

**EAPA MAGAZINE 43 - DECEMBER 2018**



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## INTRODUCTION

### DEAR EAPA MEMBERS, DEAR ASPHALT FRIENDS,

Welcome to the 43<sup>rd</sup> issue of the EAPA Magazine.

In this Magazine we will give you as usual an overview of what happened in Brussels, in Europe and outside Europe regarding asphalt in the past 7 months.

For me this EAPA Magazine is a special one, as it will be the last one for me because of my retirement at the end of this year. After having been active in the asphalt pavement area for about 40 years it is time for me to focus more on my family and my hobbies. I will continue to assist EAPA in the future but I will reduce my EAPA activities from 115% to 15%. Carsten Karcher will take over my role as EAPA Secretary General. In the past 5 years when we worked as a team, Carsten learned everything needed and therefore it will be a smooth transition. My technical tasks will be taken over by Breixo Gómez-Mejide and I will assist him where needed in a hidden way in the next years. More details about the changes in EAPA Secretariat can be found in this Magazine.

Looking back at those 40 years, of which I worked for EAPA for 17,5 years, many things changed. We obtained

more knowledge and experience, the asphalt plants, rollers and paver were equipped with electronic devices and later on with computer applications to collect and store data. Also several new types of asphalt mixtures were developed like SMA, Porous Asphalt, Double Layered Porous Asphalt, Thin Layers, Ultra-Thin Layers, etc. We also got European Asphalt Standards and European test methods. Noise reduction became important and in the last years Rolling Resistance is getting more attention.

It is good to know the history, but it is more important to look at the future. There are three items I would like to mention here in my last "Introduction"; that are digitalisation in the asphalt industry, the collaboration with road authorities to stimulate innovation and the move to automated vehicles

The digitalisation in the asphalt sector started many years ago. Now we are able to collect more data than ever before. However, the data itself are not so relevant, important is the information they can provide. The digital information that is made available will be used and shared with others. That

could be colleagues, quality managers, clients / road authorities and even equipment. At this moment the CECE / EAPA Ad-hoc Group "Road Equipment Communication Protocol" is working on a Machine to Machine communication protocol. However, this is only a small piece of a large puzzle. When we look at a project, e.g. a project like described in the EAPA publication "The Ideal Project", there are many stages in that project and in each stage of that project (digital) information is generated that has to be transferred to the next stage of that project. In the ideal situation all that information could be stored in one big database "in the cloud" and everybody with an access-key could be able to retrieve information from that system or to add information to it. No one has the right to see all the information, everyone has access to the area that is meant for him or her. In the end you would have all the information of one project (of one part of a road) in one database, from design stage, planning, pavement design, mixture design, mixture production, mixture transport, paving, compaction, quality control until the road condition assessments during many years. If we could achieve this, we would be able to trace back why certain failures occurred in the road and e.g. how long a certain mixture would last etc.

When we would see this database as

a spot on the horizon and as a future direction, we have to create a digital road map to get in that direction. In the end it might be different from what I described, but we will certainly move in such a direction.

For this road map a close cooperation with road authorities is needed. A close cooperation with road authorities is also needed to innovate in the asphalt industry. Innovation will lead to better products for the clients; better in durability and sustainability, so better for the environment and for reducing CO<sub>2</sub>. A closer cooperation with the road authorities is also needed to prepare the road infrastructure for the autonomous driving vehicles that will use the road in the future and our future roads. We have to start working on that soon too.

So, all in all a lot of challenges for 2019 and for the future.

I am looking forward to meeting you at the EAPA Symposium 2019 in Paris where we will discuss the above mentioned items or during the E&E Congress 2020 in Madrid. And enjoy reading this Magazine.

Egbert Beuving,  
EAPA Secretary General.

## CHANGES EAPA SECRETARIAT PER 1-1-2019

At the end of 2018 Egbert Beuving will retire and Carsten Karcher will become EAPA Secretary General on 1 January 2019.

Carsten will take over Egbert's tasks regarding general EAPA activities, the EAPA Secretariat, the EAPA General Council Assembly, the Executive Committee and the Directors' Group and will continue his current activities in the area of Health, Safety and Environment.

Breixo Gómez-Meijide joined EAPA in October 2018 as Technical Director and is the focal point of EAPA for technical issues. He is now the secretary of the EAPA Technical Committee and is also involved in Health, Safety and Environment items. He will contribute to the European standardisation processes in CEN Committees related to asphalt. He will also collect and prepare relevant information for members, e.g. preparation of Position Papers, Asphalt in Figures, guidelines, and documents, and contribute to the organisation of the E&E Congresses and EAPA Events in the Technical Programme Committee and support Carsten wherever needed.

After 1 January 2019 Egbert will continue to support EAPA but, of course, in a limited way. That means he will assist Carsten and Breixo when needed and

he will continue to act as chairman of the Organising Committee of the E&E Congress 2020 until this committee finalised its task and he will continue as chairman / convenor of CEN TC227 WG1 for about two years to be able to transfer his knowledge and experience to Breixo. It is expected that this will be on average 2 days per month. For this period, his present EAPA e-mail address (egbert@eapa.org) will remain active.

Short introduction of the new EAPA Technical Director Breixo Gómez-Meijide

Breixo was born in Spain and studied at the University of A Coruña where he got his MSc degree in Civil Engineering in 2009.

After carrying out pre-doctoral stays in different countries, such as Singapore, Italy and UK, Breixo finished a PhD in Civil Engineering, with the maximum qualification "Excellent – Cum Laude" in 2015 and obtained the Doctorate Extraordinary Award at The University of A Coruña. After that, he worked as a Research Fellow at The Nottingham Transportation Engineering Centre (UK), where he supervised four PhD Students.

His main research aim has been always the achievement of Sustainable

Infrastructure Systems, which produce no environmental, social and economic impact. In this regard, the three main topics that he developed are: (1) new indicators for sustainability assessment in civil engineering; (2) recycling of waste materials for construction of new infrastructures; and (3) self-healing materials for durable and resilient infrastructures that require no maintenance.

Breixo was involved for three years in the HEALROAD project: Induction heating asphalt mixes to increase durability and reduce maintenance costs and disruptions, funded by the European Infravation Programme (ERA-NET Plus on Infrastructure Innovation). The international project included Academic and Industrial Partners from Spain, UK, The Netherlands, Germany and Belgium.

He taught at the Technical School of Civil Engineering of The University of A Coruña over the courses 2013/2014 and 2014/2015 on the subjects of Highways Engineering and Highways and Airfields. He also collaborated to the subject Urban Services as invited lecturer and to the MSc Transportation Infrastructure Engineering at The University of Nottingham, with lectures on the Use of Waste Materials in Civil Engineering and Self-healing Materials.



Breixo is co-author of around 40 research publications, including one book, 3 chapters in international books, more than 20 scientific articles and 10 presentations in the most important conferences on transportation engineering.

## EAPA COMMITTEES

### JOINT EAPA EXCO AND DIRECTORS' GROUP

On 21-22 November 2018 there was a joint meeting of the EAPA Executive Committee and the EAPA Directors' Group in Ljubljana, Slovenia.

The meeting started with EAPA Secretariat and Financial items.

At agenda item "Communication, Innovation, Dissemination and Education" several items were discussed, like the communication strategy for 2019, possible EAPA Awards, EAPA Symposium 2019, E&E Congress 2020 in Madrid and possible locations for the upcoming E&E Event 2022 and the E&E Congress 2024.

It was decided to create an EAPA Communication Committee and to have an EAPA Communication Manager.

For the "Round table discussion" members of the ZAS Executive Committee (ZAS is the Slovenian Asphalt Pavement Association) joined the meeting. Here Slovenko Henigman, the ZAS President, started with a presentation showing the Slovenian situation and the challenges they are facing in Slovenia. After this presentation each country present provided short information about issues of particular interest/importance they are

working on at this moment. This to inspire other countries or to ask for ideas and suggestions. Also a question of Turkey regarding the warranty period of the various asphalt layers was discussed and the EAPA members explained their national regulations.

Juan Jose Potti (Asefma) explained the approach of the World Road Day, which was held on 11<sup>th</sup> October 2018. The goal of the World Road Day is to show the importance of roads for the people. The date of 11<sup>th</sup> October was chosen because on that date the 1st World Road Congress was held 110 years ago.

This history of Foundation Eurasphalt was shortly explained and the changes in the board of Foundation Eurasphalt were mentioned.

At agenda item "EU issues - What is going on in Brussels" legislation, initiatives and policies affecting the asphalt industry in Europe were discussed.

There was a short report of the EAPA Health, Safety & Environment Committee meeting and the possible impact of IMO 2020 was discussed.

After the short report of the EAPA Technical Committee an interesting discussion started regarding the challenges and opportunities the digitalisation in the asphalt industry could bring. It was decided to discuss this item in more detail during the next meeting.

The next joint EAPA Executive Committee & Directors' Group meeting will be held on 9 April 2019 in the EAPA offices in Brussels.



*Slovenko Henigman presenting ZAS*



*Joint EAPA ExCo and Directors' Group meeting in Ljubljana*

## EAPA AP&EM GROUP

The EAPA Asphalt Plant and Equipment Manufacturers (AP&EM) Group had a meeting on 11 October 2018 in Paris.

The two most important items of this meeting were the harmonisation of machine to machine (M2M) communication protocol in road building and the future activities of the EAPA AP&EM Group.

The progress made by the CECE / EAPA Ad-hoc Group "Harmonisation of M2M Communication Protocol in road building" was presented and discussed. The data format of M2M Communication has been defined. The intention is to organise a meeting during the Bauma where the heads of the companies (that will use the M2M Communication protocol in the equipment they produce) and some heads of construction companies meet to sign a document to obtain green light for technicians to continue to work on the M2M communication protocol. So, the top management has to agree on creating one standard and after that the technical level can continue working on the protocol.

The first field test, to test the communication and the communication protocol, will be done after the Bauma.

Which type of communication shall be used, has to be defined by the contractors.

Future activities and priorities of the EAPA AP&EM Group are:

- M2M communication
- Digitalisation
- Integration to BIM system
- Future requirements
- Other technical issues.

As these activities can be seen as the beginning of a huge change, it was decided to broaden the AP&EM Group by including the contractors / EAPA TC members.

The future activities mentioned are important topics for the contractors and by attending the AP&EM Group meetings they provide feedback during the meetings.

Other items discussed were electro mobility, CECE activities, (future) transport and the digital road map.

The next meeting of the AP&EM Group will be held on 1 March 2019 in Paris.

## EAPA HSE COMMITTEE

The latest HSE Committee meeting was held on 23<sup>rd</sup> October 2018 in Brussels with 19 participants.

During this one-day meeting the participants discussed various topics related to environment, safety and health with relevance for the European asphalt industry.

As environment items the committee members exchanged information about the work done in the EAPA Task Group "Update PCR" for the Product Category Rule (PCR) and the Environmental Product Declaration (EPD) for asphalt mixtures and asphalt pavements. The work of this group is a contribution to the CEN standardisation process for EPDs of construction products. Furthermore, the items waste of other industries in asphalt, EU end of waste legislation, Circular Economy, and the participation of EAPA in the European Tyre and Road Wear Particles Platform were discussed.

Under the agenda topic "safety" committee members exchanged information about national campaigns to raise awareness for road workers, work zone safety, and safety data sheets for asphalt mixes.

Many different topics in the field of health were discussed, amongst those

e.g. ongoing studies related to asphalt worker's health, dust measurements on milling machines, handling of silica dust, and the measuring of asphalt fumes.

After many years of chairmanship of the EAPA HSE Committee Gülay Malkoc decided not to apply for the election of the chairman for this committee for the next two years. Mats Wendel from PEAB Sweden was unanimously elected as her successor. The EAPA HSE Committee thanked Gülay for all her great work for this committee in the last years and wished Mats all the best for his task.

The next meeting will be held on 4 April 2019 in Paris.



## EAPA TECHNICAL COMMITTEE

The EAPA Technical Committee (TC) had a meeting on 24 October in Brussels.

The progresses of CEN TC 227/WG1 "Bituminous Mixtures", CEN TC227 WG6 "Sustainability" and CEN TC336 WG1 "Bituminous Binders for Paving" were reported and relevant items were discussed.

It was decided to update / revise the EAPA paper "Asphalt in railway tracks". Regarding "Rejuvenators": Thomas Koudelka presented "Practical experience with the use of rejuvenators". Comments received regarding the recently published EAPA Rejuvenators paper were discussed and it was decided to update the Rejuvenators paper in one or two years from now, taking into account the comments that will have been received until then.

There was a short update regarding the new EAPA paper "Heavy duty pavements – the Arguments for Asphalt". The item "Future road requirements" was discussed, a plan was formulated and a document will be created for the next EAPA TC meeting.

The suggestions made in a draft "Digital Road Map for the asphalt sector" were discussed and based on the discussions a revised document will be created for the next EAPA TC meeting.

There was a short report of AP&EM Group meeting held on 11 October 2018 and the proposal of expending the AP&EM Group was approved.

It was decided to organise a Joint EAPA Eurobitume TC meeting in the first half of 2019 and possible agenda items were discussed.

Laurent Porot presented the results of two Horizon 2020 recycling projects.

Knut Johannsen was (re)elected as EAPA chairman for the period 2018 – 2020.

Possible subjects for the EAPA Symposium 2019 were discussed and an update regarding the E&E Congress 2020 was presented.

The next EAPA TC meeting will be held on 3 April in Paris.



EAPA TC meeting

## EAPA GCA

On 13 June 2018 the EAPA General Council Assembly (GCA) 2018 was held in Berlin.

At agenda item "Internal Affairs", the financial report of 2017 was presented and approved, and the financial progress of 2018, as well as the proposed budget for 2019 and the EAPA fee structure for 2019, were presented.

Under "Report of the EAPA Executive Committee for 2017-2018" it was mentioned that EAPA will participate in a joint Lung Function Literature Study.

There were Activity Reports of EAPA Committees. It started with the Health, Safety & Environment Committee where Ms Gulay Malkoc, chairlady of the HSE Committee, presented the activities of the HSE Committee during the last 12 months. It was decided to create a Task Group for Updating the Product Category Rules. Also the use of Waste Plastic in asphalt was discussed.

Knut Johannsen, the chairman of the EAPA Technical Committee, gave a short overview of the activities of the Technical Committee of the last 12 months and Egbert Beuving, as chairman of the EAPA Asphalt Plant & Equipment Manufacturers Group, gave a short overview of the activities of this group.

Four EAPA Position Papers were approved to be published:

- "EAPA Recommendations for the use of rejuvenators in hot and warm asphalt production – Long version". This document will be available for EAPA members only.
- "EAPA Recommendations for the use of rejuvenators in hot and warm asphalt production (Short version)."
- "EAPA Guide regarding Handling and Use of Crystalline Silica on the asphalt mixing plant - A Good Practice Guide on Asphalt Workers Health Protection"
- "EAPA Paper Heavy Duty Surfaces – the arguments for SMA". This is an update of the version of 1998.
- The three latter publications can be downloaded from the EAPA website at [eapa.org/eapa-position-papers](http://eapa.org/eapa-position-papers).



Gulay Malkoc chairlady of HSE Committee

Three new EAPA Executive Committee members were elected: François Chaignon (Routes de France), Brian Kent (MPA, UK) and Ralf Pomp (DAV, Germany). John Kruse Larsen (the Nordic countries), Ayberk Ozcan (ASMUD, Turkey), Juan Jose Potti (Asefma, Spain) and Slovenko Henigman (ZAS, Slovenia) were re-elected.

In a short EAPA Executive Committee meeting that was held after this GCA John Larsen was re-elected as EAPA President and François Chaignon was elected as EAPA Vice-President.

Under agenda item "Asphalt Promotion" Carsten Karcher, Director of EAPA, gave an overview of the Asphalt Advantages activities of the past 12 months. Horst Erdlen continued by presenting the ideas and plans he and Susann Groß-Matthäi created to stimulate EAPA members to become more active regarding Asphalt Advantages.

This year's EAPA Asphalt Advocate of the Year Award was given to Juan Jose Potti for his excellent work on promoting asphalt on social media. The Asphalt Advocate of the previous year, Horst Erdlen, gave a speech in Spanish where he congratulated Potti. As token of appreciation he gave Potti a nice drawing.

Juan Potti presented the media impact in Spain of the first International Road Maintenance Day, which was held on 5 April 2018. They had also developed a special website for this day: [www.roadmaintenanceday.org](http://www.roadmaintenanceday.org). The slogan for 2018 was: "Maintaining Roads is Protecting the Environment". They also organised a photo contest in Spain: **#PhotoIRMD2018**

The next International Road Maintenance Day (IRMD) will be on 4 April 2019; so every first Thursday of April.

John Larsen presented the Danish campaign "Take care of my dad". They used various media in Denmark, like social media and TV. The launch of the campaign was shown on 6 TV-stations in Denmark. There were my responses by Facebook too. A video is available on: [www.youtube.com/watch?v=HZ8AK2t\\_ed4](https://www.youtube.com/watch?v=HZ8AK2t_ed4).

There was a short update regarding the E&E Event 2018, the EAPA Symposium 2019 and the E&E Congress 2020 ([www.eecongress2020.org](http://www.eecongress2020.org)).

The EAPA GCA 2019 will be held on 5 June 2019 in Paris; the day before the EAPA Symposium 2019, which will be held on 6 June in Paris.



*John Larsen and François Chaignon*



*GCA 2018*



*Horst Erdlen (l) and Juan Jose potti (r)*



*Knut Johannsen chairman of TC*

## EAPA NEWS

### NEW EAPA MEMBER FLIEGL

EAPA is happy to announce that the German company Fliegl decided to join EAPA as Associate member in September 2018.

Fliegl Bau- und Kommunaltechnik is part of the globally active Fliegl Group, which exports innovations in the construction industry, agricultural technology, commercial vehicle construction, forestry and energy management to all continents.

The company develops and manufactures products for the construction industry and municipal applications. The portfolio includes tippers, transport systems, water tanks, mixers and mixing systems, and Fliegl push-off technology:

When use of tippers is risky or not possible, push-off trailers working as trucks or semi-trailers can unload all kinds of bulk material safely and under control. With the ASW Asphaltprofi Thermo, asphalt is delivered hot and homogeneous, so that it can be installed with optimum consistency. Comprehensive support rounds out the range of products and services offered by Fliegl Bau- und Kommunaltechnik.

For more information visit [www.fliegl-baukom.de](http://www.fliegl-baukom.de).



### EAPA AWARDS

EAPA Directors' Group recently decided to provide two more awards for people to honour next to the existing EAPA Asphalt Advocate of the year award. Firstly, the EAPA International Collaboration Award related to excellent international collaboration with EAPA. Secondly, the EAPA Asphalt Runner of the year award related to best social media contribution of the year with a picture of runners running on asphalt and the hashtag **#asphaltrunners**, **#runnersloveasphalt**. All awards will be presented every year during the EAPA Symposium or EAPA General Council Assembly. The winner of the EAPA Asphalt Runner of the year award receives a set of "Runners Love Asphalt" shirts.



## EAPA ASPHALT ADVOCATE 2018

The European Asphalt Pavement Association (EAPA) has awarded Juan José Potti, President of ASEFMA (Asociación Española de Fabricantes de Mezclas Asfálticas), the Spanish Asphalt Producers Association, with the "EAPA Asphalt Advocate of the Year" award during its General Council Assembly in Berlin on 13 June 2018.

With this award EAPA honours a member that has demonstrated own initiatives regarding a better asphalt road marketing and the communication of important industry's topics. The Asphalt Advocate must have supported the "Asphalt Advantages" campaign EAPA initiated together with Eurobitume, the European Association of Bitumen Producers. This award was provided for the second time after 2017.

For more information visit the EAPA website on [eapa.org/eapas-asphalt-advocate-of-the-year-2018-award/](http://eapa.org/eapas-asphalt-advocate-of-the-year-2018-award/)



*Juan José Potti showing his award and Carsten Karcher*

## EAPA INTERNATIONAL COLLABORATION AWARD

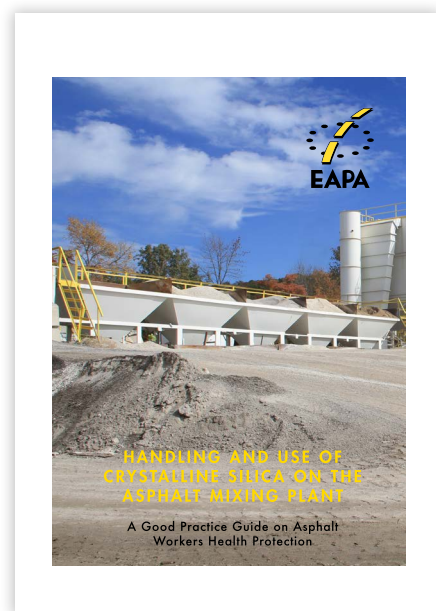
A special edition of the EAPA International Collaboration Award was presented as a Lifetime Award to long-time NAPA President Mike Acott this autumn. He was honoured during this year's GAPA meeting in Atlanta, USA in November 2018 by EAPA Secretary General Egbert Beuving in a short speech. Mike did a tremendous job for the global asphalt industry in the last decades. He was one of the important players during the IARC Monograph for bitumen and the regular exchange of the international asphalt industry in various forms. Mike initiated several scanning tours to Europe which e.g. brought Warm Mix Asphalt and Stone Mastic Asphalt to the USA. Mike will retire January 2019 so it was the right time to present this award to him.



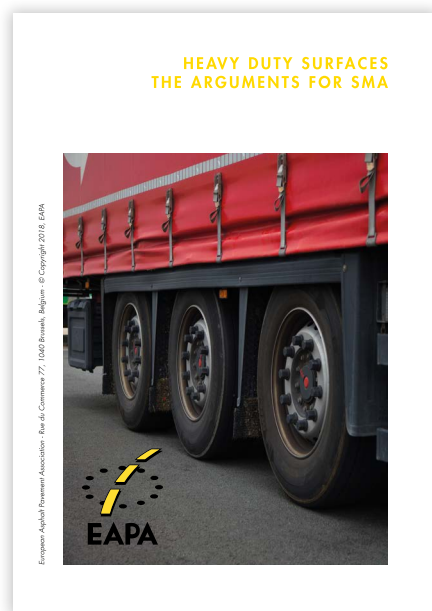
*Award winner NAPA President Mike Acott (right) and EAPA Secretary General Egbert Beuving*

## NEW EAPA POSITION PAPERS

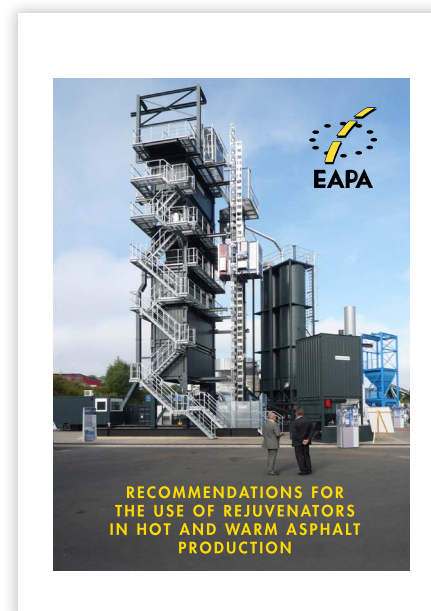
Four EAPA Position Papers were approved in the EAPA General Council Assembly to be published:



"EAPA Guide regarding Handling and Use of Crystalline Silica on the asphalt mixing plant - A Good Practice Guide on Asphalt Workers Health Protection"



"EAPA Paper Heavy Duty Surfaces – the arguments for SMA". This is an update of the version of 1998.



"EAPA Recommendations for the use of rejuvenators in hot and warm asphalt production"



"EAPA Recommendations for the use of rejuvenators in hot and warm asphalt production – Long version". This document will be available for EAPA members only.

The first three publications can be downloaded from the EAPA website on [eapa.org/eapa-position-papers](http://eapa.org/eapa-position-papers).

## EAPA SYMPOSIUM 2019 SAFE THE DATE!

### DATE AND VENUE

The 11<sup>th</sup> EAPA Symposium will be held on 6 June 2019 in La Maison des Travaux Publics, 3 rue de Berri, 75008 Paris, France, close to the Champs Elysées.

### GOAL OF THE EAPA SYMPOSIUM

Under the heading "The future of the asphalt industry" EAPA will:

- Inform the participants about the latest news of the asphalt sector concerning current and future topics
- Provide an excellent opportunity for networking, information exchange and discussions

### TARGET AUDIENCE AND PARTICIPANTS

The target audience of the EAPA Symposium is EAPA members, members of EAPA members, asphalt & bitumen industry, road administration and academia. 100 to 150 experts are expected to participate in the Symposium.



### SCHEDULE AND PROGRAMME

#### WEDNESDAY, 5 JUNE 2019

14.00-17.00 h. EAPA General Council Assembly at Club TP, 8<sup>th</sup> floor, 90 Avenue des Champs Elysées, 75008 Paris (for EAPA members only).

19.00 h. EAPA Symposium Dinner & Celebration Dinner for Egbert Beuving

#### THURSDAY, 6 JUNE 2019

8.00-17.00 h. EAPA Symposium - Presentations and Exhibition

The full-day event consists of technical presentations, a high-level panel discussion on the topic "What does the future hold for asphalt roads in a changing mobility sector?", a celebration speech of former EAPA Secretary-General Egbert Beuving, an interactive communication session, and the EAPA Awards Ceremony. The Symposium will be facilitated by Katrina Sichel and will be

supported by the interactive communication tool sli.do. The detailed programme will be provided in Spring 2019 on the EAPA website [www.eapa.org](http://www.eapa.org).

### REGISTRATION AND SYMPOSIUM FEE

The registration fee for this full-day event is 290 Euro including French VAT, the entrance to Symposium and Exhibition area, 2 coffee breaks, free wi-fi, lunch on the Symposium day and all Symposium documents.

Online registrations will be available beginning of 2019 on the EAPA website [www.eapa.org](http://www.eapa.org).

### EAPA SYMPOSIUM DINNER

On the evening before the Symposium, on 5 June 2019, a networking dinner will be held in a restaurant in Paris starting at 19:00 hours. Spouses and colleagues are welcome. Online registrations for the dinner will be available beginning of 2019 on the EAPA website [www.eapa.org](http://www.eapa.org).

### SYMPOSIUM LANGUAGE

English is the official language of the Symposium.

### ACCOMMODATION

In the surroundings of the venue, next to the Champs Elysées, many opportunities for different hotels in various categories and prices exist. We propose to book your accommodation according to your

preferred category at one of the many booking portals on the internet.

### SYMPOSIUM EXHIBITION AND SPONSORSHIPS

EAPA members and members of EAPA members will have the opportunity to present their products, companies or associations in an Exhibition. Exhibitors will be given the opportunity to provide commercial presentations in the coffee breaks based on a given schedule. Additionally, several sponsoring options will be available for the Symposium. The Exhibition & Sponsoring manual will be available beginning of 2019 on the EAPA website [www.eapa.org](http://www.eapa.org).

For more information or a booth at the Exhibition Area or a Sponsorship of the Symposium please contact EAPA Secretariat ([karcher@eapa.org](mailto:karcher@eapa.org)).

### SYMPOSIUM AND SOCIAL MEDIA

The hashtag of the 11<sup>th</sup> EAPA Symposium 2019 is **#EAPASymposium2019**. Follow the discussions and get more information on Twitter [@eapa\\_org](https://twitter.com/eapa_org) and [www.linkedin.com](http://www.linkedin.com).

### ORGANISATION & SECRETARIAT

The EAPA Symposium is organised by the EAPA Secretariat.

# Asphalt. ADVANTAGES

#AsphaltAdvantages



# 86

## SAFETY

Asphalt protects the environment  
from hazardous materials

AsphaltAdvantages.com

EAPA MAGAZINE 43 - DECEMBER 2018

## NEWS FROM BRUSSELS

### INDUSTRY4EUROPE

The joint coalition Industry4Europe of 133 European industry organisations continued its work in the last months with EAPA being one of the partners of this coalition.

Industry4Europe is helping to set the vision for the long-term future of the EU's industrial and manufacturing strategy and has published several Joint Papers and Declarations on establishing an ambitious Industrial Strategy, which you can find on the recently created website [www.industry4europe.eu/](http://www.industry4europe.eu/). Additionally, a twitter account @Industry4Europe and hashtag #Industry4Europe have been created. Information can also be found on LinkedIn.

In October 2018 the Industry4Europe coalition has published a 'Joint Call to the candidates for the 2019 European Elections'. Considering the strategic importance of industry for Europe and its citizens, and the challenges that

industry sectors are increasingly facing, the coalition calls on the support of future Members of the European Parliament to put industry at the top of the political agenda of the European Parliament during the next institutional cycle (2019-2024). In its Joint Call, the Coalition also urges the next European Commission to shortlist industry as a top priority of its five-year Work Programme, and to appoint a dedicated Vice-President for Industry. You can find this Industry4Europe's Joint Call to the candidates for the 2019 European Elections on the website.

Currently the coalition is preparing a joint manifesto for the upcoming EU Industrial Days on 5 and 6 February 2019 in Brussels.

Follow Industry4Europe on Twitter at @Industry4Europe if you would like to find out more about the coalition.



## EU CIRCULAR BUSINESS CONFERENCE

On 26 September 2018 the EU Circular Business Conference took place in Brussels. High level speakers from Commission, European Parliament and Industry participated amongst them Jyrki Katainen, Vice-President of the European Commission and Pavel Telicka, Vice-President of the European Parliament.

In two plenary and two parallel working sessions more than 500 experts discussed in this full-day conference the importance, challenges and obstacles of Circular Economy in Europe. There were interesting discussions in the parallel sessions with the headings Circular Product Design, Reusing and Repairing Products, Traceability of Substances of Concern, Recycling Material, Empowering Consumers to support Circular Economy, and Remanufacturing and upgrading Products.

The Conference was closed by Elzbieta Bienkowska, Commissioner for Internal Market, Industry, Entrepreneurship and SMEs of the European Commission.



*Jyrki Katainen Vice President  
of European Commission*

## TOWARDS ZERO

Under the heading "Towards Zero: safe vehicles, safe drivers, safe roads" the European Automobile Manufacturers Association ACEA held an event in Brussels.

This event looked at the need for combining cutting-edge vehicle safety technologies with safer driver behaviour and better road infrastructure in order to move towards the vision of zero traffic fatalities in the future. Given that the European Commission's proposal for the revision of the General Safety Regulation is under discussion right now by the European Parliament and the Council, this conference was extremely timely.

Main speaker of the day was Violeta Bulc, European Commissioner for Transport.

In two Panel discussions steered by a facilitator, experts exchanged on 'What is the best mix of measures for improving road safety today?' and 'What does the future hold in an automated world?'. During the discussions EAPA made sure, that also the road infrastructure is considered as giving an important contribution to zero traffic fatalities in the future.



*Commissioner for Transport Violeta Bulc*



*Tweet of EAPA Secretariat displayed  
on the screen during the event*

## EAPA-EUROBITUME ACTIVITIES

### ASPHALT ADVANTAGES

Based on the rollout of the previous thematic mini-campaign promoting the safety benefits of asphalt in September and October this year (**#AASafetyMonth**), Asphalt Advantages prepared the **#AASustainabilityMonth** in November and December. This second digital mini-campaign ran from the 26 November to the 16 December 2018.

As with the previous mini-campaign, it was intended to engage with the broader discussions that took place on social media around the Katowice Climate Change Conference COP24 (**#COP24**), to position the asphalt industry as a valuable interlocutor on sustainability issues, while at the same time promoting the material as the sustainable option for paving.

The Safety Month was a showcase of the ways in which asphalt plays a key role in Europe's push to improve road user safety, as well as a means of drawing attention to broader road safety trends and developments. From helping authorities to improve road safety for day-to-day road-users to making sure F1 drivers are safely competing in extreme conditions, and even looking at the future of mobility to ensure autonomous

vehicles operate safely, asphalt is one of the common denominators.

Similarly, the **#AASustainabilityMonth** highlighted many reasons why asphalt is the sustainable option for paving, as well as a means of engaging the industry in conversations on how to help Europe becoming fully sustainable.

Everybody is invited to use and spread the information about the advantages of asphalt given on the website [www.asphaltadvantages.com](http://www.asphaltadvantages.com).

Therefore, different supporting tools have been created. Those are provided in a toolbox and can be downloaded from the footer of this website to support the campaign or go directly on [www.asphaltadvantages.com/en/toolkit/](http://www.asphaltadvantages.com/en/toolkit/).

Please feel free to add the provided tools on your association's or company's website or use the tools for your printed or online magazine. We would be glad to see the advertisement in your publications. Some of these adverts can be found in this newsletter as an example.

Furthermore, we ask all asphalt friends to sign up for the newsletter on the website and to get connected with the Asphalt Advantages on Twitter with @asphalt\_eu and hashtag **#AsphaltAdvantages**.



## E&E EVENT 2018

On 14 and 15 June 2018 EAPA and Eurobitume organised the E&E Event 2018 in the hotel ViennaHouse Andel's in Berlin. The theme of the Event was "Preparing the asphalt industry for the future".

The E&E Event was held for the first time and a big success. A full auditorium with more than 360 Participants and a sold-out exhibition showed the interest of the asphalt and bitumen industries for a new platform offering the opportunity for extensive interaction across a wide scope of industry stakeholders to better understand how we can be best prepared as an industry for the expectations in the longer term.

The participants arrived from 34 countries, the highest number of participants came from Germany (74), followed by France (37) and The Netherlands (33). The E&E Event 2018 addressed senior managers and experts from road related industries, governments, local authorities, contractors, engineers, user groups and product suppliers.

The interesting programme was facilitated Katrina Sichel. She was also moderating the E&E Congress 2016 in Prague. Please find the detailed programme on

the website of the E&E Event 2018 on [www.eeevent2018.org/programme](http://www.eeevent2018.org/programme).

The speakers of the sessions were:

- **Session 1:** "Tomorrow's World, Tomorrow's Roads, Tomorrow's Asphalt!"
- Guillaume Bastien, Nicolas Hautière, Arash Khojinian, and Ralph Shirts Session
- **Session 2:** "Financing Solutions for Roads"
- Thomas Bayerl, Gergely Raccuja, and Torsten R. Böger
- **Session 3:** "Sustainability – Reducing CO<sub>2</sub> Emissions"
- Tim Breemersch, Bjarne Schmidt, and Mats Wendel
- **Session 4:** "Health & Safety Best Practices and Future Requirements"
- Reinhold Rühl, Leopold Tzeuton, David Giles, Steven Van de Broek, and Cosmin Patrascu
- **Session 5:** "Technology – What Are the Challenges for Implementation"
- Rudi Bull-Wasser, Seirgei Miller, and Knut Johannsen
- **Session 6:** "Communication – How to Attract New Recruits"
- Katrina Sichel and Martins Zaumanis

For the interaction with the auditorium for the first time the communication tool Sli.do was used. 305 active users, 15 polls and 1699 poll contributions showed the big success of this tool for the advanced discussions in the auditorium during the sessions.

In the evening of the first congress day a highly appreciated networking dinner

was held in the Wasserwerk Berlin.

The event was organised by GUARANT International from Prague and in person by the Project Manager Pavla Kozáková.

The full programme, the pictures, the presentations, and a summary are available on the website [www.eeevent2018.org/](http://www.eeevent2018.org/).



*The organisers of the event: Aimé Xhonneux, Siobhan McKelvey, Carsten Karcher and Egbert Beuving (from left to right)*



*The facilitator of the event: Katrina Sichel on stage*



*Discussion supported by the participants from the auditorium (Christian Axelsen and Matteo Pettinari, from left to right)*



*Speaker Arash Khojinian*



*Contribution from the auditorium by Sergei Miller*



## E&E CONGRESS 2020

The E&E Congress 2020 is organised by two joint EAPA and Eurobitume committees: the Organising Committee (OC) and the Technical Programme Committee (TPC).

The Organising Committee of the E&E Congress 2020 had its 3<sup>rd</sup> meeting on 20 September 2018 in Madrid and they visited three possible venues for the social event being part of the congress.

The main items the OC discussed were the Opening session and the General session (after the Opening session) with invited speakers, possible Post Congress Events on Friday after the congress, the registration fees for congress, the exhibition plan, the exhibition and sponsorship manual, the budget, the promotion plan and the congress website [www.eecongress2020.org](http://www.eecongress2020.org).

The E&E 2020 Technical Programme

Committee (TPC) had its second meeting on 21<sup>st</sup> September 2018 in Madrid. There main agenda items were the update on status of the call for abstracts, the recruitment of members for the Paper Review Committee (PRC), the abstract review process, the preparation of the paper review process and the review of the session structure of the E&E Congress 2020.

At the closure of the abstract submission more than 360 abstract were received. This is the same level as for the E&E Congress 2016 in Prague. The deadline for the paper submission is 15 August 2019.

If you wish to receive updates of the E&E Congress 2020 you can register on the congress website [www.eecongress2020.org](http://www.eecongress2020.org) by clicking on "Keep me updated".



*The Organising Committee members*



# 7<sup>th</sup> E&E CONGRESS

## EURASPHALT & EUROBITUME

**MADRID** 12-14 May 2020  
Palacio Municipal de Congresos de Madrid

ASPHALT 4.0 FOR FUTURE MOBILITY



#eecongress2020

[www.eecongress2020.org](http://www.eecongress2020.org)

EAPA MAGAZINE 43 - DECEMBER 2018

## EUROPEAN STANDARDISATION

### CEN TC227

The 29<sup>th</sup> meeting of CEN TC227 "Road Materials" was held in Vienna, Austria on the 17<sup>th</sup> and 18<sup>th</sup> September 2018. In this meeting the term of convenorship was renewed for four TC227 Working Group convenors:

- Egbert Beuving for CEN TC227 WG1 "Bituminous mixtures"
- Sergio Ortiz Carrascon for CEN TC227 WG3 "Materials for concrete roads including joint fillers and sealants"
- Manfred Haider CEN TC227 WG5 "Surface Characteristics"
- John Booth CEN TC227 WG6 "Sustainability".

The convenors of the 6 Working Groups of CEN TC227 as well as the Ad-Hoc Group Aerodromes reported their progress and relevant items were discussed. There were also reports from the liaisons CEN TC227 has with 6 other CEN TCs.

Asphalt related items are reported under CEN TC227 WG1 in this EAPA Magazine.

The next CEN TC227 meeting will be held on 25 and 26 June 2019 and most probably in Madrid or otherwise in London.



CEN TC227 meeting in Vienna

## CEN TC227 WG1

CEN TC227 WG1 had a meeting on 25 and 26 October 2018 in Stockholm.

The revised asphalt standards (EN 13108) were not cited yet in the Official Journal of the European Union (OJEU). The European Commission decided to follow the route of Delegated Act and they expect that the Delegated Act will be cited in the OJEU in summer 2019. The transition period will be 1 year.

When preparing the documents for the Delegated Act some words and wordings had to be changed to get them in line with the requirements of the European Commission (e.g. "No requirement" had to be deleted). That means that CEN TC227 WG1 will have to create an Amendment for the new asphalt standards. It would have been possible to have a total revision of the asphalt standards (to obtain new versions without Amendments) but this would have caused a delay and many potential problems.

In the report from the CEN TC227 meeting held in Vienna it was mentioned that Egbert Beuving was re-elected as convener of CEN TC227 WG1 for another 3 years.

Under agenda item "TG2 Test methods" two test methods were approved to go out for CEN Enquiry (EN 12697-42 "Amount of foreign matter in reclaimed asphalt" and prEN 12697-48 "Interlayer Bonding").

A possible early revision of EN 12697-49:2014 "Friction After Polishing" will be discussed in the next CEN TC227 WG1 meeting after the Friction After Polishing Workshop, which will be held later in 2018.

During the "Comments Resolution Meeting" prEN 12697-53- -54, -55 and -56 were approved to go out for Formal Vote (after some modifications of two of them).

At agenda item "Task Group 3 Product Standards" the remaining issues of prEN 13108-31 "Asphalt standard on bituminous emulsion (ACBE)" were discussed. It was decided that EN13108 - 31 will go out for Formal Vote (subject to amendments as agreed at the meeting in response to the CEN Enquiry comments) and will go out for Formal Vote together with the related 4 test methods (prEN 12697-53- -54, -55 and -56).

The problem Ireland had with the compatibility of HRA and chippings was

discussed and can be solved in the future HRA standard. Also the questions of Denmark regarding the interpretation of the Construction Products Regulation in relation to what can be specified in tender documents was discussed.

There was no news from Task Group 4 Conformity Assessment Standards.

Other agenda items discussed were Liaisons, CEN matters, EOTA ETA's for

additives for asphalt production, Sector Group 15 and the planning.

François Chaignon (France) gave a presentation regarding Green House Gas emissions and energy consumption of road construction in relation to the emissions of the traffic using that road in a later stage.

The next meeting CEN TC227 WG1 meeting will be held on 14 and 15 May 2019 in Switzerland.



CEN TC227 WG1 meeting in Stockholm

## CEN TC227 WG6

On 1<sup>st</sup> November 2018 CEN TC227 WG6 "Sustainability" had a meeting in London.

The draft European standard for "Environmental Product Declaration - Core rules for Road Materials - Part 1: Bituminous Mixtures" was discussed in detail and amended where needed. The goal is to send this draft standard out for CEN Enquiry in the beginning of 2019.

The convenor gave updates regarding the liaisons with CEN TC154 WG13, CEN TC350, CEN TC351. Also the draft answer to the Mandate regarding Dangerous Substances was discussed, although it is not clear where this Mandate will come.

The next CEN TC227 WG6 meeting will be held after the CEN Enquiry of the draft European standard for "Environmental Product Declaration - Core rules for Road Materials - Part 1: Bituminous Mixtures".

## CEN TC336

On 13 and 14 November 2018 CEN TC336 had its plenary meeting in Brussels.

The first main agenda item was a report from a meeting of CEN TC336 representatives had with the European Commission regarding the non-citation of several bitumen standards. The Mandates are going to be replaced by Standardisation Requests. In the next year(s) the European commission will look at the existing Mandates and will decide if some Mandates have to be changed into Standardisation Requests. CEN TC336 has to decide by the end of 2018 which direction they will choose. The two options are: continue with answer to the mandate and delegated acts or to go for a new Standardisation Request. The meeting recommended the new Standardisation Request option and all TC336 members will be asked to vote officially regarding this proposal.

To solve the non-citation problems with EN 13924-1 Hard Paving grade Bitumen and EN 13924-2 Multigrades Bitumen these standards have to be revised.

The EN 12591 that is not cited, is not in line with the Mandate and here the choice is an amended response to the Mandate or a Standardisation Request

(as mentioned above). An official vote will be prepared for this decision.

The draft for EN 14023 PmB will go out for CEN Enquiry in 2019.

Bernard Eckmann was reappointed as convenor of Working Group 2 "Fluxed Bitumen and Bituminous Emulsions" for a period of three years.

In the meeting also several test methods were discussed as well as Working Group 2 items.

The proposal of Hungary for a European standard for Rubber Modified Bitumen was not accepted in the CEN voting process. The Hungarian request for creating a Technical Specification for Rubber Modified Bitumen was accepted to be voted by the CEN TC336 members, so all CEN TC336 members can vote on this new proposal.

The next CEN TC336 meeting will be held on 12 and 13 November 2019 in Brussels.



CEN TC336 meeting in Brussels

## CEN TC336 WG1

CEN TC336 WG1 "Bituminous binders for paving" had its 35<sup>th</sup> meeting on 9<sup>th</sup> and 10<sup>th</sup> October 2018 in Solna, Sweden.

The status of EN 13924-1 Hard Paving grade Bitumen, EN 13924-2 Multigrades Bitumen and

EN 12591 "Paving grade Bitumen" was presented. The three standards were published by CEN but not cited in the OJEU. For the latest update see CEN TC336 meeting, which was held one month later.

The Systematic Review Results of various test methods were discussed.

There was a progress report of CEN TC336 WG1 TG5. PrEN 14023 (PmB) will be discussed in detail in the next CEN TC336 WG1 meeting and will go out for CEN Enquiry in summer 2019.

The proposed European standard for rub-

ber modified bitumen was not adopted in the CEN voting process. Hungary will now propose a Technical Specification for Rubber Modified Bitumen.

Beuving (EAPA) proposed to create a European Standard for Modified Bitumen to avoid future bitumen standards for all kind of bitumen modifications (like wax modified, surfactant modified, rubber modified, low temperature modified, bio-modified bitumen, etc.). It was decided to discuss this proposal in the next CEN TC336 WG1 meeting.

There were also Liaison updates from Eurobitume, EAPA, CEN TC227 WG1, RILEM and CEN TC351.

The next CEN TC336 WG1 meeting will be held on 26 and 27 February 2019 in Athens.



*CEN TC336 WG1 meeting in Solna  
(near Stockholm)*

## CEN TC336 WG1 TG5

On 20 November 2018 CEN TC336/WG1 TG5 "EN 14023 Revision" had a meeting in Brussels.

During this meeting the draft revised standard for Polymer Modified Bitumen (EN 14023) was discussed and the comments from CEN TC336 WG1 were reviewed.

After the meeting the draft standard will be updated and will be sent to CEN TC336 WG1, so it can be discussed in the next CEN TC336 WG1 meeting (end February 2019). The goal is to have the CEN Enquiry of prEN 14023 after the summer break in 2019.

The next CEN TC336 WG1 TG5 meeting will be held on 4 April 2019 or 22 May 2019.

## OTHER MEETINGS & EVENTS

### 18<sup>TH</sup> NATIONAL ASEFMA CONFERENCE

On 30 and 31 May 2018 the 18<sup>th</sup> National Asefma Conference was held in Madrid. The theme of the conference was "The Asphalt 4.0 concept in response to the new challenges regarding mobility and sustainability".

This conference tried to develop the Asphalt 4.0 concept. In general, 4.0 applies to everything related to the so-called 4th industrial revolution, intelligent industry or SMART industry. The Construction 4.0 concept has been used for a few years now. Despite this, the construction sector is one of the least developed sectors in the digital transformation, compared to other sectors.

This 18<sup>th</sup> National Asefma Conference showed and analysed some of the digital transformation initiatives that are being developed in the world of paving. From the project and tender stage to the manufacturing, paving and compaction phase, quality control and the subsequent exploitation phase.

Next to this, the asphalt industry will face challenges that come from the new passenger and commercial transport vehicles, new directions of the mobility of our society and the demands derived from the aspects related to the environment and sustainability.

- The topics addressed in the Asefma Conference were:
- The digital management of road works; here the focus was on BIM (Building Information Modelling)
- Digital integration and control systems in manufacturing and transport of bituminous mixtures; with a focus on automatic control systems in the asphalt plant during the production of bituminous mixtures, integrated plant control processes (FPC) and digital tracking systems for mixture transport trucks
- New technological developments in paving and compaction of bituminous mixtures. Here the current automatic control systems on pavers and rollers were addressed as well as the experience with Infra-Red asphalt temperature scanning, GPS tracking systems during the compaction phase, integrated weather stations, management of the information generated by each machine and global integration, examples of bonus / malus specifications in other countries and continuous compaction control systems
- Examples of current developments in the sector and challenges we

face, with current initiatives on worker safety in the workplace and in bitumen supply operations, the digital management of road works and the new challenges on mobility and sustainability

- Digital transformation, an unstoppable process, with new ways of understanding the client, management, talent and innovation in the Digital Economy, Challenges 4.0 in the paving sector and the current and future vision.

During the conference also Awards were given for the Best free communication, the Best Environmental Practices, the photographic contest **#PhotoIRMD2018** and **#Asfaltero4punto0**. Egbert Beuving of EAPA received an award as recognition of his work on the European level during the last five years.



Juan Jose Potti handing over the Award to Egbert Beuving



*Manuel Nino and Juan Jose Potti  
during the Opening session*



*"Digitalisation"*



*Streaming Video*

## MAINTENANCE OF INFRASTRUCTURE IN THE NEXT MFF

The Long-term Investment Intergroup organised together with FIEC, ERF and Caisse des Dépôts Group an event on 25 September 2018 in the European Parliament with the title "What place for infrastructure preservation and upgrading in the next Multiannual Financial Framework (MFF)?".

In the opening address Dominique Riquet, MEP and Chair of Long-term Investment Intergroup, mentioned the economic and social consequences of failing infrastructure. In the past years road maintenance budgets are decreasing significantly while the need for infrastructure is increasing. Since 2008, a 38% drop of the budget dedicated to road maintenance has been observed. He mentioned Germany as an example. If we maintain roads less than in the past the excessive traffic loads will increase the risk of failure with a factor of 10. Therefore, we need to draw lessons from the past and we really need to mobilise ourselves, according to Riquet.

Rudolf Niessler (DG REGIO) mentioned that the objective of the Commission is not only to close the missing links, but also to make European transport networks fit for the future, more efficient and cleaner. A long-term investment framework, a comprehensive transport plan,

is required to be in place, covering not only investments, but also maintenance and operation aspects that are the remit of the Member States.

Christian Tridon, President of the French association of repair and structural reinforcement contractors (STRRES) mentioned that building infrastructure is expensive. When it is finally built, a "fatigue" appears regarding its funding. However, without that continuous maintenance effort, the catastrophe is near. According to him, Europeans have the knowledge but the cost is the true issue. Today we have lost that notion of maintenance, as shown by many communities or States, which disregard that necessity. Representatives and decision-makers should be informed to that view. There is a need for a European awareness regarding maintenance.

Siobhan McKelvey, Member of the Executive Committee of ERF, introduced the panel discussion by presenting the speakers and the panellists expressed their views on the perspectives of infrastructure maintenance:

Fulvia Rafaelli, Head of the Clean Technologies and Products Unit at DG REGION mentioned that the European Commission is aware that the transport

infrastructure is a strategic investment with huge consequences on economic development. A new study made by the Commission in the form of a discussion paper "State of infrastructure maintenance" ([ec.europa.eu/docsroom/documents/31721](http://ec.europa.eu/docsroom/documents/31721)) focuses on the need for monitoring and how it can facilitate maintenance. The document emphasises that there is a huge variety of governance regarding infrastructures and there are no standards in this field and there is a big difference between construction and maintenance.

Gautier Chatelus (Caisse des Dépôts et Consignations) addressed the financing side of infrastructure maintenance issue. It is important to find a way to bring private money to focus on maintenance and operation, not only on new projects. A recent audit commissioned by the French Ministry of transport highlighted the lack of investment in the maintenance of the French road network.. In 2017, 17% of the road network was damaged while this was 14% in 2006.

Koene Talsma, Member of the Dutch Taskforce "De Bouwagenda" explained an example of a program related to infrastructure maintenance. The "De Bouwagenda" Program is a taskforce with a high ambition in the construction

sector, especially in the environmental field with the objective of "an energy neutral and circular Building environment in 2050".

Etienne Willame, Director General at the Wallonia Infrastructures Public Service, mentioned the conflict between maintenance and development of the assets; underinvestment in maintenance should not be hidden and it should be clear whether new assets should or should not be built. There is a need for analysis tools once those assets are created, technologies should aim at providing both qualitative and quantitative visions of the state and value of the infrastructures, using ageing laws for instance. In order to prove that public money can be spent in the right place, at the right time, adequate strategies should be implemented.

Antongiulio Marin (DG MOVE) underlined that we are now close to the end of the economic life of the infrastructures constructed 60 years ago. There is a need for private investments as exemplified by the approach promoted by Chatelus of Caisse des Dépôts et Consignations. Non-financial measure, new technologies and monitoring are also very decisive.



*The key-note speakers*



*The panel discussion*

## 1<sup>ST</sup> INTERNATIONAL SMA CONFERENCE

On 5-7 November the 1<sup>st</sup> international Conference on Stone Matrix Asphalt was held in Atlanta, Georgia, USA. The conference was attended by 265 people. In the Opening session Mike Acott (INAPA) gave a brief history of the introduction of SMA in the USA. It started with a paper on SMA that was presented during the Eurobitume Congress in The Hague in 1985. In the 1990's there was a USA study tour to Europe because SMA had everything the road authority needed. The introduction of SMA did not give the impact that was expected. The goal of this conference was therefore to learn from other states and from the experience of Europe and other countries that use SMA.

During the "International Panel – Why SMA?" the specific benefits of SMA were addressed. Knut Johannsen (Germany) underlined that you need the right aggregate for SMA. He also explained why they apply gritting on fresh SMA (to obtain a good skid resistance in the initial stage). In some countries they use RAP in SMA (in Germany that is not allowed). In the USA Warm Mix Asphalt technology is also used for SMA to facilitate compaction. Helen Bailey (UK) mentioned that a good education is relevant for applying SMA.

Also the use of rubber modified SMA was discussed.

Pete Rahn (Maryland Secretary of Transportation) stated that you need to convince the high-level DOT people that SMA is a good investment; it does cost more but it will last much longer.

Horst Erdlen (Germany) gave an overview of the history of the use of SMA in Germany in his presentation and he showed the changes in the SMA mixture design that have been made in German standards over the years. He also mentioned the EAPA publication "Heavy Duty Surfaces – The Arguments for SMA" that had been published earlier that day. (This SMA paper can be downloaded at: [eapa.org/wp-content/uploads/2018/11/Heavy\\_Duty\\_Surfaces\\_The\\_Arguments\\_for\\_SMA.pdf](http://eapa.org/wp-content/uploads/2018/11/Heavy_Duty_Surfaces_The_Arguments_for_SMA.pdf))

Ray Brown (NCAT, USA) explained the history of SMA in the USA.

Fan Yin (NCAT) mentioned that 18 State Highway agencies (in the USA) use SMA on a regular basis. The NCAT report he referred to is: NCAT Report 18-03: "Performance and Life-Cycle Cost Benefits of Stone Matrix Asphalt", which can be downloaded at: [www.eng.aurburn.edu/research/centers/ncat/files/technical-reports/rep18-03.pdf](http://www.eng.aurburn.edu/research/centers/ncat/files/technical-reports/rep18-03.pdf).

Todd Mansell (Caterpillar Paving) explained how to compact SMA to achieve the desired density.

Kamil Kaloush (Arizona State University) gave a short history of the use of crumbed rubber and the use of crumbed rubber in SMA and he showed the benefits of SMA with crumbed rubber.

On the 2<sup>nd</sup> day there were parallel sessions. In some presentations the use of RAS (Reclaimed Asphalt Singles) was mentioned. Several speakers did not recommend the use of RAS in SMA.

Christian Axelson (Denmark) talked about the socio-economic impacts of Low Rolling Resistance SMA. In Denmark they developed a SMA 8 KVS (KVS means Climate Friendly Surface). It lowers the fuel consumption of the vehicles using this surface layer and therefore it lowers the emissions. In 2018 they built 50 lane km's of this type of surface layer in Denmark to demonstrate that the mixture works.

On the 3<sup>rd</sup> day Bill Pine talked about the use of SMA on the Indianapolis Motor Speedway racetrack. He explained why SMA was chosen in 2004 and how they achieved the special requirements next to smoothness and durability. For this situation the shear strength of the mixture is very important (too).

Greg White (Australia) described the current efforts to introduce SMA in

Australia for airport pavements as an alternative for the grooved Marshall type dense graded asphalt that is used as surfacing on Australian airports nowadays. They grooved the dense graded asphalt to ensure skid resistance requirements are met.

Matteo Pettinari (Denmark) explained the background of the use of the SMA 8 KVS, which mixture was recently developed by the Danish Road Directorate (DRD) to reduce the rolling resistance of the pavement. Their main goal was to reduce the texture depth while still meeting the friction requirements. They modified the grading curve of SMA 8. The level of CO<sub>2</sub> reductions that can be achieved depend on the traffic speed. With lower speeds (50 km/h) the CO<sub>2</sub> reductions due to the use of SMA 8 KVS are higher than at high speeds (110 km/h).

During the Panel discussion "The Future of SMA" Horst Erdlen (IRS) advised to focus on the SMA mixture itself and not on adding all kinds of wastes. Carsten Karcher (EAPA) mentioned that reducing CO<sub>2</sub> and Circular Economy has a high priority for the European Commission and with slight adjustments to SMA and with well maintained (smooth) roads we can reduce CO<sub>2</sub> emissions a lot. For the Circular Economy old SMA will be reused (in the future) for new SMA. Next to that it is a long-lasting product, which is important to avoid re-use. So in short SMA is a good example for Circular Economy.

Rebecca Smith (Maryland State Highway Administration) advised to pay more attention to the joints. The joint is the first place to fail due to a lower compaction and therefore she advised to pay more attention to the creation of joints.

In his closing words Richard Wills (NAPA) challenged the contractors, road authorities and agencies to use (more) SMA in the future and to make it the premium product.

Most presentations and several papers of this conference can be downloaded on: [www.asphaltpavement.org/index.php?option=com\\_content&view=article&id=1155&Itemid=100382](http://www.asphaltpavement.org/index.php?option=com_content&view=article&id=1155&Itemid=100382)



Helen Bailey



Matteo Pettinari



Panel session - The Future of SMA



Panel discussion



The conference room



Kamil Kaloush



Ray Brown



Bill Pine



Christian Axelsson



Horst Erdlen



Mike Acott



Richard Wills



Knut Johannsen

## GAPA MEETING

On 8 November 2018 the Global Asphalt Pavement Alliance (GAPA) had a meeting in Atlanta (USA). GAPA is a global network of national and regional trade associations whose activities are related to the production and laying of asphalt for pavements. In GAPA

the associations are working together to exchange information and knowledge.

At agenda item "Promotion of Asphalt" EAPA gave an update regarding its "Asphalt Advantages campaign in Europe", Sabita (South Africa) presented "Road Funding Update and campaign" and NAPA informed the GAPA members about the "Watchfor.us campaign" ([watchfor.us/](http://watchfor.us/)) in the USA.

The next item was Work Force. Here NAPA and the Japanese Road Contractors Association (JRCA) explained their activities to attract new workers to the asphalt sector. JRCA also presented its activities to promote road construction industry in Japan. From EAPA side the "International Road Maintenance Day" initiative was presented.

Under "Standardisation" Sabita explained its progress on the introduction of Performance Grade bitumen standards for asphalt and spray grades in South Africa as well as the introduction of the

New Crumbed Rubber Technology by their new "Technical Guidelines for the Specification and Design of Bitumen-Rubber Asphalt Wearing Courses". EAPA gave an update regarding the European standardisation activities.

As technical items EAPA presented its Position Paper on Rejuvenators and JRCA presented a new maintenance technology for prolonging pavement life in Japan by using a special modified SMA, which has a better resistance regarding reflective cracking. This mixture contains 16% SBS, a special agent and process oil.

At agenda item "Autonomous Vehicles" the participants presented their activities regarding this new technology and how asphalt can play its role in these new developments.

Under "Health, Safety and Environment" health studies were discussed as well as the developments in the area of Rolling Resistance, Product Category Rules (PCR) and Environmental Product Declaration (EPD) and Life-Cycle Cost Analysis (LCCA).

As Egbert Beuving, the present GAPA chairman, is going to retire by the end of 2018 Carsten Karcher of EAPA was

elected as the new GAPA chairperson / convenor.

It was decided to exchange information between the meetings too and to create a GAPA Magazine to increase the global awareness, to exchange information and to inform potential GAPA members about GAPA and its activities.

More information about the Global Asphalt Pavement Alliance can be found at the GAPA website: [globalasphalt.org/](http://globalasphalt.org/).

The next GAPA meeting will be held on 17 October 2019 in Sun City, South Africa, the day after CAPSA 2019 Conference.



GAPA meeting 2018

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## COMFORT

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### 3<sup>RD</sup> INTERNATIONAL WORKSHOP ON PAVEMENT DESIGN

On 15-16 November 2018 the 3<sup>rd</sup> International Workshop on Pavement Design was held in Lednice in the Czech Republic. It was organised by the Slovenian Asphalt Pavement Association ZAS, the Czech Road Contractors Associations and OMV refinery in Austria.

There were 44 participants from 9 European countries. The 1<sup>st</sup> Workshop was held in Ljubljana (Slovenia) and the 2<sup>nd</sup> Workshop, which was mainly devoted to information about design methods in different states, was held in 2016 in Graz (Austria).

Topic 1 of the workshop focused on Pavement design for new constructions.

Here Jiri Fiedler addressed some uncertainties related to pavement design. These are, for example, the impact of temperature on fatigue resistance and the different results of the fatigue tests described in the EN 12697-24. The importance of measuring the real behaviour of pavements with various sensors and comparing the measured behaviour with the theoretical models was highlighted. (According to words of Professor AAA Molenaar, models cannot accurately predict reality yet and, for this reason we need to use coefficient

factors. This is not a bad approach but still is important to know the items hidden inside them.)

Bernhard Hofko presented an overview of performance related tests and the way how to use the results of these tests for pavement design. He explained the differences between the recipe-based approach and the performance-based approach in which the performance drives the composition of the mixture. For the traditional recipe-based approach, the experience is very important in order to optimise its parameters and be sure that the recipe works. In the performance-based approach the contractor has a high degree of freedom in mixture design, but he has to prove adequate performance by lab testing. Hofko demonstrated these approaches on examples from the recent Austrian specifications. Here fatigue, stiffness, low temperature cracking and rutting can be considered. He also presented his work on substituting traditional long fatigue tests by smaller tests on mastic samples and stated that ageing should be taken into account by more realistic ageing simulation.

Michal Varaus showed the influence of binder content of the mixture and com-



Bernhard Hofko



Igor Ruttmar



Jiri Fiedler



Michael Wistuba



Michal Varaus

paction degree on the pavement design. Three mixes were compared with (1) optimum binder content and 100% compaction degree; (2) optimum binder content but 97% compaction degree; and (3) binder content 0.5% lower than optimum and 97% compaction degree. The obtained life times were respectively 25, 17.4 and 5.1 years. Hence, although it was found that a lower binder content increased stiffness, it also significantly decreased the fatigue resistance. On the other hand, the decrease of the compaction degree led to a decrease of stiffness and fatigue. This means that the lower compaction degree and the lower binder content together can result in a pavement life decrease of 80% (so a factor of 5 lower).

Michael Wistuba showed the impact of the temperature and RAP content of the mixture on the fatigue resistance and the influence of aging on the mixture behaviour. He mentioned some shortcomings of existing design methods. Wistuba proposed a new sweep test protocol for fatigue evaluation of asphalt mixtures at different temperatures by using Uniaxial Tension-Compression Test in controlled stress mode. This method has the advantage that the stress field is homogeneous compared to bending fatigue tests as 2PB or 4PB. The stepwise increase of the stress amplitude is applied until specimen failure for different temperatures.

As the testing time is distinctly reduced in this procedure, testing at more temperatures can be carried out at reasonable costs. This approach demonstrated that the mixtures with RAP had a higher fatigue resistance at high temperature than the mixes without RAP, but a lower resistance at lower temperatures. For this reason, it is important to use temperature-depending parameters very carefully, e.g. when using the Austrian pavement design method.

Lukas Eberhartsteiner presented further developments of the Austrian design model and

Piotr Jaskula described the Polish pavement design approach, which consists on: (1) a mechanistic calculation for upper layers; (2) check if it meets the AASHTO requirements; (3) a comparison with sections catalogues; and (4) addition of one extra cm to the calculated thickness.

Topic 2 was dealing with Pavement design for the maintenance.

Here Lukas Eberhartsteiner spoke about the revision of the Austrian guide. The overlays on low-volume roads are designed with the use of catalogue. The method for overlays on high-volume roads is under development and based on FWD deflection measurements, performance-based tests and mechanistic-empirical pavement design.

Jan Zajíček explained the overlay design method in Czech Republic, which is under the revision now. Mitja Jurgele presented the Slovenian maintenance design approach (based on the AASHTO method) and Igor Ruttmar and Marcin Pawelczyk showed the Polish approach to Pavement Rehabilitation Design.

Topic 3 dealt with Pavement design methods – case studies.

In this session several design methods were compared. Important differences were found due to different assumptions and approaches used in the design methods used. More comprehensible analysis of all the assumptions will be necessary to detect the reasons for these differences.

In the last session there were three very different presentations.

A Czech presentation was dealing with pavement design in tunnels and concentrated on the resistance to fire of asphalt mixtures.

Mitja Jurgele described the design of parking areas in Slovenia and Igor Ruttmar presented the Polish approach to long-life pavements the design ("perpetual pavements").

At the end of each session there were interesting discussions. They focused on the impact of temperature on the pave-

ment design, the differences in fatigue tests and the application of FWD test for the overlay design. Also the need and possibilities for unification of design approaches were discussed although harmonisation of European design methods will most probably not happen in the near future.

The workshop was very useful and successful and the participants expressed their interests in having a 4th Workshop. The experience gained during this workshop will be used for the preparation and organisation of the next workshop, which will be held in 2020.



## INTERESTING WEBSITES

On the EAPA website at [eapa.org/eapa-publications/](http://eapa.org/eapa-publications/) a new button was added to be able to download a completely revised version of the "Lecture Notes on the Design of Flexible Pavements" of professor dr. ir. André A.A. Molenaar.

Molenaar prepared this document of 510 pages for the MSc program at the faculty of Civil Engineering and Geo Sciences of the Delft University of Technology and it describes the design of flexible pavements in detail.

Next to that the document provides the address of two websites where a large number of PhD theses that were produced at the Delft University of Technology can be downloaded as well as the so-called Molenaarfiles.

## UPCOMING CONGRESSES

### 18<sup>TH</sup> AAPA CONFERENCE AND EXHIBITION

The 18<sup>th</sup> AAPA International Flexible Pavements Conference & Exhibition will be held on 18-21 August 2019 in Sydney, Australia.

The deadline for presentations without paper is 31 January 2019.

More information can be found at [www.aapa.asn.au](http://www.aapa.asn.au)



## CAPSA'19

The 12<sup>th</sup> Conference on Asphalt Pavements for Southern Africa – CAPSA'19 – will be held from 13-16 October 2019 at Sun City, South Africa.

The deadline for Abstract submission for proposed papers is 28 June 2018.

More information can be found on the CAPSA'19 website:  
[www.capsaconference.co.za](http://www.capsaconference.co.za).



## 26<sup>TH</sup> WORLD ROAD CONGRESS (PIARC)

The 26<sup>th</sup> WORLD ROAD CONGRESS, also known as the PIARC Congress, will be held on 6-10 October 2019 in Abu Dhabi.

More information can be found at the Congress website:  
[www.piarcabudhabi2019.org](http://www.piarcabudhabi2019.org)



## CONFERENCE ASPHALT PAVEMENTS 2019

On 26-27 November 2019 the Conference Asphalt Pavements 2019 will take place in České Budějovice, Czech Republic with the title: "Asphalt pavements – the way to the black future". The deadline for submitting abstracts is 31 January 2019.

More information can be found at:  
[www.asfaltove-vozovky.cz/en/](http://www.asfaltove-vozovky.cz/en/)



## 17<sup>TH</sup> COLLOQUIUM ASPHALT, BITUMEN AND PAVEMENTS

On 27-29 November 2019 ZAS will organise its 17<sup>th</sup> Colloquium Asphalt, Bitumen and Pavements, which will be held in Bled in Slovenia.



## E&E CONGRESS 2020

The Eurasphalt & Eurobitume Congress 2020 will be held on 12-14 May 2020 in Madrid.

More information e.g. about paper submission and congress venue can be found at [www.eecongress2020.org](http://www.eecongress2020.org).



## 27<sup>TH</sup> WORLD ROAD CONGRESS

The 27<sup>th</sup> World Road Congress will be held in Prague (Czech Republic) in October 2023.

More information about this 27<sup>th</sup> PIARC Congress can be found at the official website <http://www.wrc2023prague.org/>



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## SUSTAINABILITY

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## EVENTS LIST 2019

## JANUARY

- 10 Jan CEN TC154 WG13, London
- 17 Jan Meeting of Lung-function study group in Washington D.C., USA
- 17 Jan Technical meeting of Tyre and Road Wear Platform, Brussels
- 20-23 Jan Annual Meeting of NAPA in Marco Island, USA
- 24 Jan Meeting of European Construction Forum, Brussels
- 29 Jan Organising Committee meeting E&E Congress 2020 in Madrid
- 30 Jan Technical Programme Committee E&E Congress 2020 in Madrid

## FEBRUARY

- 5-6 EU Industrial Days, Brussels
- 12 Feb CEN TC227 WG6 meeting in London
- 14 Feb Technical meeting of Tyre and Road Wear Platform, Brussels
- 19-20 Feb 20<sup>th</sup> International HAPA Conference in Siófok, Hungary
- 26-27 Feb CEN TC336 WG1 meeting in Athens, Greece

## MARCH

- 1 March EAPA AP&EM Group (with TC members) meeting

## APRIL

- 2 April EAPA HSE Committee meeting in Paris
- 3 April EAPA TC meeting in Paris
- 4 April International Road Maintenance Day
- 4 April CEN TC336 WG1 TG5 in Brussels
- 4 April ERTRAC Annual Conference in Brussels
- 4-5 April HAD Seminar in Opatija, Croatia
- 9 April Joint EAPA ExCo & Directors' Group in Brussels
- 10 April Joint EAPA ExCo & Eurobitume BoD in Brussels

## MAY

- 8 May Organising Committee meeting E&E Congress 2020 in Madrid
- 14-15 May CEN TC227 WG1 meeting in Switzerland
- 21 May CEN TC227 Chairman's Advisory Group meeting in London
- 22 May CEN TC336 WG1 TG5 in Brussels
- 23 May Technical Programme Committee E&E Congress 2020 in Madrid
- 29 May High-level meeting of Tyre and Road Wear Platform, Brussels

## JUNE

- 4 June CEN TC336 Advisory Group meeting in Brussels
- 5 June EAPA GCA in Paris
- 6 June EAPA Symposium 2019
- 25-26 June CEN TC227 meeting in Madrid (or London)

## AUGUST

- 18-21 Aug AAPA Conference & Exhibition in Sydney, Australia.

## SEPTEMBER

- 11 Sept E&E Congress 2020 Organising Committee meeting in Madrid
- 17-18 Sep CEN TC336 WG1 meeting in Ireland

## OCTOBER

- 8 Oct EAPA HSE Committee meeting
- 8 Oct Technical Programme Committee E&E Congress 2020 in Madrid
- 9 Oct EAPA TC meeting
- 10 Oct EAPA AP&EM Group (with TC members) meeting
- 13-16 Oct CAPSA 2019 at Sun City, South Africa.
- 15-16 Oct CEN TC227 WG1 meeting in Delft, The Netherlands.
- 17 Oct Global Asphalt Pavement Alliance meeting, Sun City, South Africa

## NOVEMBER

- 5 Nov Joint EAPA ExCo & Directors' Group in Birmingham, UK
- 12-13 Nov CEN TC336 meeting in Brussels
- 26-27 Nov Conference Asphalt Pavements 2019 in České Budějovice, Czech Republic
- 27-29 Nov 17<sup>th</sup> Colloquium Asphalt, Bitumen and Pavements in Bled, Slovenia



# Season's Greetings

We wish you a  
& Merry Christmas  
a successful 2019

John Kruse Larsen  
François Chaignon  
Egbert Beuving  
Carsten Karcher  
Breixo Gómez-Meijide

EAPA MAGAZINE 43 - DECEMBER 2018

## COLOPHON

### TEXT

Egbert Beuving, Carsten Karcher and  
Breixo Gómez-Meijide

### LAYOUT

Window Stories

### PICTURES

Egbert Beuving, Carsten Karcher and  
Czech Road Contractors Associations

## MEMBERS

			
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DAV - Deutscher Asphalt Verband e.V.	EBA	Eesti Asfaldiliit	HAPA - Hungarian Asphalt Pavement Association
			
IAPA - Irish Asphalt Pavement Association	Infra Contractors' Association	MPA - Mineral Products Association	NCC AB
			
Peab Asphalt AB	Sdružení pro výstavbu silnic Praha	Routes de France	ZAS - Združenje asfalterjev Slovenije

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