

International Working Groups and the ATS

The International Tunnelling and Underground Space Association (ITA) has a number of Working Groups that bring the tunnelling community together under certain topics to document state-of-the-art technology and equipment in the underground space.

Working Groups meet every year at the World Tunnelling Congress (WTC), after meeting throughout the year, with the purpose of promoting information exchange between National Groups and planning, coordinating and releasing the results of testing programs and other collected information in order to advance the state-of-the-art of that particular activity.

The Working Groups are made up of member nation contributors coordinated by an Animator and Vice Animator. Each member nation has the ability to nominate an individual as their National Representative who can then vote in accordance with their country's views, notwithstanding that any member is able to attend a Working Group meeting at the WTC and contribute informally.

Many of the Working Groups have been established for over 20 years, with some significant publications produced on the topic, with their main activities

concentrated on:

- Making available new information about the topic to all ITA National Groups; and
- Promoting the advancement of knowledge about the topic by collecting information available, or obtaining new information by means of specific testing programs.

It is with these two principles in mind that the ATS is looking for members that are willing to contribute to these Working Groups. More information on the WGs can be found at <https://about.ita-aites.org/wg-committees/working-groups> and are listed below:

Current ATS contributors include (but are not limited to): Arnold Dix (ITA President with overall responsibility for the Working Groups), David Oliveira (WG12), Anthony Harding (WG17), Jurij Karlovšek (WG22) and Ulrike Pelz (WG19).

If you would like to represent the ATS on any of these committees and exchange Australian ideas and information with international partners please contact Richard Buckingham on ats@engineersaustralia.com.

OR, if you can get a group of like-minded people together, there is also the potential to start your own Working Group. Let us know on the above email address and we can help facilitate this.

Active Working Groups

WORKING GROUP 2 Research	WORKING GROUP 3 Contractual Practices	WORKING GROUP 5 Health and Safety in Works	WORKING GROUP 6 Maintenance and Repair	WORKING GROUP 9 Seismic Effects
WORKING GROUP 11 Immersed and Floating Tunnels	WORKING GROUP 12 Sprayed Concrete Use	WORKING GROUP 14 Mechanized Tunnelling	WORKING GROUP 15 Underground and Environment	WORKING GROUP 17 Long Tunnels at Great Depth
WORKING GROUP 19 Conventional Tunnelling	WORKING GROUP 20 Urban Problems, Underground Solutions	WORKING GROUP 21 Life Cycle Asset Management	WORKING GROUP 22 Information Modelling in Tunnelling	WORKING GROUP 23 Design & Construction of Shafts

ITA WG22 – Activity Report - By Jurij Karlovšek

ITA Working Group 22 (WG22) is actively engaged in multiple initiatives aimed at advancing Building Information Modelling (BIM) practices within the tunnelling industry. In 2022, the group published two significant documents that have contributed to setting industry standards. Additionally, the group organised a lunchtime lecture in 2022, focusing on BIM's role that year, and plans to continue these educational efforts with a similar lecture scheduled for 2024. WG22 maintains a consistent schedule of meetings, convening once a month to discuss ongoing projects and future plans, ensuring that the group remains proactive in its mission.

One of the critical areas of focus for WG22 is its participation in the Sustainability Indexing Group under the Sustainability

Committee. This involvement highlights the group's commitment to integrating sustainability into tunnelling practices. A significant project underway is the extension of BIM guidelines originally designed for bored tunnels to be applicable to conventional tunnelling methods. This work is supported by weekly meetings and additional sessions dedicated to developing a comprehensive taxonomy, with a close linkage to building SMART International. The guidelines are currently under review, with a strong emphasis on ensuring their relevance and applicability across different tunnelling contexts.

Moreover, WG22 is working on a new document that outlines a sustainable BIM approach for the Lifecycle Management (LCM) of tunnelling projects.



ITA Working Group 22: Information Modelling in Tunnelling

The development of this document involves bi-monthly meetings and specialised sessions for each chapter, ensuring that the content is both detailed and cohesive. A dedicated workshop is planned for April 2024 to finalise and review the document. This project aligns with WG22's overarching goal of evolving and growing its influence in the tunnelling industry, where it aims to act swiftly while remaining inclusive of emerging themes and interdisciplinary collaboration.

Dr Jurij Karlovšek, the ITA Member Nations Representative nominated by the ATS, plays a vital

role in these initiatives. His expertise in digital engineering and deep understanding of tunnelling projects contribute significantly to the development and refinement of WG22's guidelines and standards. Dr Karlovšek's involvement ensures that the group's outputs are not only theoretically sound but also practical and applicable to real-world scenarios, particularly in the context of complex underground infrastructure projects. His leadership and active participation are key to driving WG22's mission forward, fostering innovation and sustainability within the global tunnelling industry.