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## **ADMINISTRATIVE INFORMATION**

#### **Registered office**

In 2023, EUPAVE moved to: Avenue des Arts 20 - 1000 Brussels

#### **Bylaws**

The bylaws of the association were modified at the Extraordinary General Assembly held on 6 December 2023.

The revised version is available in French and English. In case of differences between the two versions, the French version shall prevail.

#### **Managing Director**

Mr. Luc Rens, Consulting Engineer at FEBELCEM, is Managing Director of EUPAVE since the Board meeting of 23 March 2009.

#### **Communications and Office Manager**

Ms. Elise Carabédian is Communications and Office Manager since 2 November 2016.

#### **President and Vice-President**

EUPAVE's President remains Mr. Stéphane Nicoud from Holcim.

EUPAVE's Vice-President remains Mr. Rory Keogh from GOMACO.

#### **Resignation and Nomination of Directors**

The mandates renewed as of 22 June 2023:

- Jan Deja, Polish Cement Association
- Ulrich Nolting, InformationsZentrum Beton

The Board of Director is composed of the following members as of 22 June 2023:

- César Bartolomé, Oficemen
- Edwin Vermeulen, Cement&Beton Centrum
- Hervé Camerlynck, Febelcem
- Koen Coppenholle, Cembureau
- Jan Deja , Polish Cement Association
- Rory Keogh, Gomaco
- Ulrich Nolting, InformationsZentrum Beton
- Stéphane Nicoud, Holcim
- Sebastian Spaun, VÖZ







# **MEMBERSHIP & PARTNERSHIP SITUATION IN 2023**

#### In 2023, EUPAVE had 9 Full Members:

- Cembureau
- Cement&Beton Centrum
- FEBELCEM
- GOMACO
- InformationsZentrum Beton
- Holcim
- Oficemen
- Polish Cement Association
- VÖZ



















#### EUPAVE had 11 Associate Members including one NEW! member:



- Britpave
- Deltabloc
- ERMCO
- GIVASA
- · Gütegemeinschaft Betonschutzwand & Gleitformbau e.V.
- Norm Cement
- Power Curbers
- Somero
- Turkcimento
- Wirtgen

























#### EUPAVE had 15 Partners including 3 NEW! Partners::



- AB-Roads
- · Chem-crete
- KWS
- MIT Mess- und Prüftechnik GmbH
- Otto Alte-Teigeler
- Otto Brentzel
- Robuco
- · Roos Groep
- Specbea
- TRBA
- ZBS
- Zeta Industry
- Christian Paglia
- PERC Mark Snyder
- Sepehr Ghafari
- Michael Darter



























# MEMBERSHIP & PARTNERSHIP SITUATION IN 2023

Our new Members and Partners



www.norm.az

Norm Cement is the largest cement plant in the South Caucasus, with a production capacity of 5,300 tons of clinker per day and 2.1 million tons of cement per year. The plant is designed according to the most advanced technology, with process equipment supplied by leading manufacturers from European countries. This ensures a high quality output, as well as safety and operational efficiency. Currently, the plant produces 8 grades of cement. Norm Cement is the first cement plant in the South Caucasus region to receive the API (American Petroleum Institute) certificate and the first manufacturer to produce oil-well cement, with Q1 and A10 certification.



MIT Mess- und Prüftechnik is a manufacturer of smart NDT measurement devices used for quality control and assurance during road construction (applicable for concrete as well as for asphalt pavement). Beside dowel bar scanners MIT provides state authorities, the construction industry and consultants with thickness measurement devices, reflector plates, a cable detector, software solutions and a range of services. MIT devices running successfully with more than 1.000 customers worldwide, especially in Europe and North America. A number of national and international standards have been established on the basis of MIT's technology.



**Dr. Christian Paglia**, Director of the Institute of Materials and Constructions at the University of Applied Sciences of Southern Switzerland. Ph. D in Material Science at the Swiss Federal Institute of Technology,

Researchgate

www.mit-dresden.de



**Professor Michael I. Darter**, PE, PhD, Emeritus Professor of Civil & Environmental Engineering at the University of Illinois and Principal Engineer for Applied Research Associates, Inc. Dr. Darter is an internationally recognized expert in pavement research.

Researchgate

#### INTERNAL ORGANISATION

We held one ordinary General Assembly on 22 June 2023 and one Extraordinary General Assembly on 6 December 2024.

The Extraordinary General Assembly was held in order to vote the revision of EUPAVE's bylaws according to a new Belgian Royal Decree.



Board and Technical & Promotion Committee meetings were organised on:

- 12 January 2023
- 20 April 2023
- 19 September 2023
- 6 December 2023

Strategic Board meetings were organised to discuss the future of EUPAVE. The meetings were held on:

- 19 September 2023
- 6 December 2023



#### **Working Groups**



online meetings were held by the working groups.

- The Sustainability & Resilience WG [S&R WG) The Concrete Safety Barriers WG (CSB WG) to promote the sustainable benefits of concrete pavements (open to both Members and Partners)
- The EU Advocacy WG (EU Adv WG) to advocate at EU level the use of cement and concrete in • The Concrete Pavement Statistics WG (CPS European transportation infrastructure (open to Members)
- The **Best Practices WG (BP WG)** to exchange know-how and best practice amongst our Members and Partners (open to both Members and Partners)
- to follow the standardisation activities, monitor developments and undertake promotion actions on road restraint systems (open to Members only).
- **WG)** to gather statistical data on the use of concrete in transportation infrastructure (open to Members only)
- The Communications Tools WG (Comm tools WG) to develop EUPAVE's website, newsletter and other tools (open to Members only)

January	30: CPS WG
February	1: S&R WG
March	21: CSB WG
April	5: EU Adv WG 27: CPS WG
May	17 & 31: EU Adv WG
July	14: EU Adv WG 17: CSB WG and S&R WG

August	24: CSB WG
September	4: EU Adv WG
October	11: EU Adv WG 20: CSB WG (meeting) 25: CPS call with Asli Ozbora
November	14: EU Adv 15: BP WG 22: S&R WG
December	14: CSB WG 15: EU Adv WG



meetings were organised within the EU Advocacy WG to develop a new Lobbying Action Plan.

- 18 January
- 1 February
- 17 February
- 6 March
- 14 April
- 28 September 2023

## 14th International Symposium on Concrete Roads

In 2023, EUPAVE together with the Polish Cement Association organised the 14th International Symposium on Concrete Roads.

In addition to the International Technical Programme Committee meeting organised on 26 January 2023,



meetings were also organised between EUPAVE and the Polish Cement Association regarding the organisation of the Symposium.

20 January, 24 March, 17 April, 8 and 22 May and 5, 12 and 19 June 2023.



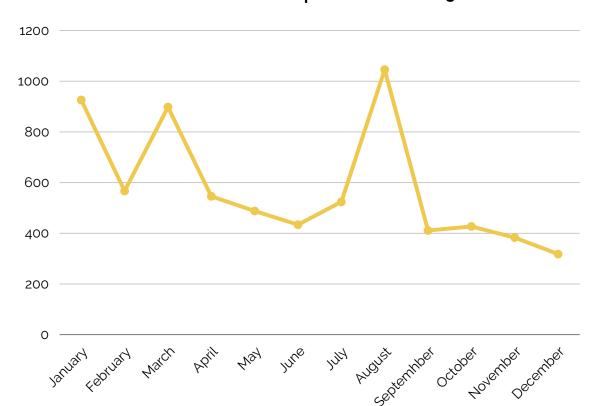
## COMMUNICATION

## Website

articles were published in 2023

6968 visitors from July 2023 till December 2023

#### Number of visitors per month in 2023



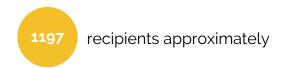




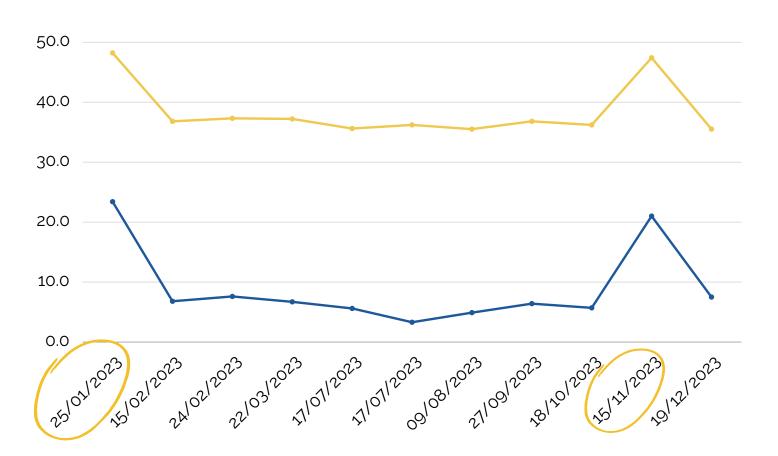
## COMMUNICATION

## **Newsletter**





#### Opened & clicked newsletters in 2022 (%)



In January 2023, the most clicked link was the article on the registration for the 14th International Symposium on Concrete Roads.

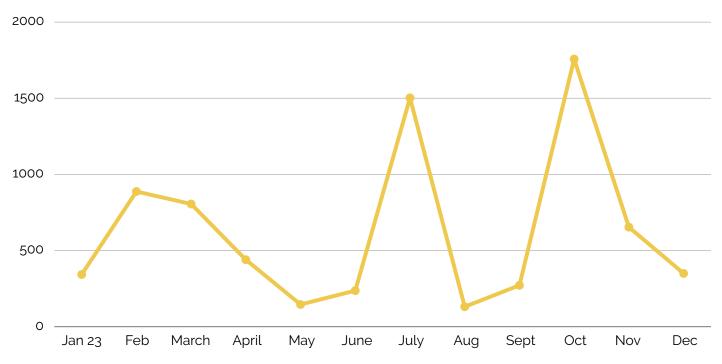
In November 2023, the most clicked link was the registration form to our EU Debate.





#### Post impressions in 2023

An **impression** is the number of times users saw the post on LinkedIn.



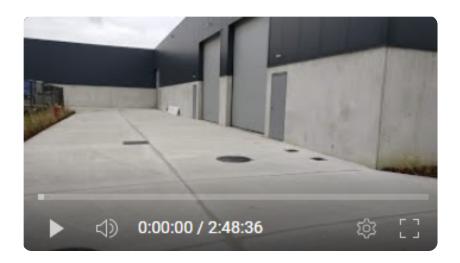




In 2023, we shared two recordings of our events on YouTube.



The EUPAVE Webinar "Optimal compaction for a durable concrete surface" held on 9 March 2023. The video was viewed 448 times.



And the Best Practices workshop, "Outdoor industrial and heavy-duty concrete pavements", held on Wednesday 19th April 2023. This video was viewed 17 times.

#### **Publications**



Following the release of EUPAVE's infographic "Concrete Pavements make roads more sustainable", EUPAVE's working group on Environmental Strategy released fact sheets focusing on the following items;

- "High Albedo" in June 2020,
- "Less fuel consumption" in October 2020,
- "100% Recycling" in December 2020,
- "Climate Resilience" in September 2021. and
- "Long Service Life" in August 2022.

The fact sheet "Sustainable Water Management" was released in January 2023.



In October 2023, EUPAVE released a compilation of fact sheets a compilation of fact sheets "Sustainability and Resilience in the heart of concrete roads".

The compilation gathers the 6 fact sheets and an introduction and conclusion written by Luc Rens.

## **Events**



## "Optimal compaction for a durable concrete surface"

On Thursday 9 March 2023 EUPAVE held a technical webinar titled "Optimal compaction for a durable concrete surface", attended by 60 global participants.

Mr. Luc Rens, Managing Director of EUPAVE, opened the event by welcoming the participants and presenting EUPAVE and its activities. Luc also gave a short introduction on optimal compaction before introducing the three speakers.

Mr. Paul Jaworksi from Minnich Manufacturing started the webinar with a presentation on "Applied Vibration against Concrete Mechanical Resistance and its Impact on Carbon Neutrality".

He was followed by Dr. Michael Ayers, President of Global Pavement Consultants, Inc who showed cases of problems and how to remediate.

Mr. Rory Keogh, recently retired as Managing Director of Gomaco International and newly consultant, explained how monitoring and controlling of compaction by a slipform paver can be done in practice. The tile of his presentation: "Slipform Paving with Auto-Vibe".

The presentations were followed by a Q&A session.

You can find the recording of the webinar on our Youtube channel





#### **Events**



EUPAVE Best Practices workshop, 19 April 2023

## "Outdoor industrial and heavy-duty concrete pavements"

On Wednesday 19th April 2023, EUPAVE held in Brussels its 8th workshop on Best Practices in Concrete Paving. The theme for this year was "Outdoor industrial and heavy-duty concrete pavements". It was organised as a hybrid event, using a professional sound and video-system from the Dutch "Betonhuis" ("Concrete House"). The event was attend by around 60 participants online and in Brussels.

Concrete is extensively used for the construction of internal floors of factories and warehouses as well as for external pavements such as parking, delivery and storage areas and hard standings for heavy use in port and airport areas. When designed and constructed properly, concrete floors and external pavements will provide excellent serviceability over a long period.

Mr. Luc Rens, Managing-Director of EUPAVE, opened the workshop and welcomed the participants. He introduced EUPAVE, its mission and gave an overview of the previous workshops on Best Practices.

He then presented the design and construction of industrial pavements and the comparison with road pavements. Dr. Anne Beeldens, Consulting engineer and owner of AB-Roads, showed how to build durable heavy-duty pavements.

The third presentation was an "Analysis of critical load arrangements for stacked containers for the design of roller compacted concrete industrial pavements" by Halil Ceylan, Professor at Department of Civil, Construction, and Environmental Engineering at the Iowa State University.

After the coffee break, Myron Hillock, Sales Director at Somero Enterprises, Inc. introduced "Levelling and compaction equipment for industrial floors and pavements".

Jeroen de Vrieze, Technical Marketing & Statistics at Betonhuis, presented a case study "The Container Exchange Route in Rotterdam: why concrete was chosen".

The presentations were followed by a Q&A from both the live audience and the on-line participants. For the in-person participants, the afternoon ended with a pleasant networking cocktail.



#### **Events**



EUPAVE/FEBELCEM Workshop at Matexpo 2023, 7 September 2023

## "Innovative case-studies on concrete paving"

The Federation of the Belgian Cement Industry, FEBELCEM, and the European Concrete Paving Association, EUPAVE organised on 7 September 2023 a joint workshop on "Innovative case-studies on concrete paving" at MATEXPO 2023, Kortrijk. MATEXPO is a biennial international trade fair for building equipment at Kortrijk Xpo. As the third largest trade fair of its type in Europe, it has an established reputation and receives more than 40,000 visitors.

Mr. Luc Rens, Managing Director of EUPAVE opened the workshop with a short introduction. Then, representatives of four manufacturers of concrete paving machines - POWER CURBERS, GOMACO, WIRTGEN and SOMERO, all members of EUPAVE, introduced their innovations.

The first presentation was given by Juan-Luis Fumadó, International Sales at POWER CURBERS Company, LLC. Mr. Fumadó presented different case studies that POWER CURBERS have been working on. He started with a tsunami retention wall in Japan, the NASA airport at Cape Canaveral A Q&A followed the presentations. (USA), race track kerbs in France and others.

Mr. Patrick Zanen, Global Director of Business Development at GOMACO introduced the multifunctional concrete finishers, allowing the construction of roads and channels in high slopes. He also showed some new developments, amongst which an electrically driven slipform paver for kerbs.

Mr. Martin Datzert, Product Manager at WIRTGEN GROUP, described the innovative developments by Wirtgen in slipform paving, e.g. the new concrete spreading machines preceding the slipform paver and the advanced steering and control tools for machine operators. Emphasis was placed on the many training and assistance options that are offered.

Mr. Glenn Stobart, Territory Manager at SOMERO Enterprises, Ltd gave a presentation of "3D Concrete Paving for Commercial and Industrial Areas: the Future is Now". He started his presentation exposing the advantages of concrete pavements such as its strength, life cycle, durability and less maintenance. He then presented the concrete paving applications using laser screeds and explained the functioning of 3D integration. He ended his presentation showing the areas of operation where SOMERO is present: external pavements, pervious concrete, tunnel construction, etc.

Participants were invited by Patric Zanen to the exhibition stand of DE BRUYCKER-KEMP to take a look at the GOMACO battery-powered slipform paver.

## **Events**



EUPAVE/FEBELCEM Workshop at Matexpo 2023, 7 September 2023

"Innovative case-studies on concrete paving"





EUPAVE workshop during PIARC World Road Congress, 4 October 2023

#### "Optimised and sustainable concrete pavement concepts for the future"

EUPAVE participated in the PIARC World Road Congress held in Prague (Czech Republic) from t the 2023 World Road Congress in Prague from 2 to 6 October 2023. 4 of our Members and Partners, HOLCIM, IECA, MIT Dresden, and OAT were also attending the Congress.

We hosted a workshop entitled "Optimised and sustainable concrete pavement concepts for the future" on October 4th.

Luc Rens gave the introduction. Then Mauricio Esguerra, co-founder and CEO of Magment and Tim Alte Teigeler, Head of research and development at OAC gave a presentation on "Inductive charging - adding new functions to concrete pavements".

Eugen Florescu, Group Marketing, Head of Road Segment at Holcim introduced the "Optipave system, the optimized rigid pavement" with a focus on "a successful story of Holcim Ecuador". Next, Dr. Ir. Elia Boonen, Researcher, Technological advisor & Deputy Head of Division at the Belgian Road Research Center shared "the contribution of water pervious pavements to a sustainable water management".

Dr. Ir. Anne Séverine Poupeleer, Head of division of Roads and Traffic of Flemish-Brabant (Belgium) and Member of PIARC TC 1.1 concluded the event.





#### **Events**



EUPAVE EU Debate, 5 December 2023

#### "Deployment of innovative infrastructure for climate-neutral mobility"

On Tuesday 5 December 2023, EUPAVE hosted its EU Debate on the theme "Deployment of innovative infrastructure for climate-neutral mobility". The event took place at EUPAVE's new office in the Hubb, where also EMBUILD, the former Belgian Construction Confederation is located.

Stéphane Nicoud, President of EUPAVE, opened the event and introduced EUPAVE. He then introduced the main topic of the event: dynamic charging and Electric Road Systems (ERS). Mr. Nicoud concluded his opening speech by shedding light on the Alternative Fuel Infrastructure Regulation (AFIR).

EUPAVE believes that combining dynamic charging with concrete pavements will lead to the development of highly sustainable and resilient solutions for road transport, particularly tailored for commercial vehicles.

The first speaker of the evening was Mr. Mauricio Esguerra, co-founder and CEO of MAGMENT. Despite weather conditions preventing his physical presence, Mr. Esguerra gave a virtual presentation on "Scaling wireless charging infrastructure with magnetizable building materials".

Continuing the discourse on innovative infrastructure, Mr. Toon Wassenberg, Mobility Advisor, sustainability and public affairs from SIEMENS, presented the potential of dynamic charging of Heavy Duty Vehicles on motorways.

Following the presentations, a debate unfolded about the challenge of providing sufficient charging infrastructure in Europe. The synergy of ERS and stationary charging infrastructure was highlighted as well as the need for more pilot projects and the EU funding that is required to do so.

EUPAVE members remarked that the preferred pavement choice goes to long-life maintenance free structures, precisely what is offered with concrete pavements.

All participants joined a cocktail reception allowing further networking.

EUPAVE is dedicated to leading progress in road transport for a climate-friendly future.



# 14th International Symposium on Concrete Roads



25-28 June 2023

#### "Concrete Roads to a Green World"

Five years after Berlin, the 14th International Symposium on Concrete Roads was held from 25 to 28 June 2023 in Krakow, Poland, in the DoubleTree by Hilton Hotel. The organization was reception on Sunday evening. Jan Deja, Director in the hands of the Polish Cement Association, together with EUPAVE, under the honorary patronage of the Polish Ministry of Infrastructure and the General Directorate for National Roads and Highways, and with the support of the World Road Association PIARC and the International Society for Concrete Pavements ISCP.

The motto of this edition, "Concrete Roads to the Green World" was present throughout the programme. In addition to the classic technical themes such as design, materials, construction and applications, a lot of attention was paid to sustainability themes like the European Green Deal, circular construction and the economic and social aspects of concrete roads.

Around 220 participants were present to listen to over 70 presentations during the 3-days conference, covering 12 different themes plus a workshop on "Concrete Roads 4.0".



#### **Opening Ceremony and Gala Dinner**

The event started with an enjoyable welcome of the Polish Cement Association and Luc Rens, Managing Director of EUPAVE kicked off the Symposium.

The Opening Ceremony on Monday morning included welcomes speeches from Jan Deja, Luc Rens, Krzystof Kieres, President of the Polish Cement Association, Stéphane Nicoud, President of EUPAVE, Nazir Alli, President of PIARC, Lucio Salles de Salles, Member of the Executive Committee of ISCP, Zbigniew Kotlarek, President of the Polish Road Congress and representatives of the two main sponsors, OAT and GORAZDZE.

It was followed by an Opening session with contributions from several Polish keynote speakers, sharing the Polish experiences in concrete road construction. Dr. Mark Snyder from the U.S. ended this session with a presentation on "The past and future of load transfer systems for jointed concrete pavements".

Following a day of sessions, the Polish Cement Association organized the Gala Dinner at the spectacular Wieliczka Salt Mine.



# 14th International Symposium on Concrete Roads

#### **Technical visits**

The 2 worksite visits organized Tuesday afternoon were a great success.

One group visited the local concrete roads and bicycle paths in Skawina and the concrete sections in tunnels on S52 in Krakow. Another group went to the section of concrete on A1 Pyrzowice-Czestochowa motorway and visited a test section, where GFRP (glass fiber reinforced polymer) reinforcement bars were used instead of steel for the construction of a CRCP (continuously reinforced concrete pavement) section. The project was executed and presented by Mr. Igor Ruttmar from TAP, STRABAG.





#### **Closing Ceremony**

The event came to an end Wednesday 28 June 2023 with the Closing Ceremony.

During the ceremony, Luc Rens introduced the "Carlos Jofré Award" which is dedicated to our colleague Carlos Jofré who passed away on 10 December 2020. It is offered by OFICEMEN, IECA and EUPAVE. It recognizes the whole career of professionals who have a long experience and relevant works in fields related to concrete pavements and cement treated bases. For the first edition, Michael Darter, internationally recognized expert in pavement research and consultant, and participant to all 14 editions of the Symposium, received the trophy. He was also offered financial compensation of 500 EUR for expenses related to the Symposium and an 18-month partnership with EUPAVE.

Rory Keogh, vice-president of EUPAVE, gave the Award of the "Best Technical Paper" to Frederic Otto from Aachen University RWH and his coauthors, M. Oeser, J. Rickwärtz, S. Stevic, J. Kolb, K. Hameyer, M. Niedermeier, R. Grajcarek for their paper "New construction concepts for the realization of electric road systems with dynamic inductive power transfer technologies". Stephane Nicoud, president of EUPAVE, gave the Award of the "Best Marketing Paper" to James Mack (CEMEX USA) and his co-authors, Greg Dean (ACPA) and Leif Wathne (CPTech Center) for their paper "Improving pavement resiliency to flooding: a case for concrete pavements".



## **REPRESENTATION**

# Participation in events and meetings



30 January: Meeting Australian Society for Concrete Pavements and EUPAVE



7 February: ERF Road Restraint System Working Group



28 March: ERTRAC Plenary meeting



27 April: ERF Road Restraint System Working Group



6 July: ERTRAC 20 Years anniversary conference

ConPaveStruc 2023

29 & 30 August: ConPaveStruc 2023, South Africa Luc Rens gave a presentation entitled "Towards on improved behaviour of CRCP thanks to active crack control".



2 October: 20 Years anniversary CEDR



2-6 October: PIARC World Road Congress with EUPAVE workshop (see page 15).



27: ERF 25th Anniversary



#### REPRESENTATION

## Collaboration with stakeholders

#### **ISCP (International Society for Concrete Pavements)**

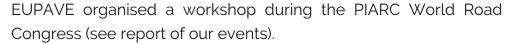
Mr. Luc Rens continued in 2023 his position as a Director of the Board in ISCP and participated in the conference calls of the Board Meeting. I



n August 2023, Luc was replaced by Jeroen de Vrieze.

#### PIARC (World Road Association)

In 2023, Luc Rens participated as corresponding member in the Technical Committee 4.1 Road Pavements.





#### **ERF (European Road Federation)**

EUPAVE continued its membership of the European Union Road Federation and participated in in the ERF working groups as well as other activities:



- → ERF Plenary Assembly
- → ERF WG on Road Restraint Systems

#### **ERTRAC**

#### (European Road Transport Research Advisory Council)

EUPAVE remained a member of ERTRAC in 2023.



#### **Australian Society for Concrete Pavements (ASCP)**

Following the signature of the MoA in 2021, EUPAVE maintained regular contacts with ASCP by exchanging information on technical and environmental data on concrete pavements, on pavement statistics, events and resources.



