

ATS chapter and subgroup reports

February 2024 – August 2024

VICTORIAN CHAPTER

Chair - Elena Gavazzi

The Victorian Committee has held bimonthly meetings throughout the reporting period. In the last six months, the committee enjoyed active participation in the World Tunnelling Congress in Shenzhen (WTC 2024) and ran successful events including:

- Celebrating International Women's Day - Unveiling the Stories of Senior Professionals in Tunnelling (in collaboration with the Diversity in Tunnelling subgroup) (6 March)
- ATSym Industry Night – Welcome Future Tunnellers (in collaboration with ATS Young Members subgroup) (9 April)
- Technical session – Industry Update - The Snowy 2.0 project (26 June)
- Technical session - Suburban Rail Loop in Melbourne – Embedding Sustainability (8 August)
- Site visit – Melbourne Metro Parkville Station (19 August)

Upcoming events include:

- Technical session - Hobsons Bay Main Yarra Crossing Duplication Project (19 September)
- St Barbara's Day Celebration Victoria (5 December)

The committee has also continued to engage with the Victorian Tunnelling Centre and build relationships with local universities with the intent of attracting students to the world of tunnelling and help the industry fill the current skills gaps.

QUEENSLAND CHAPTER

Chair – Morteza Ghamgosar

The Queensland Committee has held regular meetings throughout the reporting period and run successful events including:

- Site visit – Roma Street Station fitout and commissioning (organised in collaboration with ATSym) (11 June)
 - This event was held in person, capped to a maximum of 30 people and received great feedback.
- DAARWIN-GEMINI A novel tool to predict advance rate of a TBM in real-time (15 August)
 - The presentation was held online.

The Queensland Committee is managing Australia's World Tunnelling Congress bid for 2028. PCO (Professional Conference Organiser) interviews are finalised and the winning candidate is MCI.

The second edition of the Tunnel Design



Members of the ATS Exec on a CRR project site visit during their recent Executive Meeting in Brisbane

Guideline has been managed by Queensland ATS Young Member Chair Brodie Aitchison and is planned to be released in time for the ATS Short Course in Brisbane in November 2024.

WA CHAPTER

Chair – Jiang Aizezi (Aziz)

- The WA Chapter continues to make headway with ATC25 conference preparation having secured Arinex as the PCO, and the Perth Convention and Exhibition Centre the venue. The conference website domain has been purchased and will be made live soon with the logo development reaching its final stage.
- The call for abstract and milestone dates have been agreed, several high-profile keynote speakers have been secured and we're aiming to lock in the rest before end of this year. All information related to the conference be released soon with the website launch.

Events

- The committee continues to collaborate closely with like-minded societies including ASTT (Australian Society of Trenchless Society), ICE WA (Institutes of Civil Engineers), AGS WA (Australian Geomechanics Society), and hosted a joint technical session on 9 April (BP KWOL Pipeline Relocation – Largest Brownfield Trenchless Relocation in Australia), while promoting and attending each other's technical presentations since.
- The committee is looking forward to securing a technical presentation on the Alkimos Desalination Project later this year and are working with Herrenknecht on a one day technical seminar in November focused on new developments in mechanised tunnelling and shaft sinking in mining and civil industry.

Expanding committee

- The Committee is thrilled to announce Arianna Castellano as our Diversity in Tunnelling group rep and Lewis Walsh as our Young Member Rep for WA and look forward to these two bringing fresh ideas and knowledge from our east coast partners to improve the WA Chapter for our members.

NSW CHAPTER

Chair – Phil Clark

The NSW Committee has held regular meetings throughout the reporting period and held the much-anticipated technical session on Rozelle Interchange Tunnels – Complex Geology, Complex Design (1 August).

**AUSTRALASIAN
TUNNELLING
CONFERENCE 2025**

10-13 November 2025
Perth, Western Australia

<https://atc2025.com.au/>



Technical session on Rozelle Interchange Tunnels – Complex Geology, Complex Design



Celebrating International Women's Day - Unveiling the Stories of Senior Professionals in Tunnelling

The Committee is currently assisting with planning a collaborative event with other Engineers Australia societies, including Engineering Heritage Australia, to mark the 75th Anniversary since the commencement of works on the Snowy Mountains Hydroelectric Scheme.

The NSW committee is pleased to have supported two of the selected nominations for the ITA's 50th anniversary 50 Iconic Tunnelling and underground space projects. Both the Snowy Mountains Hydroelectric Scheme and the Sydney harbour Tunnel were recognised on this list for their global importance.

TUNNEL SYSTEMS OPERATION AND MAINTENANCE GROUP (ATS-SOM)

ATS SOM has held regular meetings throughout the reporting period and organised several local and national technical sessions and events including:

- Tunnel Systems Education at the Victorian Tunnelling Centre (11 April)
- Site visit – Transurban road tunnel control room – Melbourne (15 April)
- Site visit – Transurban road tunnel control room – Brisbane (30 April)
- Site visit – Transurban road tunnel control room – Sydney (15 May)
- High pressure water mist in tunnels (13 June)
- Road tunnel ventilation optimisation using 1D modelling (8 August)

The Committee is currently organising the ATS-SOM Workshop (3-4 October), a two-day event at the Victorian Tunnelling Centre in Melbourne, which will be packed with visits, presentations and hands on demonstrations of tunnel system products.

ATS YOUNG MEMBERS (ATSYM) SUB-GROUP

ATSym group met regularly during the reporting period and organised:

- ATSym Industry Night – Welcome Future Tunnellers (9 April)
- Insights into a career in tunnelling panel discussion (4 July)

- CRR Site Visit – Roma St Station Fitout and Commissioning (11 June)

Summary of activities

- Appointment of two new ATSym committee members in WA. Both will be instrumental in developing the ATSym in WA and in planning activities including the 2025 Australasian Tunnelling Conference
- Ran the David Sugden Award
- Managed the second edition of the Tunnel Design Guideline (which is now with the publishers)
- Assisted with ATS Short Course Planning
- Breakthrough magazine
- Website revamp (ongoing)

Potential or upcoming events

- NEL technical presentation (pending approvals)
- Careers workshop at the University of Adelaide (pending)
- NEL site visit (November – pending approvals)
- Western Harbour Tunnel Site Visit (Q3/4)
- Student design competition (TBC)
- Cavern Design for Hydropower projects (7 Nov)

DIVERSITY IN TUNNELLING (DIT) SUB-GROUP

The first half of 2024 was a busy one for the DiT subgroup which ran three key events:

Mentor Alliance

- The Mentor Alliance built on the successful 2023 mentoring program and expanded it to include ATS Young Members. The program attracted over 70 participants and incorporates mentoring, coaching and training through the external training provider Impact Business School. The program will continue in 2025 with a new cohort.

International Women's Day

- DiT ran the successful event: Celebrating

International Women's Day - Unveiling the Stories of Senior Professionals in Tunnelling (6 March)

International Women in Engineering Day

- DiT hosted the successful online event: Bridging the Gap: Addressing Gender Pay Disparities in Engineering (27 June)

Later in 2024, DiT will host a forum for international engineering colleagues to share the challenges and learnings associated with relocating to Australia.

AUSTRALIAN SHOTCRETE SOCIETY (AUSS)

AUSS organised the Shotcrete 2024 two-day workshop, held at the Novotel Preston in Victoria on the 14-15 August 2024. It was an outstanding success, with over 120 participants.

Day 1 of the workshop included the nuances of mix design for underground shotcrete, cutting-edge spraying techniques, and the fine details of surface finishes. The morning and afternoon tea breaks provided participants with ample opportunities to network, exchange ideas, and build professional connections.

The day culminated in a lively pre-dinner drinks session, fostering further collaboration and informal discussions that extended the learning experience beyond the formal sessions.

On Day 2, the focus shifted to the exploration of low-carbon concrete binders, the examination of recent shotcrete projects, and the insights of contractors on the practical challenges and solutions in shotcrete applications. The event concluded with a comprehensive general discussion on spraying and quality issues. Throughout the workshop, the skilful facilitation by session chairs and the use of roving microphones ensured that all voices were heard, making the event not only informative but also highly interactive and engaging.