

Slope Safety Technical Review Board

Key Messages: A Slope Safety Technical Review Board (SSTRB) was first established in 1995 to review the Government's work in slope safety management and advise on technical aspects of the slope safety system. The SSTRB benchmarks the work of the Geotechnical Engineering Office (GEO) against international practice and assists the GEO in enhancing technical quality improvement. The current Board was appointed by the Director of Civil Engineering and Development in 2022 with a term that expires in 2025. The Board currently comprises Dr Suzanne Lacasse of Norway, Professor David Petley of the United Kingdom (UK) and Professor Jean Hutchinson of Canada.

Introduction

The Slope Safety Technical Review Board was established by the then Director of Civil Engineering in May 1995 to advise the Government on technical aspects of slope safety. A total of eight Boards have been formed since then. Each Board normally comprises up to three renowned geotechnical experts and the tenure of each Board is four years. The current Board is the eighth Board, which commenced in July 2022. The Board members include Dr Suzanne Lacasse, Professor David Petley and Professor Jean Hutchinson. A list of members of the previous Boards is presented in Annex A.

Work of the Slope Safety Technical Review Board

During the annual visits of the SSTRB, the Members interact extensively with staff of the GEO and are briefed on GEO's work, the subjects of which include rainfall and landslides in Hong Kong, climate change impacts on slope safety, landslide studies, Landslip Prevention and Mitigation Programme, technical development in slope engineering, natural terrain landslide risk management, remote sensing (including satellite, aerial and terrestrial) technology, applications of quantitative risk assessment, AI-empowered Landslip Warning System, emergency preparedness, innovation and technology, slope safety public education, and collaborations with the industry and academia. The Board also holds meetings with the Permanent Secretary for Development (Works) and local geotechnical professional groups.

The Board has noted that the challenges with regard to slope safety in Hong Kong are unique in the world. The Board has expressed commendation for the GEO's contribution and the state-of-the-art expertise in landslide risk management:

"The level of expertise on slope safety at the GEO is unique on an international scale. The SSTRB finds that the GEO continues to lead international practice on slope safety and is a model that other countries aspire to follow."

Criteria for Selection of Board Members

Recognising the importance of the SSTRB in enhancing GEO's work, the Government decided to appoint the eighth SSTRB in 2022 with a term that expires in 2025.

The criteria for the selection of members to the SSTRB were:

- (i) high international standing in the geotechnical field;
- (ii) appropriate knowledge and experience related to slope safety; and
- (iii) no involvement with commercial projects in Hong Kong that could have a real or apparent conflict of interest with the SSTRB duties.

Members of the Eighth Board (2022-2025)

The eighth Board currently comprises:

Dr Suzanne Lacasse is an Expert Adviser of the Norwegian Geotechnical Institute (NGI), Norway. She is a renowned geotechnical expert with a wide range of engineering experience from consulting, research and university teaching. Her areas of expertise include geotechnical laboratory and in-situ testing techniques, slope stability evaluation, and hazard and risk assessment and management.

Professor David Petley is Vice-Chancellor of the University of Hull, UK. He enjoys a high international standing in the geotechnical field, with expertise in landslide risk evaluation and management, slope deformation monitoring and forecasting, remote sensing, and engineering geomorphology. He has served as a Technical Advisor for the Public Works Department of the Malaysian Government on the National Slopes Master Plan.

Professor Jean Hutchinson is a Professor in Geological Sciences and Geological Engineering at Queen's University, Canada. She is well respected for her wide-ranging expertise from engineering geology and rock engineering to site characterisation and geotechnical risk management for mining and transportation infrastructure, with a focus on slope instability, landslide hazards and novel monitoring techniques.

**Geotechnical Engineering Office
Civil Engineering and Development Department
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Annex A - Members of the First to the Seventh Slope Safety Technical Review Boards

	<u>Year</u>	<u>Members</u>
First Board	1995 - 1998	<ul style="list-style-type: none">• Professor Norbert Morgenstern• Professor Robin Fell• Sir John Knill
Second Board	1998 - 2001	<ul style="list-style-type: none">• Professor Norbert Morgenstern• Dr Suzanne Lacasse• Professor C F Lee
Third Board	2002 - 2005	<ul style="list-style-type: none">• Professor Norbert Morgenstern• Professor Malcolm Bolton• Professor Wang Sijing
Fourth Board	2006 - 2009	<ul style="list-style-type: none">• Professor Wang Sijing• Dr Suzanne Lacasse• Professor Oldrich Hungr
Fifth Board	2010 - 2013	<ul style="list-style-type: none">• Dr Suzanne Lacasse• Dr Peter Lyttle• Professor Wilson Tang (2010 - 2012)• Professor David Petley (starting from July 2012 in replacement of the late Professor Wilson Tang)
Sixth Board	2014 - 2017	<ul style="list-style-type: none">• Dr Suzanne Lacasse• Professor Oldrich Hungr (2014 - August 2017)• Professor David Petley
Seventh Board	2018 - 2021	<ul style="list-style-type: none">• Dr Suzanne Lacasse• Professor David Petley• Professor Kenichi Soga