TC 2.5 Connected and Automated Mobility
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Executive Summary:

The PIARC Technical Committee 2.5 Connected and Automated Mobility Technical Committee (TC 2.5) Kick Off Meeting (KOM) was held from 7 – 9 February 2024 in Paris, France. The meeting was largely procedural, agreeing work programmes and roles such as Working Group Chairs for the next four years.

I was appointed as the Partnerships Coordinator for TC 2.5. As well as contributing to the work of TC 2.5, this role will provide an opportunity to make linkages with international experts that will also be valuable for future Austroads work.

TC 2.5 has three Working Groups:

- WG 2.5.1 Roads for cooperative, connected and automated mobility, considering both physical and digital infrastructure.
- WG 2.5.2 Automated driving and infrastructure.
- WG 2.5.3 Architectures, (including the role of managers and security issues) and business models for public authorities and road agencies (including partnerships with industry).

I was also appointed Co-Chair of WG 2.5.1.

The key deliverable will be a Technical Report for the next World Road Congress in 2027. Case Studies and a Literature Review will also be prepared. These are the minimum outputs and it is expected that there will be opportunities for delivery of other products at earlier dates. The first piece of work will be a literature review. This will be completed mid-2025. It is intended as an input into the final Technical Report and not for publication.

Two Seminars must be held in low- or medium-income countries (referred to as LMICs) over the four-year period of TC 2.5. A location for one of the Seminars was tentatively identified as being in Tunisia, at the end of 2025.

The next in-person TC 2.5 meeting will be in Seville, Spain 6 - 7 November 2024.

Background:

TC 2.5 KOM took place from 7 – 9 February 2024 at PIARC's headquarters in La Défense, Paris, France. The meeting took place over three days, with the first and last being half-day sessions. On the first day, PIARC officials addressed a plenary session of representatives of the three Technical Committees that were meeting in parallel. The plenary discussed how PIARC's Technical Committees function and also introduced the PIARC staff who would be involved in supporting the committees.

TC 2.5 is a new committee. Days two and three focussed on developing the work programmes for the three Working Groups. Approximately 25 people took part in TC 2.5 in person. A further 20 people joined remotely for short 'hybrid' sessions at the end of the second and third days. The hybrid sessions recapped the in-person discussions and enabled the on-line participants to participate in the election of individuals to the various roles for TC 2.5 and Working Groups.
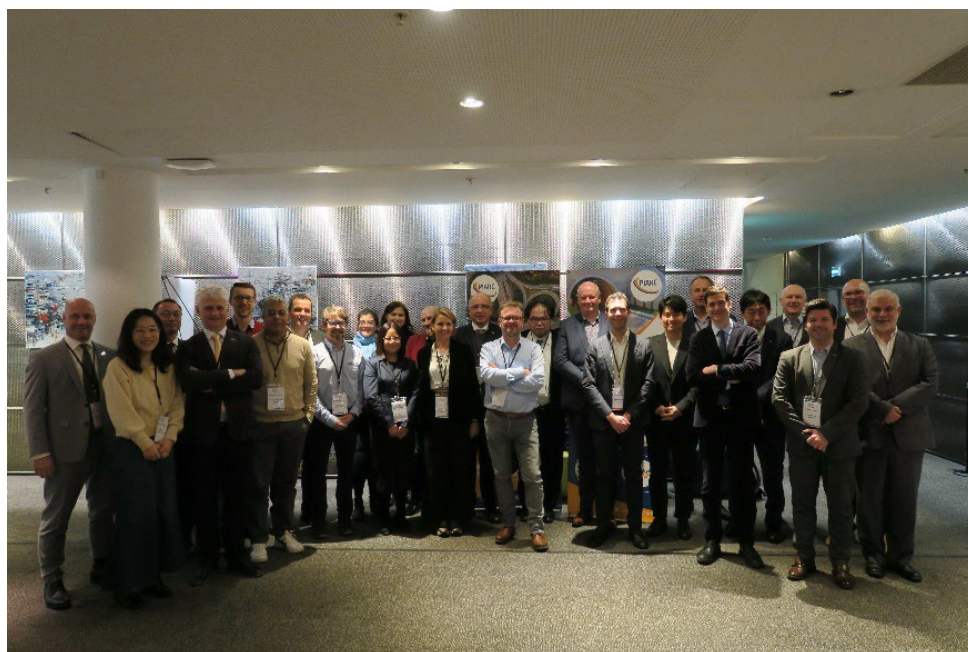
Participants at TC 2.5 came from a range of backgrounds with academic and industry representatives, as well as government. Around a third of those taking part in TC 2.5 had been part of previous technical committees and were familiar with the processes, while the rest were new to PIARC.

The Working Groups established under TC 2.5 are:

- WG 2.5.1 Roads for cooperative, connected and automated mobility, considering both physical and digital infrastructure.
- WG 2.5.2 Automated driving and infrastructure.
- WG 2.5.3 Architectures, (including the role of managers and security issues) and business models for public authorities and road agencies (including partnerships with industry).

The Chair and Secretaries of TC 2.5 are:

- Ana Luz Jimenez Ortega – Chair
- Ian Patey - English speaking secretary
- Abdelmename Hehdli - French speaking Secretary
- Antonio Granado Perez – Spanish speaking Secretary

Work Programme:

A draft work programme was discussed at TC 2.5, as this had to be prepared for PIARC by 28 February 2024. Following discussions at TC 2.5 the draft work programme was then circulated by email for feedback and a final version was submitted by the deadline.

The key deliverable will be a Technical Report, to be finalised for the next World Road Congress, which is to be held in Vancouver, Canada in 2027. Case Studies and a Literature Review will also be prepared. The Chair stressed these are minimum outputs and it is expected that there will be opportunities for delivery of other products at earlier dates. Reference was also made to preparing a "High Impact Summary" as well as articles for the PIARC Magazine Routes/Roads and social media material. The first piece of work will a literature review. This will be completed by mid-2025 and is intended as an input into the final Technical Report, rather than for publication.

Under PIARC's rules, two Seminars must be held in low- or medium-income countries (referred to as LMICs) over the four-year period of TC 2.5. A location for one of the Seminars was tentatively identified as being in Tunisia, at the end of 2025. This session will be held in partnership with TC *2.4 Road network operations and ITS for sustainability* as its work has strong synergies with TC 2.5. The second Seminar for LMICs was tentatively suggested to be held in Mexico in 2026. It was not clear from the discussions what involvement, if any, New Zealand/Austroads is expected to have in these Seminars. These may be linked with the planned in-person Working Group sessions.

All TC 2.5 meetings are intended to be in person, as PIARC considers this to be more productive. However, online meetings, using tools such as MIRO Boards, were proposed as being potential tools for some engagements, especially between meetings, and that these options would be explored further.

Meeting outputs:

We were not invited to discuss or refine the Working Group topics, beyond clarifying how the activities of WG 2.5.1 Roads for cooperative, connected and automated mobility, considering both physical and digital infrastructure and WG 2.5.2 Automated driving and infrastructure would differ. It was agreed that WG 2.5.1 would look at the physical and digital requirements for connected, cooperative, and automated mobility, whereas WG 2.5.2 would focus on the evolution of road networks, due to automated vehicles, along with considering the definition of operational design domains. Although participants were asked to identify which Working Group they wished to be part of, we were advised that all materials would be shared with all Working Groups.

I was appointed as the Partnerships Coordinator for TC 2.5. The role is intended to act as a coordinator between TC 2.5 and other relevant international bodies with similar mandates. This will provide an opportunity to make linkages with international experts and this will be valuable for future Austroads work, as well as for TC 2.5. I was also appointed as Co-Chair of WG 2.5.1 along with Raducu Dinu from Canada.

The next TC 2.5 meeting will be in Seville, 6 - 7 November 2024.

Learnings for Australia and/or New Zealand:

This was a KOM, so the focus was on the programme structure and supporting processes rather than the topics that are the focus of TC 2.5. It was clear, however, from informal discussions that all jurisdictions participating in TC 2.5 have the same general concerns about how to manage the uptake of connected and automated vehicles, although some are further ahead in their planning than others. It is expected that there will good opportunities for sharing and learning from jurisdictions participating as the work programme progresses.

When I mentioned that I was representing Austroads, this was greeted very positively with several people saying that previous Austroads representatives had been very productive.

There is a strong informal interest (though this was not discussed during the meeting itself) from participants in holding a TC 2.5 session in New Zealand or Australia. The earliest this would occur would be in the first quarter of 2025. It would be useful to have a view on this for the next session.

Next Meeting

The next TC 2.5 meeting will be in Seville, 6 - 7 November 2024.

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