				1				6
2					1			1			1		1				6
2										1	1		1				5
2							1			1		1	0				5
1										1			1				3
2							1						0				3
2																	2
1							1						0				2