

World Road Association (PIARC)
TC 3.3: Asset Management
Virtual Meeting, 6-8 October 2020



Executive Summary

The Technical Committee (TC) on Asset Management met in Early October to discuss progress to date, and revising work plans and meeting schedules in light of the COVID-19 Pandemic. The TC is undertaking a diverse workplan with several Working Groups and Subgroups (Ulysses is contributing to Workgroup 1, Subgroup 2).

The next meeting will be from the 2nd to the 4th of March, and will again be a virtual meeting.

Background

Technical Committee 3.3 is focussed on collating the latest knowledge on emerging processes and technologies and extending products developed in the previous cycle to disseminate best-practice knowledge in the area of asset management.

The Technical Committee (TC) 3.3 has been divided into four Working Groups (WG) devoted to different aspects of the Work Program:

- WG 3.3.1 - Innovative approaches for asset management systems
- WG 3.3.2 - Measures for improving resilience of road network
- WG 3.3.3 - Renewal and rejuvenation of aging infrastructure
- WG 3.3.4 - Update of the Asset Management Manual

Following the Kick-off meeting in Paris in January, the subsequent TC 3.3 meeting was scheduled to be in Chicago, August 26-28, following the 11th International Conference on Managing Pavement Assets (ICMPA) 2020. This meeting was cancelled due to the COVID-19 Pandemic and a virtual meeting arranged for early October.

All meetings were held from 3 pm to 6 pm Paris time (GMT+1), which was 1 am to 4 am AEDT (GMT+11).

The Agenda for the three days of meeting was as follows:

- Tuesday 6 October 2020 – TC Plenary Meeting and introduction to WG meetings
- Wednesday 7 October 2020 – Parallel Meetings of the four Working Groups
- Thursday 8 October 2020 – TC Plenary Meeting

The key issues covered in the meeting included:

- Review of objectives and workplans, especially in light of COVID-19
- Progress of the separate WGs
- Scheduling future meeting times and locations
- Future participation in other events such as the Winter Congress, the rescheduled ICMPA 2020, and Special Projects
- Matters related to the organisation of the TC

Work Program

The activities and progress of each Working Group was presented in each parallel meeting on Day 2 of the meeting. The objectives of each Workgroup is elaborated below.

WG 3.3.1. Innovative approaches for asset management systems

This WG is divided into four subgroups:

Subgroup 3.3.1.1, *Guideline for Implementation Asset Management System*, has the objective of developing a guideline for implementing Asset Management Systems in the road sector according to ISO 55001, taking in account different road organisations and at different maturity levels. The WG will consider also other approaches and different level of maturity in the case studies. This subgroup is based on improving and innovating managing assets approach by taking into consideration of a triple bottom line of sustainability (PPP, i.e. profit, people, planet).

Subgroup 3.3.1.2, *Life Cycle and Risk Management*, has a main goal of incorporating a life-cycle and risk management approach. Furthermore, it also aims to improve and innovate managing assets approach by taking into consideration of a triple bottom line of sustainability (PPP).

Subgroup 3.3.1.3, *BIM and use of Digitalisation in Asset Management*, is Investigating the use of BIM (Building Information Model), by using a standard format, in conjunction with current AMSs used by road owners and operators. Moreover, it is intended to investigate the use of Digitalisation in Asset Management. As the previous subgroups, WG 3.3.1.3 is based on improving and innovating managing assets approach by taking into consideration of a triple bottom line of sustainability (PPP).

Subgroup 3.3.1.4, *Documental support*, aims to contribute previous and relevant documentation to the other subgroups for their correct research development. This group takes into account works carried out by T.C.D.1 – Asset Management within Cycle 2016-2019. This group intends to encourage coordination with other TCs and TFs, such as T.C. 1.1, T.C.1.2, T.C. 1.3, T.F. 1.2, T.C. 2.4, T.C. 4.1, T.C. 4.2, T.C. 4.3, T.C. 4.4 and T.F. 3.1.

These subgroups reported their progress to date on these objectives since February.

The WG also agreed to a schedule of outputs as follows:

Work Items	Delivery date
State of the Art & Case Studies	June 2021
Webinar	October 2021
Draft Briefing Note on Life-Cycle management and risk	January 2022
Draft Briefing Note on BIM	January 2022
Draft Report	March 2022
Final Briefing Note on Life-cycle management and risk	April 2022
Final Briefing Note on BIM	June 2022
Final Report	September 2022
Translation of outputs	November 2022
Delivery to PIARC General Secretariat	December 2022

WG 3.3.2. Measures for improving resilience of road network

This WG reported on their review of the literature, including gathering previous PIARC reports. Members are currently working on the previously stated objectives:

- Identifying and quantifying the risks and global losses associated to damages of transportation system and establishing efficient risk mitigation strategies within a holistic approach on road infrastructure; and
- Identifying best practices and approaches of Road Asset Management measures to improve the resilience of the road infrastructure.

WG 3.3.3. Renewal and rejuvenation of aging infrastructure

The Working Group provided an update on their progress on the key objectives:

- Identifying best practices and approaches of road asset management that support the renewal and modernization of aging road infrastructure, including the management of road renewal backlogs.
- Taking in account the emerging vehicle and infrastructure technologies.

WG 3.3.4. Update of the Asset Management Manual

The Working Group provided an update on their progress on the key objectives:

- Upgrading the content of the Road Asset Management Manual
- Extending the education and dissemination section of the Road Asset Management Manual

Meeting outputs

Workplans for all Working Groups and Subgroups were revised.

The revised format and locations of upcoming meetings were discussed as shown below:

March 2021	Virtual
June 2021	Virtual, Chicago (Rescheduled ICMPA 2020), or Rome
October 2021	Mexico City (with BIM for Asset Management Seminar)
Northern Spring 2022	New Zealand, Chile, Ghana
Northern Autumn 2022	Portoroz (Slovenia)
Northern Spring 2023	Asia (with Seminar)
September 2023	Prague (XXVII World Road Congress)

The Spring 2021 meeting on the Technical Committee has been tentatively scheduled for Tuesday the 2nd to Thursday the 4th of March. The meeting time will be 10:30 pm to 1:30 am AEDT.

Emerging issues

The cycle is still in its early stages, and no major issues have emerged as yet.

Learnings for Australia

The work program for this committee parallels efforts within Australia and by Austroads specifically to improve high-level guidance on best practice in asset management, to maintain an understanding of how new approaches can continue to be incorporated, and to consider questions of risk and resilience in light of climate change.

BIM (Building Information Model) is an emerging area for roads. It would be to Australia's advantage to undertake more investigation of the opportunities BIM can offer.

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