



<b><u>LIST OF CONTENT</u></b>	<b><u>PAGE#</u></b>
<b><u>INTRODUCTION</u></b>	<b><u>04</u></b>
<b><u>EAPA COMMITTEES</u></b>	<b><u>06</u></b>
EAPA ExCo and Directors' Group	06
EAPA Asphalt Plant & Equipment Manufactures Group	07
<b><u>EAPA SYMPOSIUM 2017</u></b>	<b><u>08</u></b>
<b><u>EAPA-EUROBITUME ACTIVITIES</u></b>	<b><u>13</u></b>
Joint EAPA - Eurobitume Executive Committee	13
AsphaltAdvantages	14
E&E Event 2018	16
E&E Congress 2020	17
<b><u>EUROPEAN STANDARDISATION</u></b>	<b><u>18</u></b>
CEN TC336 WG1	18
CEN TC336 WG1 TG5	18

<b><u>PAGE#</u></b>
<b><u>OTHER MEETINGS &amp; EVENTS</u></b>
TRB 2017
Infratech
NAPA Annual Meeting 2017
18 <sup>th</sup> HAPA Conference
<b><u>INTERESTING WEBSITES</u></b>
<b><u>UPCOMING CONGRESSES</u></b>
<b><u>EVENTS LIST</u></b>
<b><u>COLOPHON</u></b>
<b><u>MEMBERS</u></b>

## INTRODUCTION

Dear EAPA members, dear Asphalt friends,

Welcome to the 39<sup>th</sup> issue of the EAPA Newsletter.

When reading this Newsletter you will see that there are a few items that pop-up at different places. In this introduction I would like to focus on two of them: the future and durability.

At this moment there is a lot of attention in the media regarding automated vehicles, platooning and especially autonomous vehicles. For the asphalt sector of course the question is: What could this mean for the asphalt pavements in the future? Do we have to modify the pavement or pavement design in the future to be able to provide these new type of vehicles a smooth and safe surface to drive on? Some road authorities already discovered that they have to maintain their road markings in a better way because automated vehicles have difficulties detecting worn-out road markings.

At TRB, the ACEA Annual Reception and the 18<sup>th</sup> HAPA Conference speakers talked about the future transport systems and the implications it will have. The speakers mostly talk about vehicles, telematics and traffic engineering items, and when they talk about infrastructure they often mean the digital infrastructure. Only a few try to address the consequences for the pavement and then they admit that they do not really know what to expect; they can only guess. I think that is an honest answer. When we had our first desktop computers nobody could foresee the possibilities of the computers we are using today. The same applies for mobile phone. Some people use their mobile phone as a mobile computer and camera that can be used for calling someone if needed.

In some countries they did studies and developed scenarios for 2030 and 2050. They mention that the introduction of automated vehicles is estimated to reduce the need for conventional infrastructure investments (extra-wide lanes, wide shoulders, guardrails, rumble strips, stop signs) because automated vehicles may allow design of narrower lanes and elimination of shoulders, thus better utilising existing infrastructure. Special lanes may be needed for platooning in particular, which might also require additional space for vehicles joining and separating from platoons.

As long as cars and trucks drive on roads with tyres the tyre-pavement interaction might not change much. However an important aspect will be

the lateral wander. When all trucks would drive in the same line, the lateral wander would be less. Technically it will be possible to see to it that they do not drive in the same line, so the lateral wander does increase. Fatigue does apply to all pavement materials, so it is important for all road materials that trucks use various lines.

When we were brainstorming about the programme for the E&E Event 2018 in Berlin we also spoke about these items. The automated vehicles will come in the near future and we will have to take care of them. In general the developments in road building do not have the same speeds as the development in electronics (computer, mobile phones) so we might have some time to think about.

Sometimes specific items come back in the future. In the 1920's they were already studying rolling resistance. In those days it was not for reducing fuel and CO<sub>2</sub> but to be able to predict what horses would be able to pull as cart or wagon on different paved and unpaved road surfaces.

The second item is durability. Now they are talking about durability in more countries. An increased durability results in a longer lasting road or road surface, less maintenance, more effective and efficient use of materials, more cost efficiency, less need of recourses, a lower Carbon footprint, and it is better for the environment. In EAPA we are now working on a paper called "The Ideal Project". This paper provides tools for increasing the durability of asphalt pavements by providing good examples in all stages of the project; so from the design preparation stage until maintenance.

For implementing ideas mentioned in "The Ideal Project" it would be good when road authorities and road contractors would sit around the table to find opportunities to implement certain technologies or to create opportunities for contractors to use innovative techniques for obtaining more durable pavements. By working together they should be able to create a win-win situation.

In this issue of the EAPA Newsletter you can read more about the two above mentioned items and many other matters that were presented and discussed in the past three months.  
Enjoy reading it.

Egbert Beuving,  
Secretary General of EAPA

## **EAPA COMMITTEES**

### **EAPA EXECUTIVE COMMITTEE AND DIRECTORS' GROUP**

On 7 March 2017 the EAPA Executive Committee and the EAPA Directors' Group had a joint meeting in Brussels.

Under agenda item 'EAPA secretariat' the financial situation of EAPA was discussed. The preliminary financial results of 2016 were presented and the EAPA budget for 2017 and 2018 were discussed.

At agenda item 'Communication, Innovation, Dissemination and Education' Public Relation activities, (Social) Media, the Asphalt Advantages campaign and Contacts with other associations were addressed. The draft programme of the EAPA Symposium 2017 was presented as well as the progress made regarding the E&E Event 2018 in Berlin and the E&E Congress 2020 in Madrid.

At 'EU issues' there was an update concerning what is going on in Brussels and what is in the pipeline. Here the rejection of the European Commission to publish the revised asphalt standards (as published by CEN), because of additional categories in some tables, was explained.

During the Round table discussion each country present gave short information about one issue of particular interest they are presently working on to inspire and inform the other countries.

At 'Health, Safety & Environment Topics' the progress of the EAPA Health, Safety & Environment Committee was presented, various studies, Differentiation of Bitumen and Silica Dust were addressed as well as the developments regarding Rolling Resistance.

At agenda item 'Technical Topics' there was a report regarding the EAPA Technical Committee, the EAPA Asphalt Plant & Equipment Producers Group and the European standardisation activities.

The next EAPA ExCo and Directors Group meeting will be held on 10 and 11 October 2017 in Copenhagen.

### **EAPA ASPHALT PLANT AND EQUIPMENT MANUFACTURERS GROUP**

The EAPA Asphalt Plant and Equipment Manufacturers (AP&EM) Group had a meeting on 22 February 2017 in Paris.

There were two main agenda items. The first one was Harmonisation of Machine to Machine Communication Protocol in road building. A CECE (Committee for European Construction Equipment) / EAPA Working Group "Road Equipment Communication Protocol" started in December 2016 with a small team to evaluate the possibility to develop a common Machine to Machine (M2M) communication protocol based on actual telematics standards. The team will be broadened in later stages. The Working Group decided to work on "Gateway to gateway communication". The goal is to define a minimum amount of data needed. The first part is expected to be ready in the 1<sup>st</sup> quarter of 2017.

The protocol can be seen as a language and a string of e.g. 60 elements has to be defined. 30 of them are harmonised and the other 30 are free for the customer / specific for the company. When the structure in the data is defined, the equipment producers know how to deal with the numbers of their own system.

The second main agenda item was the draft EAPA Position Paper "The Ideal Project".

One of the goals of this position paper is to show the technologies that are available to improve the quality of the final product: the asphalt layers. The content of the draft paper was discussed and changes were made.

The next AP&EM Group meeting will be held on 5 October 2017.



*EAPA ExCo and  
Directors' Group meeting*



## **EAPA SYMPOSIUM 2017**

### **DATE AND LOCATION OF THE EAPA SYMPOSIUM 2017**

The 10<sup>th</sup> EAPA Symposium will be held on 1 June 2017 in La Maison des Travaux Publics, 3 rue de Berri, 75008 Paris, France, close to the Champs Elysées, as a full day event with a networking dinner in the evening before

### **PURPOSE OF THE EAPA SYMPOSIUM**

Under the heading "Sustainability, Innovation and Communication in 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**

The target audience of the EAPA Symposium is EAPA members, members of EAPA members, asphalt & bitumen industry, road administration and academia

## **SCHEDULE**

### **WEDNESDAY 31 MAY 2017**

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

### **19.00 EAPA Symposium Dinner**

Get together for a networking dinner in the restaurant "La Fermette Marbeuf", 5 rue Marbeuf, 75008 Paris

### **THURSDAY 1 JUNE 2015**

8.00-17.00 EAPA Symposium - Presentations and Exhibition  
See programme below.

### **PROGRAMME FOR EAPA SYMPOSIUM ON 1 JUNE 2017**

#### **"SUSTAINABILITY, INNOVATION AND COMMUNICATION IN THE ASPHALT INDUSTRY"**

Facilitator: Katrina Sichel

#### **8.00: Registration and welcome coffee in the exhibition area**

#### **9.00: Session 1 "Opening and Keynotes"**

- Opening by John Larsen, President of the European Asphalt Pavement Association
- Keynote "New Procurement Systems in Europe with green content" by Harald Versteeg, Rijkswaterstaat, The Netherlands
- Keynote "Communication of industry themes" by Katrina Sichel

#### **10.15: Coffee break and exhibition**

#### **11.00: Session 2 "Health, Safety and Environment at EAPA"**

- Status-quo and outlook for the Rolling Resistance in Europe  
Speaker: Johan Maeck, Belgian Road Research Centre
- Environmental Responsibility of the asphalt industry – Environmental Product Declaration (EPD) and Asphalt Recycling/Circular Economy (Report of Committee Work)  
Speaker: Geir Lange, Veidekke, Norway (TBC)
- Taking measures for the Worker's Health – Fumes and Dusts (Report of Committee Work)  
Speaker: Christine Leroy, USIRF, France

**12.15: Lunch break and exhibition****13.30: Session 3 “Making asphalt roads and the asphalt industry more attractive” - interactive session with Katrina Sichel**

- This will be an interactive session and draw upon the experience of different stakeholders to develop, together, communication outputs that are accessible and meaningful for all actors in the sector. Structured by the moderator, participants will work in groups to design a number of communication tools that can be used to address different prioritised audiences via various channels (social media, events, media outreach, audio visual etc.). The session is intended to be engaging, focused, practical and useful - and, crucially, draw upon the ideas and expertise of participants
- A summary of this session will be provided afterwards on the EAPA website and on Social Media

**15.00: Coffee break and Exhibition****15.30: Session 4 “Innovation and new technologies”**

- Applied new techniques and outlook in asphalt production and paving  
Speaker: Sergei Miller, University of Twente, The Netherlands
- Building Information Modelling (BIM) for Infrastructure  
Speaker: Manus Marrtinen, NCC Industry, Finland
- Rejuvenators for Asphalt Mixes  
Speaker: Knut Johannsen, Eurovia, Germany

**16.45: “EAPA’s Asphalt Advocate of the year 2017” Award**

Handing over of an Award to a selected EAPA member for his initiative regarding a better asphalt road marketing and for his outstanding “Asphalt Advantages Campaign” support

**after 17.00 Closing of Symposium**

by the John Larsen, President of the European Asphalt Pavement Association

**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, lunch on the Symposium day and all Symposium documents.

The cost for the networking dinner will be 40 Euro per person including beverages and French VAT. Please register for the Symposium and the Dinner on [http://www.eapa.org/form\\_reg.php](http://www.eapa.org/form_reg.php).

Online registrations must be completed before 24 May 2017. You will receive an invoice after your registration for the Symposium and the dinner. On the day of the Symposium, you will have the possibility to register for participation too by paying the registration fee in cash. No other methods of payment can be accepted.

**EAPA SYMPOSIUM DINNER**

On the evening before the Symposium on 31 May 2017 a networking dinner will be held at the restaurant “La Fermette Marbeuf”, 5 rue Marbeuf, 75008 Paris starting at 19:00 hours. Spouses and colleagues are welcome. Registrations for the dinner must be completed before 24 May 2017.

**SYMPOSIUM LANGUAGE**

All presentations will be given in English.

**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**

Next to the EAPA Symposium there will be an Exhibition. EAPA members and members of EAPA members will have the opportunity to present their products, companies or associations there. For a booth at the Exhibition area of the Symposium please contact EAPA Director Carsten Karcher ([karcher@eapa.org](mailto:karcher@eapa.org)).

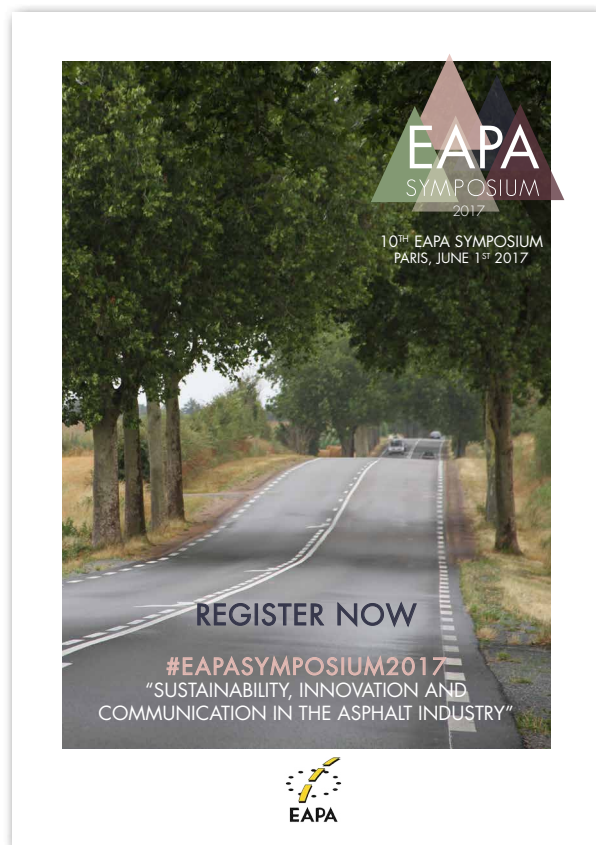


## **SYMPOSIUM SPONSORSHIPS**

For sponsorships of the EAPA Symposium please contact EAPA Director Carsten Karcher (karcher@eapa.org).

## **SYMPOSIUM HASHTAG**

The hashtag of the 10<sup>th</sup> EAPA Symposium 2017 is **#EAPASymposium2017**.



## **EAPA-EUROBITUME ACTIVITIES**

### **JOINT EAPA - EUROBITUME EXECUTIVE COMMITTEE**

On 8<sup>th</sup> March 2017 a joint EAPA - Eurobitume Executive Committee Meeting was held in Brussels.

Under the agenda item 'Bitumen and Health' there was an update regarding the differentiation between air-rectified and severely oxidised bitumen. Also an overview regarding the Health & Safety activities in Europe was presented. Eurobitume gave an overview of their health studies that are in the pipe-line.

There was an update regarding the revision of the bitumen product standards.

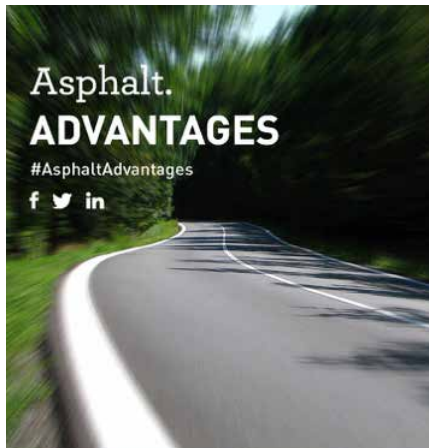
Under agenda item "Campaign of Asphalt Promotion" there was an update about the work of the EAPA - Eurobitume Task Force "Providing Evidence Asphalt Advantages".

Under "Eurasphalt & Eurobitume Events" the state-of-the-art of the E&E Event 2018 in Berlin and the E&E Congress 2020 in Madrid was presented.

EAPA explained the outline of the programme of the EAPA Symposium 2017 to be held on 1<sup>st</sup> June 2017 in Paris and Eurobitume described in short the Strategic Asphalt Research (STAR) Symposium that will be organized by the Asphalt Institute Foundation (USA) in May 2017.



*Joint EAPA - Eurobitume ExCo meeting*



### ASPHALT ADVANTAGES

The Asphalt Advantages campaign is currently focussing on collecting feedback from stakeholders about the campaign in a survey. If you want to participate please go to <https://www.surveymonkey.com/r/asphaltadvantages>. Your feedback would be very much appreciated. The results of the survey will be used to develop further the strategy for the asphalt advantages campaign for this year.

In the last months, the layout of the adverts of the campaign have been refreshed. Maybe you have realised that in the "Advantage of the month" or other information. For an overview of the new adverts please go to the campaign's toolkit, that is provided on the Asphalt Advantages website <http://www.asphaltadvantages.com/en/toolkit/>.

Everybody is still invited to spread information and content of asphalt advantages campaign given on the website. Please use the different supporting tools have been created. Those are provided in a toolbox and can be downloaded from this website to support the campaign. 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.

# Asphalt. ADVANTAGES

#AsphaltAdvantages



## SAFETY

Asphalt protects the environment  
from hazardous materials

[AsphaltAdvantages.com](http://AsphaltAdvantages.com)



## E&E EVENT 2018

The first E&E Event 2018 will be held in Berlin on 14<sup>th</sup> – 15<sup>th</sup> June 2018 under the title 'Preparing the asphalt industry for the future'

Based on the responses received from key industry stakeholders and supporters of Euraspalt and Eurobitume Congress, EAPA and Eurobitume decided to launch the E&E Event as a platform to continue the momentum initiated every four years at the E&E congresses.

The main objective of this event will be to focus on the preparations needed by the asphalt industry to ensure it is fit for future purpose by exploring the following important strategic issues, some have already been highlighted in the E&E Congress 2016:

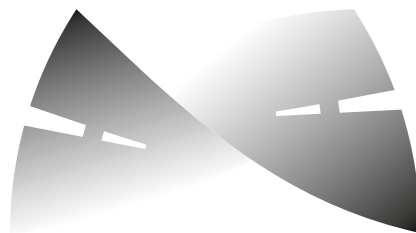
1. Visions on the future of the asphalt industry
2. Economic aspects
3. Communication, education and training – Becoming an attractive industry
4. Future Environmental aspects including future Health & Safety items
5. New technologies including equipment and information technology.

The detailed content of each of these five sessions will be influenced from the views we receive from a survey which will be sent to a wide selection of potential participants.

The format of the Event will be based on creating effective interaction between participants to get a better common understanding on how to improve the future for the industry. To reach this goal there will be an increased participation through various direct interactions during the event combined with more traditional presentations. The E&E Event 2018 is meant for senior managers and experts from road related industries, governments, local authorities, contractors, engineers, user groups and product suppliers.

Save the date!

## E&E EVENT EURASPALT & EUROBITUME



14 & 15 JUNE 2018

**BERLIN**

## E&E CONGRESS 2020

The next Euraspalt & Eurobitume Congress will be held on 12 – 14 May 2020 in Palacio Municipal in Madrid and it will be organised by EAPA and Eurobitume. The preparations for this 7<sup>th</sup> E&E Congress already started and a PCO (Professional Conference Organiser) was selected. Later this year the Organising Committee will start with its work.

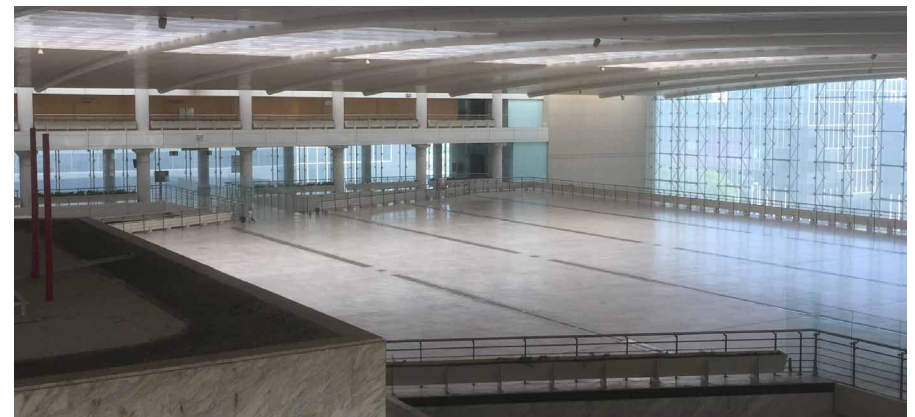
7<sup>th</sup> E&E CONGRESS

EURASPALT & EUROBITUME



MADRID

12-14 MAY 2020



*Exhibition area in Palacio Municipal de Congressos Madrid*



*Auditorium*



*Entrance*

## **EUROPEAN STANDARDISATION**

### **CEN TC336 WG1**

On 14 and 15 March 2017 the CEN TC336 WG1 had a meeting in Manchester (UK).

Anja Sörensen (Eurobitume Deutschland) is now the new convenor of CEN TC336 WG1 and she is the successor of Chris Southwell (Eurobitume UK). Several test methods that could go out for Formal Vote or CEN Enquiry were discussed. The revised test methods for Elastic Recovery, Storage Stability and Force Ductility were approved to go out for Formal Vote.

The responses to the comments received during the CEN Enquiry process regarding the revision in EN 12591 'Paving Grade bitumen' were discussed and approved as well as the draft revised standard. The draft revised EN 12591 was approved to go out for Formal vote.

The proposals of CEN TC336 WG1 TG5 regarding of the revision of EN 14023 'PMB' were discussed. Some amendments were made but the general approach of TG5 was approved. For the next CEN TC336 WG1 meeting TG5 will prepare a draft revised standard.

The next CEN TC336 WG1 meeting will be held on 19 and 20 September 2017 in Italy.



*CEN TC336 WG1 meeting in Manchester*



*Anja Sörensen*



*Chris Southwell*

### **CEN TC336 WG1 TG5**

Task Group 5 of CEN TC336 WG1 is dealing with the revision of EN 14023 "Polymer Modified Binder". The Task Group had a meeting on 8 February 2017.

During this meeting table 1 "Specification framework for polymer modified bitumen" and table 2 "Specification framework for polymer modified bitumen – Additional Properties" were discussed and new draft tables were created.

The goal is to have a more performance related PMB standard and TG5 will create a draft proposal for a new EN 14023 that is expected to go out for CEN Enquiry around December 2017 (after the approval of CEN TC336 WG1 and CEN TC336).

The next TG5 meeting will be held on 13 June 2017.



## OTHER MEETINGS & EVENTS

### TRB 2017

From 8 to 12 January 2017 the 96<sup>th</sup> Annual meeting of TRB (Transportation Research Board) was held in Washington DC. In total 13.277 participants attended this TRB meeting.

There were more 800 sessions and workshops with more than 5000 presentations. Next to that there was an exhibition with more than 200 exhibitors.

In the session 'Pavement Rehabilitation, looking back, looking forward' Jon Epps (Texas A&M University) gave an overview of the past, present and future. In the asphalt sector we had a lot of innovations in the 1970's, where we got the dryer drum mixer, cold milling machines, vibratory rollers, cold in place recycling, hot in place units, etc. We got better analytical tools and linear elastic models. For the future we have to reduce construction time and to improve the quality.

Two speakers spoke about their experience with Cold In-place Recycling (CIR).

Audrey Copeland (NAPA) spoke about Thin Asphalt Overlays. A new generation of thin-layer asphalt overlays called Thinlays™ are a popular approach to pavement preservation in the USA because of their ability to provide improved ride quality, reduce pavement distresses, maintain surface geometrics, reduce noise levels, reduce life-cycle costs, and provide long-lasting service. They have a thickness of 37,5 mm or less. NAPA Publication IS-135, Thin Asphalt Overlays, provides guidance on when to choose thin asphalt overlays, selecting materials and designing the mixes, ensuring construction and quality control, and what type of performance benefits to expect. This publication can be downloaded at: <http://www.asphaltpavement.org/ThinIsIn>

Dale Decker addressed rubblisation of concrete pavements to prevent reflective cracking when overlaid with asphalt. Crack and seat is not eliminating slab action and therefore it is better to use a rubblisation technique. However this technique might be difficult for concrete pavements on a very weak subgrade.

In the session 'Asphalt Mixture volumetrics' mix design was discussed. Here it was seen that volumetrics is not enough to characterise a mixture. Therefore performance tests have to be added like ITS and wheel tracking. The intensive discussions showed the importance of this subject. During



**EAPA**  
SYMPOSIUM  
2017

10<sup>TH</sup> EAPA SYMPOSIUM  
PARIS, JUNE 1<sup>ST</sup> 2017

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"SUSTAINABILITY, INNOVATION AND  
COMMUNICATION IN THE ASPHALT INDUSTRY"



this session also the use of “used cooking oil” was mentioned as a bitumen ‘additive’.

The meeting room for the session ‘Autonomous / Connected Vehicles: Implications for Infrastructure design, construction, materials and maintenance’ was fully packed. Several speakers presented their vision. They spoke about Vehicle to Infrastructure (V2I), Automated Vehicles (AV), Road Side Units (RSU), etc. Brian Ray mentioned the impacts of connected vehicles on multimodal geometric design. In the future the lane width and the shoulder design might change. When we have self-driving cars it will increase the amount of traffic.

Cheryl Richter (FHWA) showed possible impacts of the use of autonomous and connected vehicles on the pavement and pavement design. It might have an effect on the lateral wander of the vehicles, but maybe they can be designed in such a way that they do not all drive in the same line. Platooning could lead to an increase of the traffic volume without having additional lanes.

In the last presentation of this session Gerald Ullman looked at Work Zone Safety. Automated and autonomous vehicles will have several advantages for Work Zone Safety because the desired behaviour of connected vehicles can be programmed for work zones.

In the session ‘Asphalt Mixture Recycling and Rejuvenation’ it was mentioned that the way the rejuvenator is applied has a clear influence. So there is a difference when added to the bitumen compared to adding it to the RAP (where it needs to do its work). Also here the temperature is important. One of the conclusions was that rejuvenated 50% RAP mixes could be expected to have a field performance similar or better than the current allowed 20% RAP mixes (for the Commercial Available Rejuvenator used in the test).

During the Chairman’s Luncheon there were several speakers and awards were given. The Luncheon Speaker was Jaiwon Shin of the National Aeronautics and Space Administration (NASA). He gave a short history of aviation and showed technical innovations NASA contributed to. NASA is now working on several new airplane concepts and he expects that we need to use the third dimension for transport in the future. He expects that all modes of transport will come together.

Next to the sessions and the committee meetings there were also many poster sessions, which were very well attended.



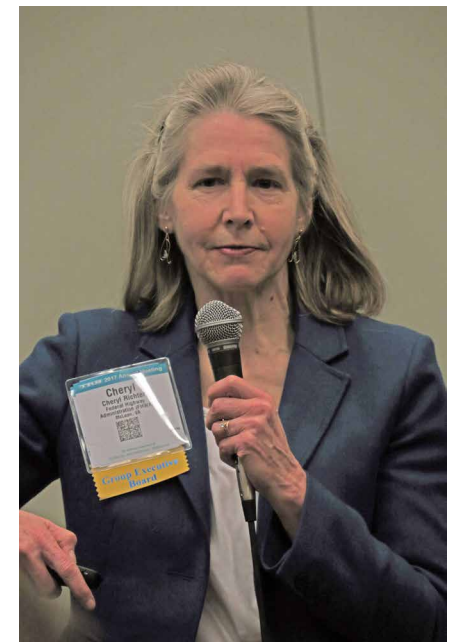
*Jon Epps (Texas A&M)*



*Audrey Copeland (NAPA)*



*Dale Decker*



*Cheryl Richter (FHWA)*

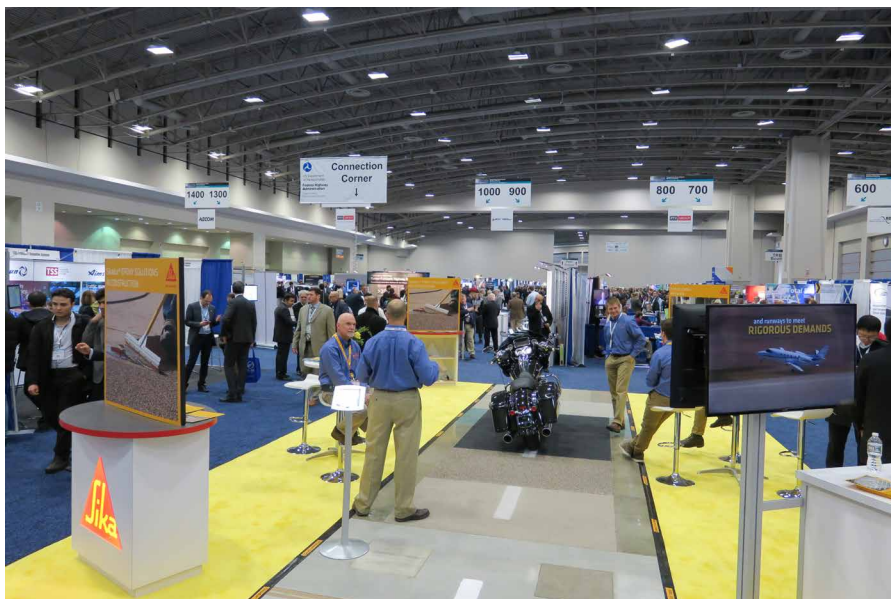




*Jaiwon Shin (NASA)*



*Presentation of Jaiwon Shin during the Chairman's Luncheon*



*Exhibition*



*Poster Session*



## INFRA TECH

During the InfraTech 2017, which was held in Rotterdam, the Netherlands from 17-20 January 2017, there were some interesting presentations.

BAM Infra presented the results of the LE2AP project. Preliminary results of this project were presented during the E&E Congress 2016 in Prague by Rien Huurman.

LE2AP is the acronym for Low Emission<sup>2</sup> Asphalt Pavement. Ronald van Hulst started introducing this project, which started in 2013. The technique developed separates reclaimed Porous Asphalt into its constituent materials. Then these reclaimed materials are used to create a two-layer Porous Asphalt at low temperature.

Two trail sections of each 1000 meter were built on Provincial roads and the results are good. To stimulate the use of this technique Van Hulst invited contractors that are interested in using this technique to contact him.

Rien Huurman gave more details about the process. The reclaimed Porous Asphalt is separated in a (clean) aggregate part (> 2 mm) and the mastic part (bitumen, filler and sand). By using a foaming technique they produce Porous Asphalt with these reclaimed materials by using a rejuvenator. For two-layer Porous Asphalt they have on average 90% reuse of reclaimed Porous Asphalt. The (initial) noise reduction is -8,5 dB(A).



Ronald van Hulst



Rien Huurman



Jan Hooghwerff (of M+P) presented "Less CO<sub>2</sub> by lower rolling resistance of roads". More than 90% of the CO<sub>2</sub> emissions of roads are caused by the vehicles using the road. The emissions generated by the vehicles is for 30% coming from car traffic and 70% from truck traffic. The asset manager can influence this CO<sub>2</sub> emission by creating a more continuous traffic flow ("green waves for traffic lights" so less breaking), speed limits, crosswind reducers (e.g. trees) and a lower rolling resistance of the road surface. Hooghwerff presented rolling resistance data measured with the TU-Gdansk device on various road surface types. A rolling resistance reduction of 10 – 30 % will lead to a fuel-use reduction of 2 – 6%. Hooghwerff also mentioned the preliminary results of measuring rolling resistance of trucks. This project of Rijkswaterstaat with DAF started in 2016 and will finish in 2017. For trucks also the longitudinal evenness of the road and especially the macrotexture of the road surface are the most important factors influencing the rolling resistance of the road, just as for passenger cars. The results of this study are expected to be published in 2017.



Jan Hooghwerff



## **NAPA ANNUAL MEETING 2017**

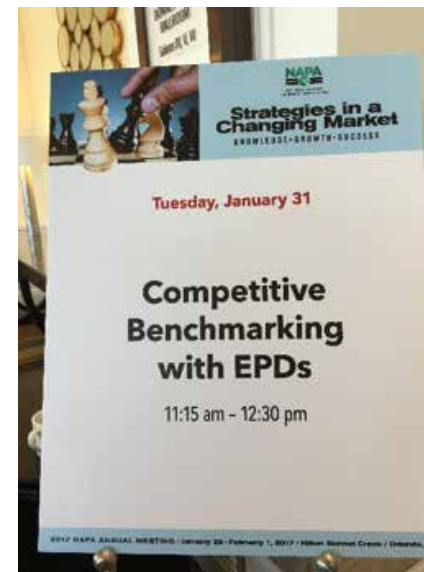
Under the heading "Strategies in a Changing Market" the National Asphalt Pavement Association (NAPA) held its annual meeting in Orlando, USA, in the end of January.

Attendees enjoyed general sessions, educational sessions and committee meetings. EAPA Director Carsten Karcher attended the meeting and participated in several NAPA Committee meetings like Sustainability, Environment, Health & Safety, Research and Asphalt Technology. He will take the most relevant items of these committee meetings to the next EAPA Committee meetings this spring.

The sessions focused e.g. on construction industry's economic outlook, highway funding in the new congress, safety culture, strategies for safer work zones, competitive benchmarking with Environmental Product Declarations (EPD), and higher density for improved performance.

One highlight of the meeting was the opening keynote session with Captain Scott Kelly, History-Making U.S. Astronaut, Retired U.S. Navy Captain on "The Sky Is Not The Limit: Lessons from a Year in Space".

For more information go to NAPA's homepage  
<http://www.asphaltpavement.org>.



*Kevin Kelly NAPA Chairman 2016*

## **18<sup>TH</sup> HAPA CONFERENCE**

On 21 and 22 February 2017 the 18<sup>th</sup> HAPA Asphalt Conference was held in Siófok, Hungary. In the opening session Tibor Veress, director of HAPA, mentioned that this conference was a special event because the Hungarian Asphalt Pavement Association HAPA is celebrating its 25 years anniversary. Veress explained in short the history of HAPA.

In 2017 it was also 150 years ago when the first asphalt pavement was built in Budapest.

This was the reason that HAPA took to initiative to create a book called "Hungarian asphalt road construction is 150 years old". This book will have about 700 pages and will be published by the end of 2017. 40 people of the asphalt industry have been working on this book for two years and it will present the history, the present and the future.

Thomas Wörner of the Technical University of Munich presented the first analyses of different asphalt properties that relate to the representative determination of performance-relevant asphalt properties that should provide the basis for new conditions of contract. In his conclusions he mentioned that performance testing requires a long testing time and although they investigated 21 roads, more data are needed.

Etienne le Bouteiller of the International Bitumen Emulsion Federation (IBEF) gave an overview regarding the use of bitumen emulsions. About 8% of the bitumen used in the world is used for bitumen emulsions. Bitumen emulsions are mainly used for pavement preservations and bond and prime coats. He also mentioned that they have problems with emulsion production due to the fact that the consistency of bitumen is not consistent.

Egbert Beuving spoke about the paper EAPA is working on called 'The ideal project'. This paper provides tools for increasing the durability of asphalt pavements by providing good examples in all stages of the project; so from the design preparation stage until maintenance. With an increased durability the road will last longer and will need less maintenance. It also improves the effective and efficient use of materials and leads to a lower Carbon footprint, less need of resources and it is better for the environment.

In his presentation he showed several possibilities to increase durability. One of them was the contract-type with e.g. a best "quality/price" ratio or a bonus/malus-system.

Barna Zsolt of Értékterv Kft showed the future challenges in traffic, like information technology, mobile communication, electric transport, autonomous vehicles, etc.

Juan José Potti of Asefma (Spain) gave arguments and strategies in his presentation to defend a suitable conservation of the roads, as Asefma used in Spain. They created strategies at 5 levels: Social impact, political impact, sectorial impact, technical impact and media impact. Today technical arguments are not sufficient anymore.

To reactivate and to defend the production of bituminous mixtures in Spain, during the crisis, Asefma has realised a strategy to 5 levels:

- The adequate conservation of the roads is a social need
- The preventive conservation is the most economical way of supporting the patrimonial value
- The development of an indicator that informs media about the condition of the conservation of the roads
- Defend the adequate preservation of the current infrastructures before investing in a new infrastructure
- Improve our social impact in our activities and report much more to the citizen by streaming and social networks

So in short: We need to be greener, more innovative, digital and open to share the information.

On the second day there were i.a. reports of the work of the HAPA Environmental Working Group, the Technological Working Group and the Raw Materials and additives Working Group.



*18<sup>th</sup> HAPA Conference*





*Tibor Veress*



*Thomas Wörner*



*Etienne le Bouteiller*



*Barna Zsolt*

## INTERESTING WEBSITES

When the United States Department of Transportation was created (in the USA), the Secretary of Transportation was charged by law to report on both the current and the anticipated future conditions of USA's transportation system. Beyond Traffic 2045 is USA DOT's most comprehensive assessment of current and future conditions in decades.

In effect it is a call to action. "After years of chronic underinvestment and policy choices that sometimes work at cross-purposes with larger economic and social mobility goals, now is the time for a report like this to be read, understood, considered, and utilized to breathe new life into funding and policy discussions at the federal, state, and local levels".

Beyond Traffic 2045 can be downloaded at  
<https://www.transportation.gov/BeyondTraffic>



## UPCOMING CONGRESSES

More upcoming conferences can be found at the EAPA website:  
<http://eapa.org/events.php>

### XII JORNADA ASEFMA

On 30 and 31 May 2017 the XII National Congress, organized by Asefma, will be held in Madrid (Spain).

This Congress will be dedicated to the Impact of road preservation on CO<sub>2</sub> emissions.

The hashtag of the XII National Congress of Asefma is #XIIJornadaAsefma.

More information can be found at

<http://www.asefma.es/tag/XIIJornadaASEFMA/>



## WCPAM 2017

On 12 – 16 June 2017 the World Conference on Pavement and Asset Management (WCPAM) 2017 will take place in Italy.

Pushing the evolution of transportation infrastructures: let's shape the future of pavement and asset management! – with this significant motto, the conference offers researchers, developers, companies and other associations dealing with everyday tasks and responsibilities related to transport infrastructures pavement and asset management the possibility to present innovative projects and to interchange knowledge and experience.

During the five days' conference, research findings, best practices and case studies about road and airport pavements and assets will be in the focus as well as life-cycle cost analysis or economic, environmental and political strategies or innovative design methods and materials.

More information can be found at [www.wcpam2017.com](http://www.wcpam2017.com).





## IICTG CONFERENCE

On 26 – 28 September 2017 the International Intelligent Construction Technologies Group (IICTG) 2017 Conference will be held in Minneapolis, Minnesota, USA.

More information can be found at <http://www.iictg.org/2017-conference/>



## 4<sup>TH</sup> INTERNATIONAL SYMPOSIUM ON ASPHALT PAVEMENTS & ENVIRONMENT

On 20 – 21 November 2017 the 4<sup>th</sup> International Symposium on Asphalt Pavements & Environment will be held in Tokyo, Japan. This Symposium is hosted by ISAP Technical Committee on asphalt Pavement & Environment (TC-APE).

More information can be found at: <https://confit.atlas.jp/guide/event/isapape2017/top?lang=en>



## AV'17

On 28<sup>th</sup> – 29<sup>th</sup> November 2017 the CONFERENCE ASPHALT PAVEMENTS 2017 - AV'17 will be held in České Budějovice, Czech Republic.

More information can be found at: <http://www.asfaltove-vozovky.cz/en/>



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

On 30 November and 1 December the 16<sup>th</sup> Colloquium on Asphalt, Bitumen and Pavements in Bled, Slovenia.

**16<sup>th</sup> Colloquium**  
ASPHALT, BITUMEN and PAVEMENTS

Bled | Slovenia

30<sup>th</sup> November - 1<sup>st</sup> December | 2017



The largest international meeting of construction and maintenance of pavements in Slovenia.

**ZAS** <sup>20</sup> **Združenje asfalterjev Slovenije**  
Slovenian Asphalt Pavement Association  
[www.Zdruzenje-ZAS.si](http://www.Zdruzenje-ZAS.si) | E-mail: [info@zdruzenje-zas.si](mailto:info@zdruzenje-zas.si)

**PETROL**

ZAS with cooperation of PETROL,  
the leading Slovenian energy company

## EVENTS LIST

- 5 April EAPA HSE Committee meeting in Berlin  
 6 April EAPA TC meeting in Berlin  
 5-7 April FEHRL Infrastructure Research Meeting 2017 (FIRM17) in Brussels
- 4-5 May CEN TC227 WG1 meeting in Belfast  
 8-10 May Strategic Asphalt Research symposium in Colorado Springs, USA  
 16-17 May FGSV Asphaltstraßentagung, Bamberg, Germany  
 18 May CEN TC227 WG6 meeting in Berlin  
 19 May CEN TC227 Chairman's Panel Meeting
- 30-31 May XII ASEFMA National Asphalt Days, Madrid, Spain  
 31 May EAPA GCA meeting in Paris
- 1 June EAPA Symposium in Paris  
 13 June CEN TC336 WG1 TG5 meeting in Brussels  
 19-20 June CEN TC227 meeting in Cyprus
- 13-16 Aug 17th AAPA International Conference in Melbourne  
 17 Aug GAPA meeting in Melbourne
- 19 Sept CE TC154 WG13 meeting in London  
 19-20 Sept CEN TC336 WG1 meeting
- 5 Oct EAPA AP&EM Group meeting in Paris  
 10-11 Oct EAPA ExCo and directors' Group meeting in Copenhagen  
 18 Oct EAPA HSE Committee meeting in Paris  
 19 Oct EAPA TC meeting in Paris
- 2-3 Nov CEN TC227 WG1 meeting in Stockholm  
 14-15 Nov CEN TC336 meeting in Brussels  
 28-29 Nov AV-17 - Conference on Asphalt Pavements 2017 in České Budějovice (CZ)  
 30 Nov-1 Dec 16<sup>th</sup> Colloquium on Asphalt, Bitumen and Pavements in Bled, Slovenia

## COLOPHON

Text: Egbert Beuving & Carsten Karcher

Layout: Window Stories

Pictures: Egbert Beuving and Carsten Karcher

## MEMBERS

			
Asefma	Asfaltindustrien	ASMUD - Turkish Asphalt Contractors Association	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	USIRF - Routes de France	ZAS - Združenje asfalterjev Slovenije	

## ASSOCIATE MEMBERS

				
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