



PIARC TC 1.1 – Performance of Road and Transport Administrations Singapore, 30 October -4 November 2022

Executive Summary

The sixth meeting of the Technical Committee was an in person only meeting held over the period 30 October to 4 November 2022 in Singapore hosted by the Land Transport Authority. Alan Colegate, from Main Roads Western Australia, attended the meetings in his role as English Speaking secretary and as one of three Working Group Leaders. We had 16 participants from 12 countries in attendance.

In this cycle, the Technical Committee is addressing three specific issues:

1. Understanding how Road and Transport Administrations are measuring the efficiency and effectiveness of Customer Experience and Public Value Creation.
2. The role of transport agencies in shaping disruptive technology and service models
3. Organisation of staff and human resources

A summary of the activities undertaken during the week are included in the work program section of this report. The main activities of the meetings were to progress the work being undertaken within each of the work programs, share findings and source input from across the workstreams.

In addition, during our regular meetings the Singapore International Transport Congress and Exhibition (SITCE 2022) was underway with TC members presenting at various times throughout the Congress. On 3 November there was a dedicated stream to the work of TC1.1 called “Innovating the Transport Agency of the Future through Customer Focus, Technology and Diversity”. The session was well attended with almost 300 delegates and a high level of participation and dialogue in the panel session that closed out our stream.

Overall, the meeting was critical in ensuring that we are on track to deliver the final products ready for the World Road Congress. Each of the Working Groups were able to address several outstanding actions and the Technical Visits with the land Transport Authority were beneficial and interesting. In addition to progressing our Working Group activities we identified topics and themes for the next PIARC Strategic Plan and assessed the large number of abstracts that were submitted for consideration as part of the WRC.

We now have four reports that have been published and are available on PIARC’s website:

- Diversity and Talent Management in Transport Administrations – the Road to Success”
- Customer Experience; A PIARC Case Study Analysis
- The role of Transport agencies in shaping Disruptive Technologies and service models – a private sector roundtable completed with the IRF and IATR
- The role of Transport agencies in shaping Disruptive Technologies and service models – A PIARC Survey Report”

A program was outlined for the next meeting to be held in Morocco planned for the last week of April 2023. If this is not possible ASFINAG have agreed to host a meeting in Vienna in June. It was agreed to not seek to further pursue a meeting in Shanghai for early 2023 as had been planned. In conclusion we believe that we are on track to deliver all our outputs in time for the WRC and our initial work plans.

Work Program

The Technical Committee on Performance of Road and Transport Administrations brings together matters related to the policies and strategies that transport administrations develop and enact. This TC is developing guidance on these issues based on the experience of member countries at different stages of development focussing on the following terms of reference split into three distinct pieces of work.

Working Group 1 - Understanding how Road and Transport Administrations are measuring the efficiency and effectiveness of Customer Experience and Public Value Creation – Working Group Leaders – Alan Colegate (Australia) and Ilaria Coppa (Italy)

During this cycle the Committee will be looking at reporting on the performance of road and transport administrations focussing on the customer facing levels of service underpinning asset management, models and frameworks in use, how we capture creation of public value and understanding decisions and practices around communicating, engaging and activating the community. During this meeting we:

- Reviewed the content submitted from each theme within the working group and restructured the report to better reflect the relationship between Customer Experience, Asset Management and Public Value Creation
- Identified the public value creation themes derived from the literature review and related practice examples and used that to inform the development of a model to apply the learnings in a transportation context
- Reviewed the relationship between the public value matrix within the Maturity Model that is underpinning the report and workshopped concepts around linkages within the other themes and the Customer Experience maturity model
- Discussed the formation and additional editorial work that needs to be done to the results of the Asset Management Survey. Whilst the assessment has been done it needs further refinement to ensure that it is consistent with the structure of the report.
- Started to pull together the findings from the three themes to determine common elements that would work towards informing the Conclusion of the technical report

Working Group 2 - The Role of Transport Agencies in Shaping Disruptive Technology and Service Models – Working Group Leaders – Jonathan Spears (UK) and Anne-Séverine Poupeleer (Belgium)

The Committee will also be looking at the transformation and new role of road and transport administrations in the face of the sharing economy model and new disruptive and innovative technologies such as connected and autonomous vehicles (CAV), on-demand ride sharing services, Mobility as a Service (MaaS) and so on. These will continue to alter the landscape of how people view mobility, how they travel, how freight moves, and what their overall travel behaviour and expectations are. The power of new technologies to connect us along with the emergence of sharing platforms is forcing transport industries to re-evaluate their current business-models. During this meeting the Working Group:

- Have published two deliverables and the final survey report which includes analysis and assessment of the 69 fully completed questionnaire responses to be included in the Technical Report completed has been submitted for review and publication.
- Mini case studies from seven agencies have been developed and the content was workshopped at the meeting to determine what will be captured as input into the final technical report.
- The first seven chapters of the technical report have undergone peer review within the WG and time was spent addressing the comments identified during the review.
- Further work was done on the conclusions which currently stand at 28 and need to be further refined to a maximum of ten without losing the thinking and value behind the information captured during the research process.

Working Group 3 - Organization of Staff and Human Resources – Working Group Leaders Anna Wildt-Persson (Sweden) and Alex Walcher (Austria)

The final area of focus is concerned with matters of diversity, whether it be gender, ethnicity, culture, disability, age, religion, political ideas or ideology, income or other factors perceived to represent disadvantage in achieving personal and community opportunities. Approaches include positive discrimination, the setting of targets for recruitment or career progression, professional networks, publicity around role models or selective support for educational or training opportunities. The Committee will analyse effective approaches for defining and promoting diversity in opportunity across the roads and transportation sectors including how to attract new employees into the transport industry and profession, especially, young professionals. During this meeting the Working Group:

- Updated the TC on the Special Project on Diversity and plans to complete the final round table with to be held in French specifically to reach French speaking African nations.
- Used the time together to finalise the conclusions and recommendations and to specifically ensure that matters related to LMIC are being addressed in the final report.
- Focus for this meeting was around diversity and new talent and competencies and exploring how to bring diversity and talent management into a single concept.
- Currently within the report all the dimensions of diversity have conclusions but need to harmonise how they are developed further for recommendations to PIARC.

Singapore International Transport Congress and Exhibition (SITCE 2022)

This was the fourth time that the Singapore Land Transport Authority and the UITP have come together to host SITCE 2022 (the firsts since COVID) described as one of Asia's most recognised events in the urban mobility space. The theme this year was Heartbeat of Mobility: Towards a sustainable, resilient and seamless public transport and attracted over 5 200 visitors from 52 countries visiting the exhibition that showcased 120 global brands. The congress itself featured 5 streams that included 125 international speakers with more than 1 100 delegates.

In addition to several TC members presenting on specific subject areas, mainly around disruptive technologies we managed to secure a specific session for PIARC within the Congress. Under the broad Title of “Innovating the Transport Agency of the Future through Customer Focus, Technology and Diversity” covering four topic areas that help put into perspective the work accomplished within the Technical Committee and emphasised the importance of innovation as a common thread among the Working Groups.

There was a lot of interest in the work that is being done especially around the areas of workforce of the future and the impact of disruptive and emerging technologies.



- Anne-Séverine Poupeleer, Member of PIARC’s Executive Committee, Chair of PIARC’s Finance Commission spoke on “What is PIARC and the Role of Road Administrations in Enabling Efficient Transit Movement”
- Alan Colegate & Ilaria Coppa, presented on “Building your Customer Experience to improve Public Value Creation”
- Jonathan Spear spoke on “Disruption Ahead: The Role of Transport Agencies in Responding to and Shaping Future New Technology and Service Models”
- Karen Bobo, presented on the “Results of the Roundtable discussions on issues of equity and diversity impacting Transport Administrations”



The session concluded with an open forum question and answer panel session that was engaging with many questions being asked across a wide range of areas.

Singapore Land Transport Authority

The Deputy Chief Executive, Chief Technology Officer and Chief Sustainability Officer, Mr Wee Shann Lam, welcomed us to their Bedock Campus as our workspace for our time in Singapore.

As part of his welcome, he gave us an outline off the work that LTA are involved with and a tour around the facilities which include their commercial fares and ticketing development laboratory. The following are a few takeaways from our host that were of interest:

- Ministry of Transport overseas LTA, Civil Aviation and Maritime Port Authority, as part of a restructure the regulation of setting fares had been removed from LTA.
- The LTA includes transport planning, (work closely with Urban Redevelopment Authority within zones). Their focus is on mixed development with industrial, schools, residential with a theme of “walk live and play within your own neighbourhoods”
- Construction of metro lines on behalf of the Govt, contract, to help keep skills they do their own design works to help ensure informed buyers, the aim is to have 300km by 2030, an increase of 60 kms. Currently takes 7 to 10 years per MRT line
- Road construction North South Expressway - added one lane as a transit corridor that allowed for cycling, walking, personal mobility devices
- They have had 15 years of “Golden Period” of construction
- They plan all bus routes and operate the service through regulation award licence to public transport operators. Own the busses and buy busses so moving to eBus aiming for 50% to 70% the rest are hybrids
- They also Regulate taxi and hail company and Regulate vehicle policy including the limit the purchase of cars to 10 years - based on a certification system keeps vehicle age very young - 2040 phase out ICE cars (exclude HV and commercial) - based on certificate - 2030 will not renew certificates for ICE. 1m vehicles for 5.5 m people
- In terms of active mobility, they are learning from others as they seek to increase share of bikes from 1% to 4% still looking to getting the balance between social amenity, narrow paths and health benefits

- 2025 car parks must have charging stations, advised public that LTA has agreed to put in place charging stations.
- Solar is difficult, even using all public housing and train stations but still pushing as much as they can. Transport is their third largest emitter - PT only small percent, subway 3% even without greening 5%, largest part is private transport with 66% of emissions from vehicles. Converting ICE to electric vehicles can half carbon emissions. LTA believe that hydrogen will only work if the infrastructure is there
- No hypothecated funding, they manage \$10 billion - LTA has lions share of the funding within the Ministry however, the focus for funding is on active transport and public transport. They have subsidies of around \$1b for the metro and \$1b for buses
- Management of data with origin and destination information and using existing CCTV camera's, issue is around extracting data from propriety systems. They now have in the contracts that the data is owned by LTA and it must be able to be extracted this has meant that they are focussing on creating a common data platform and terminology and definitions.



Future meetings

Subject to the ever-changing environment the following is proposed:

- April/May 2023 –Morocco
- October 2023 – World Road Congress Prague

Conclusions and recommendations

We are continuing to do address the issues identified in the strategic plan and we made a lot of gains just based on being able to attend and meet in person. We achieved our primary outcomes and continue to track well in terms of achieving our outputs for the current cycle.

There is a strong commitment from everyone who participated to share what they know and contribute towards achieving products that will be useful and highly valued and to continue to strive to achieve the agreed outcomes despite some of the difficulties being faced.

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 November 2022