

IBEF Exchange Seminar

Introduction

Gaylon Baumgardner – President IBEF

Asphalt Emulsion Manufacturing Association (AEMA)

Senior Vice President – Ergon Asphalt and Emulsions, Inc., U.S.A.



June 7th, 2019 - Paris



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Welcome

Bienvenue

WITAMY

Benvenuto

Üdvözlök

Bienvenido

желанный

Willkommen

Добре дошли

Welcom

Yōkoso



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Program

- 9:00 – Update on European Standards (Bernard Eckmann/IBEF)
- 9:30 – Impact of IMO on Bitumen Quality (Sebastien Le Corre/Total)
- 10:15 – Break
- 10:30 – Founding Members Exchange
 - Introduction (Etienne Le Bouteiller/IBEF)
 - Panel Discussion – Founding Members
- 11:30 – Development of New IBEF Website (Emmanuel Cornet/IBEF)
- 11:45 – IBEF Action Plan for 2019 and Beyond (Gaylon Baumgardner/IBEF)
- 12:15 – Adjourn and Cocktail



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CEN/TC 336 - Bituminous binder standardisation

Situation of harmonized standards

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7th June 2019

B. Eckmann

CEN/TC 336 STANDARD PORTFOLIO

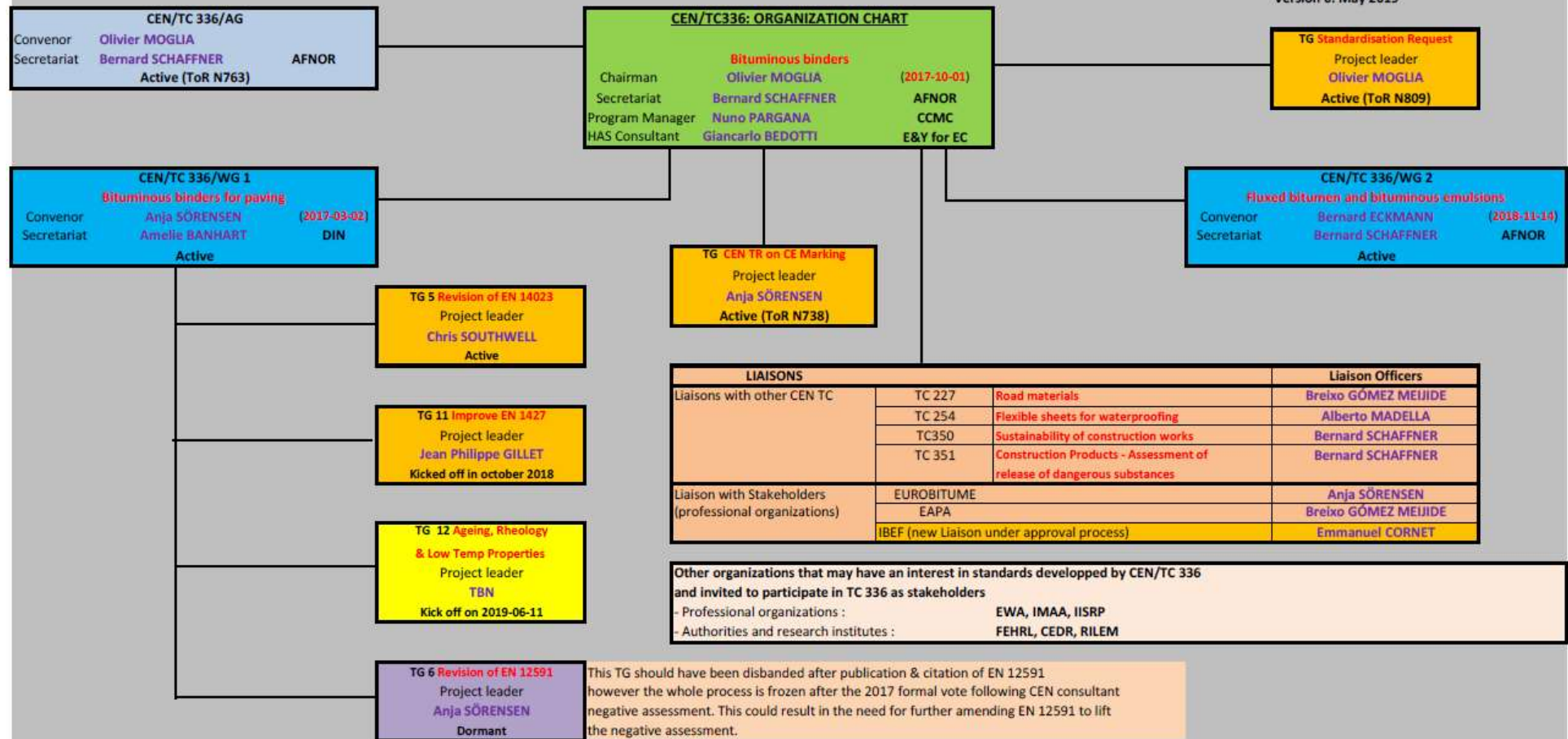
- About 50 test standards



- 8 Specification standards including 6 in the scope of Mandate M124 :

EN 12591	Normal Paving Grade Bitumen
EN 14023	Polymer Modified Bitumen
EN 13924-1	Hard Paving Grade Bitumen
EN 13924-2	Multigrade Bitumen
EN 13808	Bitumen Emulsions
EN 15322	Fluxed and Fluidised Bitumen
EN 13304	Oxydised Bitumen
EN 13305	Hard Industrial Bitumen

Version 6: May 2019



EUROBITUME European Association of Bitumen Producers
EAPA European Asphalt Pavement Association
EWA European Waterproofing Association
IMAA International Mastic Asphalt Association
IBEF International Bitumen Emulsion Federation
IISRP International Institute of Synthetic Rubber
FEHRL Forum of European National Highway Research Laboratories
CEDR Conference of European Directors of Roads
RILEM International Union of Laboratories and Experts in Construction Materials, Systems and Structures

Construction Products Regulation (CPR – EU 305/2011)

EU 305/2011 applies to all EU Members States

- To remove barriers to trade for construction products → CE marking
- Construction **works** must satisfy a set of 7 «Basic Work Requirements» (BWR)
- Replaces the former Construction Products Directive (CPD – 89/106/EEC)

Mandate M/124 (road construction products) – July 1998 (established under CPD)

- Given to CEN by the European Commission
- Defines the BWR to be considered for bituminous paving products

Task ascribed to CEN Technical Committees (TC336 for bit. binders) :

- Propose **Essential Characteristics** and test methods applicable to construction products in relation to the identified BWR's (**Answer to the Mandate**)
- Develop harmonized product standards accordingly

Mandate M/124 – Part dealing with bituminous emulsions

C - Bitumen emulsion, fluxed bitumen emulsion, polymer modified bitumen emulsion, fluxed polymer modified bitumen emulsion

ER	Performance characteristics	Durability
1 and 4	<p>Viscosity</p> <p>Water effect on binder adhesion</p> <p>Breaking behaviour</p> <p><i>after stabilisation of the resting binder:</i></p> <p>Hardness (including temperature dependence)</p> <p>Resistance to flow / deformation (including temperature dependence)</p> <p>Cohesion</p> <p>Adhesion</p>	<p>Y</p> <p>(Against ageing, weathering, oxidation, ... as relevant)</p>
2		
3	Release of dangerous substances*	

Answer to Mandate M/124

1st answer to the Mandate : made by TC336 in 2000 and has been accepted by EC in 2001

- List of harmonized product standards
- Test methods to be applied to assess these Essential Characteristics
- Is the reference document used by HAS (Harmonized Standards) Consultants to assess the conformity of harmonized product standards to the legal requirements of CPD/CPR

Tentative amendment of the answer to the Mandate has been made in 2015 but has never been formally accepted by EC

For the time being, harmonized standards are still evaluated against the 2001 document

- A harmonized standard can only be used for CE marking if it has been cited in the OJEU
- Citation can only be done if the standard complies with the answer to the Mandate

Some consequences :

- Revised standard (EN 12591) cannot be cited due to negative assessment by HAS Consultant
- New standards (EN 13924-1 & 2) cannot be cited since they were not listed in the 2000 answer to the Mandate

TC336 PRODUCT STANDARDS

HAS CONSULTANT VIEW ON PRODUCT STANDARDS (EC POSITION)

— SHOULD ONLY ADDRESS ESSENTIAL CHARACTERISTICS

- ≡ AS IDENTIFIED IN THE ANSWER TO MANDATE M124
- ≡ NEW CHARACTERISTICS WOULD HAVE TO BE JUSTIFIED IN RELATION TO THE BWR OF THE CPR AND ACCEPTED BY THE COMMISSION

— BUT RETAINED ESSENTIAL CHARACTERISTICS MAY DIFFER DEPENDING ON THE INTENDED USE

- ≡ IT IS POSSIBLE TO HAVE SEVERAL TABLES ZA.1 (ONE FOR EACH INTENDED USE)

— INTRODUCTION OF NEW THRESHOLDS, LEVELS OR CLASSES

- ≡ NEED TO BE ACCEPTED BY THE COMMISSION → DELEGATED ACTS
- ≡ HAS CONSULTANT : HARMONIZED STANDARDS NEED ONLY TO SPECIFY ESSENTIAL CHARACTERISTICS AND ASSOCIATED TEST METHODS, PERFORMANCE THRESHOLDS, CLASSES OR LEVELS MAY BE FREELY REGULATED BY MEMBER STATES

— POSSIBILITY TO ADD OTHER, « VOLUNTARY », CHARACTERISTICS :

- ≡ STILL UNDER DEBATE
- ≡ THE SOLUTION MOST LIKELY TO BE ACCEPTED IS TO ADDRESS THEM VIA A SEPARATE, NON-HARMONIZED, EN SPECIFICATION ON WHAT COULD BE CALLED « INSTALLATION PROPERTIES » (e.g. Flash-Point, Sieve residue, ...)

TC336 PRODUCT STANDARDS

HAS CONSULTANT VIEW ON PRODUCT STANDARDS (EC POSITION)

— DATED VS UNDATED REFERENCES

“For undated references, the latest edition of the referenced document (including any amendments) applies.”

Means:

the latest edition **before the date of citation of the product standard**

In other words:

A new version of a test standard becomes only applicable for CE marking once a new version of the product standard has been cited at a later date.

- Calls for regular revisions of product standards
- Calls for simultaneous revisions of product and test standards

— STANDARDIZATION BODIES MUST KEEP WITHDRAWN VERSIONS OF A PRODUCT STANDARD AVAILABLE FOR CE MARKING AS LONG AS THE NEW VERSION HAS NOT BEEN CITED.

TC336 PRODUCT STANDARDS

PRESENT SITUATION FOR TC336 PRODUCT STANDARDS

- CITATION OF REVISED PRODUCT STANDARDS CAN ONLY OCCUR IF :
 - ≡ A NEW ANSWER IN LINE WITH EC REQUIREMENTS IS PROVIDED AND ACCEPTED
 - ≡ REVISED PRODUCT STANDARDS COMPLY WITH THIS ANSWER
- TC336 HAS DRAFTED A NEW ANSWER TO THE MANDATE IN 2018 BUT IT HAS NOT BEEN TRANSMITTED TO EC SINCE EC ENCOURAGES A NEW APPROACH :
- STANDARDIZATION REQUEST (SR)
 - ≡ PROBABLY A MOST EFFECTIVE APPROACH THAN NEW ANSWER TO THE MANDATE
 - ≡ WOULD REPLACE THE PART OF MANDATE M/124 DEVOTED TO BITUMINOUS BINDERS
 - ≡ ONCE APPROVED, THE STANDARDIZATION REQUEST WILL NOT REQUIRE AN « ANSWER » FROM TC336 BUT THE SET-UP OF A WORK PROGRAMFULD
 - ≡ TC336 HAS BEEN OFFERED AND HAS AGREED TO PARTICIPATE TO THE DRAFTING OF SUCH A SR FOR ALL ITS HARMONIZED STANDARDS
 - A TG has been created with an ambitious objective to come up with a first draft for the TC336 Plenary Meeting in Nov. 2019
 - ≡ BUT **NEW CONSTRAINTS** CONCERNING **BWR3** (Release of dangerous substances) AND **BWR7** (Sustainability) ARE LIKELY TO BE IMPOSED ON PRODUCT STANDARDS

TC336 PRODUCT STANDARDS

PRESENT SITUATION FOR TC336 PRODUCT STANDARDS

— EN 12591 (PAVING BITUMEN)

- ≡ REVISED STD (with Annex B on DSR/BBR) HAS BEEN APPROVED BUT NOT PUBLISHED
- ≡ CANNOT BE CITED AS SUCH
- ≡ 2009 VERSION STAYS IN FORCE AND NEW REVISION WILL ONLY BE STARTED ONCE CITATION ISSUES HAVE BEEN SOLVED (STANDARDIZATION REQUEST)

— EN 13924-1 (HARD PAVING BITUMEN) AND EN 13924-2 (MULTIGRADE)

- ≡ PUBLISHED BUT NOT CITED (cannot be used for CE marking)
- ≡ WILL NOW HAVE TO BE REVISED (SR in 2019 and 2020) BEFORE BEING ELIGIBLE FOR CITATION
- ≡ REVISED VERSIONS WILL HAVE TO BE COMPLIANT WITH (accepted) NEW STANDARDIZATION REQUEST

— EN 14023 (POLYMER MODIFIED BITUMEN)

- ≡ REVISED DRAFT (including DSR/BBR/PAV data) HAS BEEN PREPARED BY WG1/TG5
- ≡ IT HAS BEEN DECIDED (Nov. 2018) TO OPEN THE WORK ITEM FOR REVISION
- ≡ IT IS HOPED THAT CITATION RELATED ISSUES CAN BE SOLVED THROUGH A STANDARDIZATION REQUEST WITHIN THE REVISION TIMEFRAME

TC336 PRODUCT STANDARDS

PRESENT SITUATION FOR TC336 PRODUCT STANDARDS

— EN 13808 (BITUMINOUS EMULSIONS)

- ≡ TC336/WG2 HAS DRAFTED PROPOSALS FOR A MORE EFFICIENT STANDARD FOCUSED ON END-USES
- ≡ SYSTEMATIC REVIEW TOOK PLACE IN 2018 (10 requests for revision)
- ≡ WG2 HAS HOWEVER RECOMMENDED **TO NOT REVISE EN 13808**, CONSIDERING:
 - The uncertainties about citation and the risk of losing voluntary characteristics (binder content, sieve residue, ...)
 - The wish to alert CEN/EC on the need for a clarification before continuing standardization work
- ≡ EN 13808:2013 STAYS IN FORCE UNTIL NEXT REVISION
- ≡ TC336/WG2 WILL CONTINUE TO WORK ON A NEW PROPOSAL (TR)
- ≡ NEW PROPOSAL/REVISION WILL HAVE TO BE COMPLIANT WITH THE STANDARDIZATION REQUEST

— EN 15322 (FLUXED BITUMINOUS BINDERS)

- ≡ HAS BEEN CONFIRMED AFTER 2018 SYSTEMATIC REVIEW

- ➔ **THE STANDARDIZATION REQUEST WILL BE THE KEY FOR THE FUTURE OF THESE STANDARDS**
- ➔ **UNFORTUNATELY, WE WILL HAVE TO WORK UNDER STRONG TIME CONSTRAINTS**

TC336 PRODUCT STANDARDS

CLOSING REMARKS

— HARMONIZED STANDARDS ARE NOW THE LEGAL TOOL FOR THE APPLICATION OF THE CPR

- ≡ ONLY ESSENTIAL CHARACTERISTICS
- ≡ BUT POTENTIALLY NEW CONSTRAINTS (BWR7) WHICH SHOULD BE CHALLENGED
- ≡ FUTURE EVOLUTIONS WILL BE MUCH MORE DIFFICULT
 - Introduction of new test methods
 - Modification of performance classes and thresholds
- ≡ TC336 EXPERTS ARE NOT LEGAL EXPERTS

— WE ARE SERIOUSLY DRIFTING AWAY FROM ORIGINAL EXPECTATIONS

- ≡ STANDARDS SETTING GUIDELINES FOR PRODUCERS AND ROAD AUTHORITIES
- ≡ STANDARDS GIVING CONFIDENCE IN THE PRODUCTS THROUGH A SHARED CONSENSUS ON AD-HOC PROPERTIES AND LEVELS OF PERFORMANCE
- ≡ STANDARDS REFLECTING THE LATEST STATE OF THE ART

NOT PROVIDED

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Impact of IMO on bitumen quality

Sébastien Le Corre – TOTAL Marketing & Services

Bitumen International Supply Manager



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Introduction to the emulsion markets

Étienne le Bouteiller – Technical Coordinator



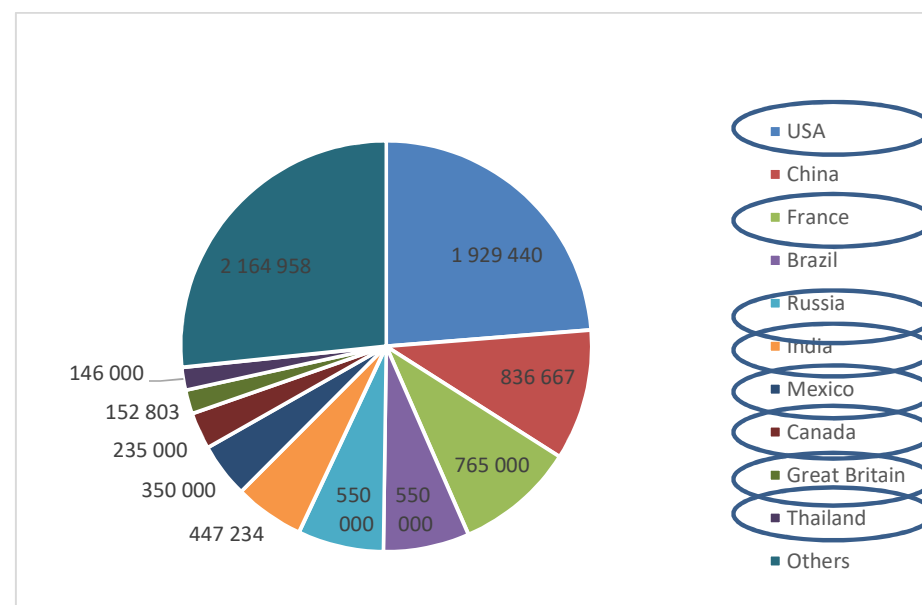
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DATA 2016

- Data collected for the PPRS NICE 2018
- 96 countries for emulsions: 8 137 702 MT
- 139 countries for bitumen: 103 120 054 MT

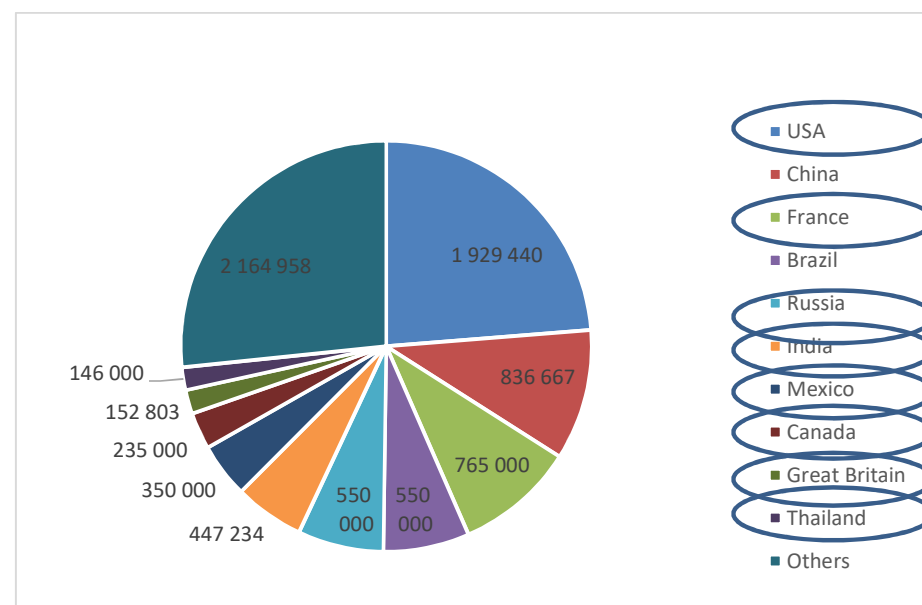


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DATA 2016

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DATA 2016

Country	Association	Bitumen	Emulsion
USA	AEMA	20 266 865	1 929 440
France	SFERB	2 406 000	765 000
United Kingdom	REA	1 425 000	152 803
Germany	FBS	1 700 000	120 000
Spain	ATEB	600 000	109 285
Italy	SITEB	1 440 000	73 000
Total	Founding members	27 837 865	3 149 528
		27,0%	38,7%
Mexico	AMAAC	1 300 000	350 000
Japan	JEAA	1 500 000	137 000
Australia	AAPA	850 000	110 000
South Africa	SABITA	398 000	98 552
Hungary	HAPA	139 000	9 500
Total	Full members	32 024 865	3 854 581
		31,1%	47,4%
Total	Worldwide	103 120 054	8 137 702



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FUTURE

	IBEF	%	Others	%	Total
Emulsion	5 420 315	66,7%	2 717 388	33,3%	8 137 702
Bitumen	51 884 106	50,3%	51 235 948	49,7%	103 120 054
Ratio	10,4%		5,3%		7,9%



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FUTURE: A DREAM ????

	IBEF	%	Others	%	Total
Emulsion	5 420 315	66,7%	5 352 602	49,7%	10 772 916
Bitumen	51 884 106	50,3%	51 235 948	49,7%	103 120 054
Ratio	10,4%		10,4%		10,4%



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THANK YOU

Étienne le Bouteiller – Technical Coordinator



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Panel Discussion

IBEF Founding Members



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Emulsion market in UNITED KINGDOM

Stewart Struthers – [Director] – [Road Emulsion Association Ltd]



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0. CONTENT

1. Market description
2. Main drivers
3. Comments
4. Future



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1. MARKET DESCRIPTION

- Bitumen emulsion market in the UK 140,000 Tonnes in 2018
- Largest market sector is Surface Dressing binders (65%)
- Majority of SD binder volume is Polymer Modified
- 7 Manufacturers – Colas , Nynas , Total , Bituchem , Jobling-Purser , Kier (Ayton) & new market entrant PolyBitumens (Eurovia)



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2. MAIN DRIVERS

- **Local Authority road maintenance spend**
- **Highways England spend on Trunk roads and Motorways (Major roads)**



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3. COMMENTS

- Local Authority roads budgets under severe pressure with cuts of 20 % not uncommon
- (despite increase in Government funding i.e. Authorities re-allocate the monies away from roads)
- Annual maintenance shortfall for UK roads estimated at £ 657 M per annum
- Over 1.8 M pothole repairs annually - equivalent of 1 every 17 seconds !
- One time backlog spend of £ 10 Billion would be required and take 10 years to complete



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3. REAL ACTIVITY

- Working on joint initiatives with contractors industry association RSTA (Road Surface Treatments Association) in the areas of Health & Safety and promoting surface treatment systems using bitumen emulsions
- Interactions with other industry and government bodies i.e. ADEPT (Association of Directors of Environment, Economy, Planning & Transport
- Launch of two animated videos promoting the benefits of processes that use bitumen emulsions
 - Bond Coats in highway construction <https://youtu.be/TrZzD-9ayHk>
 - Surface Dressing as a key surface treatment and how it can prevent potholes <https://youtu.be/GbffT2ZtLBI>



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4. FUTURE

- Longer term funding with more certainty of budgets is required
- Brexit may spark infrastructure spend as stimulus
- Maintenance budgets are seen as remaining flat
- Highways England / Dept for Transport seeking innovative longer lasting repair materials



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Emulsion market in SPAIN

María del Mar Colás– Technical Manager and Vice-President of ATEB



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OUTLINE

1. Market description
2. Main drivers
3. Comments
4. Future



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1. MARKET DESCRIPTION

- Focus on Spain
 - We have a large road network: 167.000 km (26.000 km of state roads (52% traffic), 71.000 km of Spanish Autonomous Communities (42% traffic) and 70.000 km of the Provincial Councils (6% traffic))
 - There is a good relationship between road authorities and the industry
 - Tools for innovation have been implemented
 - Circular Economy is the model to be consider



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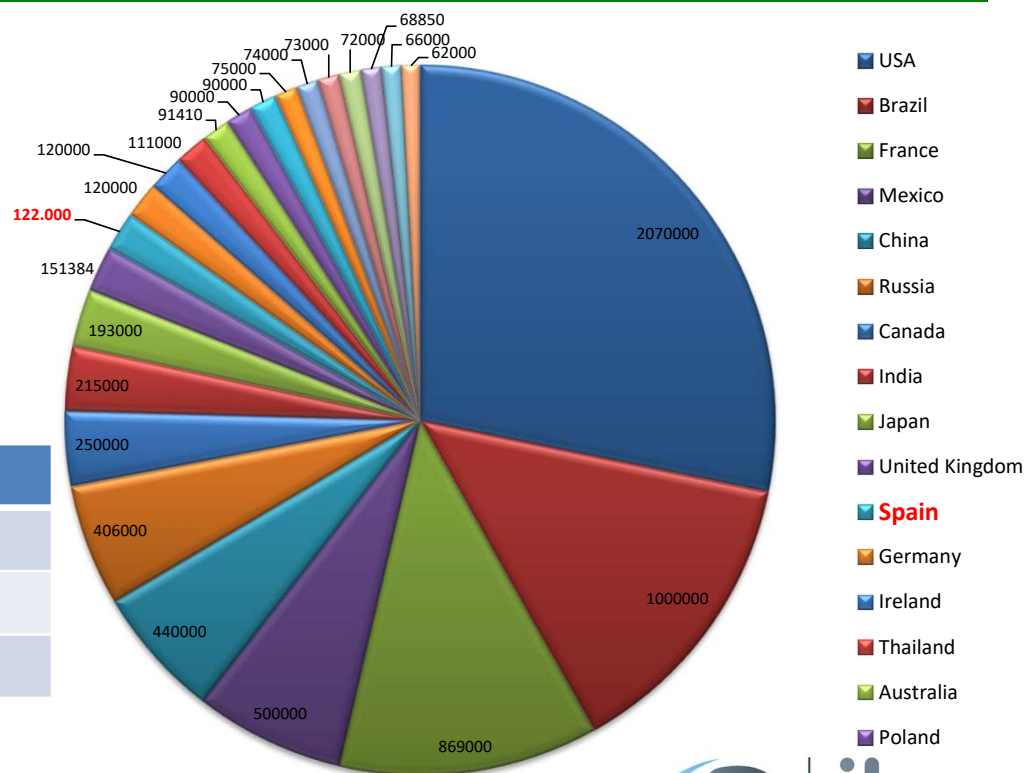
1. MARKET DESCRIPTION

- Where are we in Spain?
 - Emulsions productions in 2018 was 118.000t
 - We are in the Top 25

	Bitumen	Emulsion	Ratio
Spain	750,000	118,000	15.7 %
EU 28	11,706,000	1,776,000	15.2 %
Worldwide	103,120,000	8,138,000	7.9%



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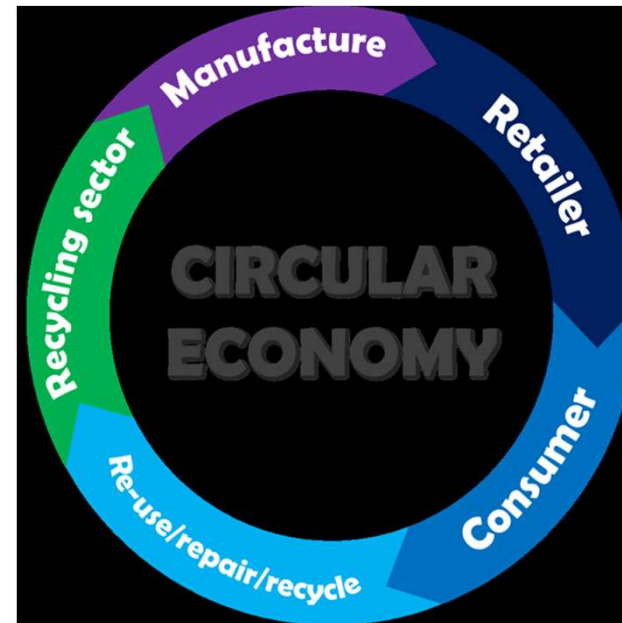
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2. MAIN DRIVERS

- Budget restrictions
- Preserving non renewable resources
- Improve maintenance techniques
- Low temperatures techniques
- Durability

Circular economy



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➤ ATEB is always supporting the use of maintenance techniques

➤ Technical Committee for LTR has drafted a total of 9

General Technical Prescriptions about

- GRAVAEMULSION
- PROTECTION AND SEALING COATS
- SURFACE DRESSINGS
- SLURRY SEAL
- COLD OPEN MIXES
- HALF WARM BITUMINOUS MIXTURES
- IN-SITU RECYCLING WITH BITUMEN EMULSION
- HALF WARM RECYCLING



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The image shows the cover of a technical report. It features a collage of four photographs: a road construction site with a truck, a road with a large tanker truck, a road with a white truck, and a road with a white truck. The text on the cover is in Spanish and includes the title 'Recomendaciones para la Redacción de Pliegos de Prescripciones Técnicas Particulares de Firmes y Pavimentos Bituminosos de Carreteras de Baja Intensidad de Tráfico' and the subtitle '(Unidades complementarias o no recogidas en el PG-3 y el PG-4)'. Logos for 'Asociación Técnica de Carreteras' and 'WORLD ROAD ORGANIZATION' are also present.

Recomendaciones para la Redacción de Pliegos de Prescripciones Técnicas Particulares de Firmes y Pavimentos Bituminosos de Carreteras de Baja Intensidad de Tráfico

(Unidades complementarias o no recogidas en el PG-3 y el PG-4)

Comité de Carreteras de Baja Intensidad de Tráfico de la Asociación Técnica de Carreteras
Grupo de Trabajo 3

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3. COMMENTS

- The production of bituminous emulsion in Spain has dropped dramatically in recent years.

Economic crisis = lack of maintenance

- In general, production has also declined in Europe ... but much less than in Spain.
- In many others EU countries (UK, Poland, Czech Republic, Romania ...) the use of emulsion is maintained or even grows!
- Clearly booming techniques: those related to maintenance and sustainability
 - Slurries seals
 - Recycled bituminous mixtures



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3. COMMENTS

- There are Key factors for the growth of cold techniques:
 - The warmer weather helps its application
 - Emulsion techniques are very associated with maintenance
 - Sustainability
 - Energy savings
 - Health and safety
 - Logistics
 - Versatility
 - Quality and good performance

THINK+
POSITIVE.



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3. COMMENTS

How are we moving in ATEB?

- Collecting market information on emulsions
- Promoting the use of bitumen emulsions
- Sharing information about advantages of pavement preservation using bituminous emulsion
- Exchanging information on standards and regulations
- Exchanging information and best practices on production and use of bituminous emulsions
- Contributing updated technical information on the website
- Conducting technical training of new professionals
- Organizing technical symposiums in Spain



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4. FUTURE

- Preserving non renewable resources..... Recycling asphalt pavements!
- Reduce emissions of GHG and energy consumption.... By using emulsion techniques!
- Improve the environmental performance of the road.... emulsions contribute to the environment!
- Use of High Performances materials, not only for wearing course but also for binder & base course...Choose "the right product, in the right place and at the right time"
- **Promote preventive maintenance of the roads**



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4. FUTURE

- Road sector digitalization is another important factor in encouraging its development
- ATEB Tools:
 - Website www.ateb.es
 - ATEB Blog <http://ateb.es/index.php/blog>
 - Social network as LinkedIn ATEB, Twitter @ateb_es and Fan Page Facebook



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THANKS FOR YOUR ATTENTION!



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Emulsion market in United States

Gaylon Baumgardner – Senior Vice President – Ergon Asphalt and Emulsions, Inc.

Representing

The Asphalt Emulsion Manufacturing Association (AEMA)



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0. CONTENT

1. Market description
2. Main drivers
3. Comments
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1. MARKET DESCRIPTION

- **AEMA Primarily Represents the United States and Canadian Markets**
 - **AEMA – North American Association with International Members**
 - **Focusing Efforts Through IBEF to Establish Greater International Outreach**
 - **International Technical Committee**
 - **AEMA – IBEF Joint Efforts:**
 - **The International Symposium on Asphalt Emulsion Technology (ISAET) – Washington D.C.**



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2. MAIN DRIVERS

- **Rapidly Deteriorating Infrastructure in need of Preventive Maintenance and Repair**
- **Increased Occurrence of Non-load Related Cracking**
- **Typically Strong Resistance from Major Hot-Mix Construction Entities**
- **Hot-Mix vs. Pavement Preservation**
- **Improved Products and Techniques**



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3. COMMENTS

- Annual Survey
- Strict Confidentiality Accompanies Survey
- No One Outside few Personnel of the Accounting Firm can Access non-Aggregated Data
- Survey is Destroyed Immediately After Reporting Data
- Members Submitting, Geography and Specific Emulsion Types not Known



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4. FUTURE

- **Current Data has been Captured from 2015-2016 and 2017-2018 Time Periods**
- **Have Moved to Annual Survey**
- **Attempting to Build Trust in the Industry to gain Significant Respondents**
- **Efforts to Capture Market Data have been Resisted in the Past.**
- **New Efforts Progressing Well with Hopes of Improvement**



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Emulsion market in France

François CHAIGNON– Président of SFERB/ROUTES DE FRANCE



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0. CONTENT

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1. MARKET DESCRIPTION

➤ Tonnage

- Emulsions 576 000 t
- Modified emulsions 134 150 t close to 2.5 M t of ACBE
- Fluxed bitumen 43 000 t
- Modified bitumen 227 000 t (10% of the bitumen used in France for HMA)

➤ Total road bitumen in France 2.8 Mt

➤ Emulsion tonnage globally stable but increase of 2% of HMA last year



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1. MARKET DESCRIPTION

- Around 200 M m² of surface dressing (chipseal for Gaylon)
- 50M m² of microsurfacing

- At Routes de France increase of the French industry turn over by 10%
 - Mainly urban, tram and high level of bus lanes
 - So more manual work than paving or maintenance work (half term of the mayors)



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2. MAIN DRIVERS

- Strong issues on bitumen supply (mainly North, East of France and Paris area)
- New regions in France with a reorganization of the regional Routes de France
- Creation of “metropoles” which will cover cities around the large ones
 - New road services under way
- Less knowledge on emulsion in the industry and the road owners authorities
 - SFERB would like to increase information sessions on pavement maintenance
 - Creation of small tutos to present pavement preservation techniques (2020)



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3. COMMENTS

- At SFERB we have refiners on board
 - IMO is the actual subject
 - 30% of the French bitumen consumption is used through the SFERB members
 - TOTAL did a very interesting presentation for the French market
 - SHELL will present its position at the end of June

- A safety manual for emulsion plants is under way (beginning of 2020...)



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3. COMMENTS

- **Strong work on European Specifications**
 - **Bernard as chairman of TC 336 WG2**
 - **Renewal of the emulsion standard**
 - **Work on ACBE (Asphalt Concrete Bitumen Emulsion) EN 13108-31**

- **Internal work on micro surfacing machines calibration**
- **Work on Surface dressing and microsurfacing defects (after 1 year)**
- **IDDRIM note on Cape Seal (Revêtement Superficiel Combiné)**
 - **Increasing the number of techniques using bitumen emulsions**



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4. FUTURE

- Safer at the emulsion plants
- Better quality products
- Training and information to the industry and road owners
- The right technique at the right time on the right road



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Emulsion Market in ITALY

Carlo Giavarini – Honorary President – SITEB



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1. MARKET DESCRIPTION

With an estimated value of 87,000 tons in 2018, the emulsion market in Italy is still poor, in spite of the fact that we had an increase of about 10% respect to 20017 (also due to increased use of asphalt mix.

We are among the 5 historical founders and hope that *mama* IBEF will not scold us for not having done our promotion homework properly.



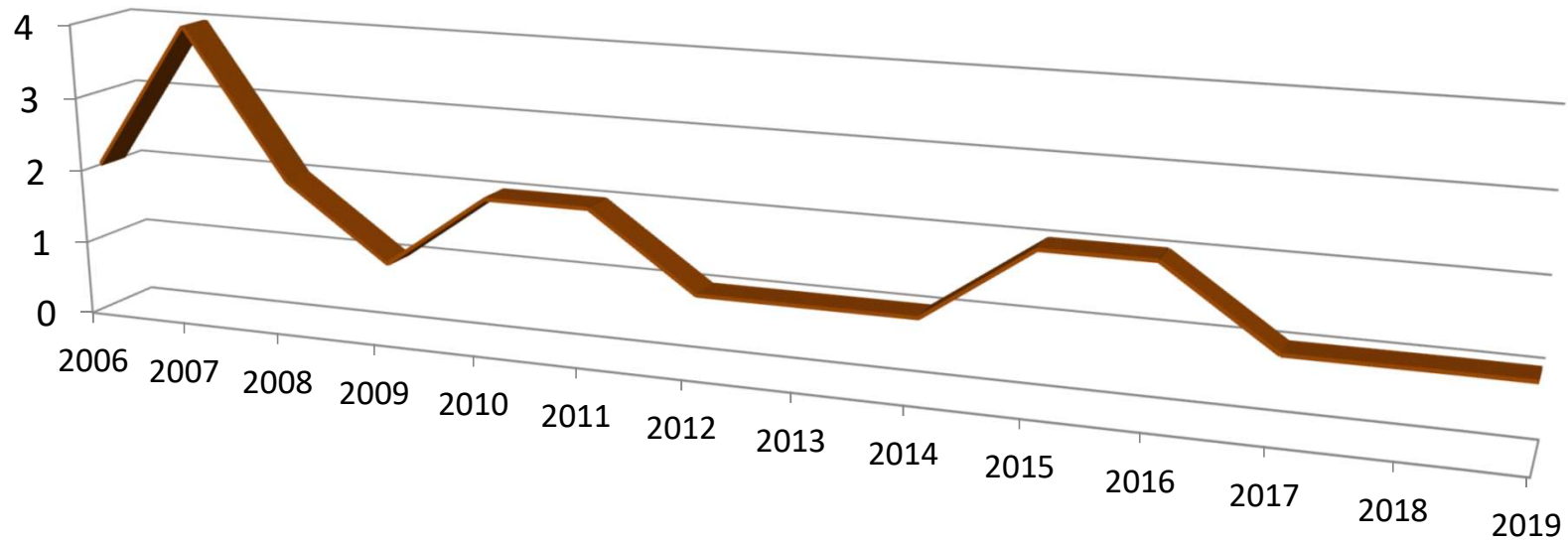
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EMULSION PLANTS IN ITALY (about 40)



EMULSION PLANTS IN ITALY (by Massenza)

Emulsion plants supplied in 2006-2019



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2. MAIN DRIVERS

-Cold recycling (also for small works)

-Bond (tack) coat

From a rough estimate we made on the basis of our production of asphalt mix, we discovered that emulsion is not always used (as a bond coat) before laying the mix, or it is not used enough. This is due, in our opinion, to a lack of control by the supervisors of the work.



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3. COMMENTS

SITEB was founded about 60 years ago as an emulsion technical association (Sindacat Italien Techniciens des Emulsions de Bitume) and then transformed into a bigger Asphalt and Road Association, where the emulsion producers are one of the 7 constituent categories.

In Italy there are a lot of producers who are members of other categories (e.g. contractors, bitumen and asphalt producers, additives industries etc.). This is the reason why the B.E. producers category is falible.

During its last assembly SITEB decided to encourage a number of producers to shift to the B.E. category. Moreover, we have planned a number of conferences with the Administration in order to explain and promote the use of emulsions during roadworks. In the last two years SITEB has organized 18 conferences to promote «innovation», including emulsions, but it did not work for the emulsions, probably because the message was too «diluted».

This is part of our future. In the next 2 slides we will consider a more important and common future.



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ARGUS ATHENS 2019: Conclusion of the presentation on «Future Mobility and Impact on Road Pavements» *(by C. Giavarini)*

- We are on the eve of an epochal evolution in mobility systems
- There is a need for an overall and long term vision of all phases of such an evolution
- Car technology is evolving much quicker than infrastructure: we need infrastructure solutions that work independently from a specific technology
- Need for pavements in perfect conditions, adaptable and versatile
- **Asphalt will remain the most suitable and sustainable material for road pavements, providing that the evolution of the refining industry continues to produce it in sufficient quantities (and quality)**

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4. FUTURE

And what about the future of bitumen emulsions ?

We probably have to think about it, and try to adapt the use of emulsion to the evolution of the asphalt pavement, based on:

- versatility and adaptability
- durability
- recyclability
- sustainability
- with road markings regarded as part of the surface



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Development of the new IBEF website

Emmanuel Cornet – Executive Director – IBEF



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0. CONTENT

1. Why a new Website ?
2. What are the deliverables ?
3. Timing



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1. WHY A NEW WEBSITE ?

- To have a better positioning, a better visibility
- To facilitate exchange between members
- To transform our visitors into *customers*
- To be able to manage it ourselves
- To provide new functionalities



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2. WHAT ARE THE DELIVERABLES ?

- Better clarity on IBEF vocation
- More visibility for our members
- More technical data
- Updated news
- Platform to exchange best practices between our members
- All available in French / English / Spanish



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3. TIMING / NEXT STEPS

- Finalize the editorial part, especially “Techniques” part
- Translate in English and Spanish
- Development phase
- Launching Autumn 2019



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THANK YOU

Emmanuel Cornet – Executive Director



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IBEF Action Plan for 2019 and Beyond

Gaylon Baumgardner – President IBEF

Asphalt Emulsion Manufacturing Association (AEMA)

Senior Vice President – Ergon Asphalt and Emulsions, Inc., U.S.A.



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Vision

The International Bitumen Emulsion Federation is the recognized and acknowledged international reference for bitumen emulsion technology enhancement and information exchange.



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Mission

Promote the efficient, effective, and safe use of bitumen emulsions as viable solution for road maintenance throughout the World.

Collect market information and promotional material used in various emulsion-producing countries and disseminating it for the benefit of all.

Exchange information and best practices on standardization, safety standards, production and use of bitumen emulsions.

Actively seek opportunities with existing platforms at international and local levels to provide representation and be the voice for the Bitumen Emulsion Industry.

Conduct periodic worldwide technical symposiums dedicated to bitumen emulsions.



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International Bitumen
Emulsion Federation

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Strategy

Create, enlarge and strengthen a community in order to develop the awareness of the emulsion based technologies.

Develop interactions with organizations committed with the same vision. Key supporters:
Related industry associations: AI, ALA, ASEFMA, ARRA, EAPA, EB, FP2, ISSA, NCPP, RTSA...

Road organizations: PIARC, ERF, CILA...

Empower the IBEF members for the dissemination on behalf of the IBEF its messages at local / national level.



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Strategy Continued

Develop a strong and proactive virtual network within the membership and related supporters.

Embrace the opportunity for member knowledge transfer from best practices, experiences and specific expertise to help to develop the industry overall and create a positive market environment for future market growth.

Attract national associations to join the IBEF.



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Action Plan

Develop the use of cost effective communication tools for the IBEF members and beyond (e.g. website). Design means to associate members (toolkit?) with limited financial resources and proactively update both website and social media platforms to build presence and profile.

Identify and select events the IBEF members / IBEF ExCo members should attend.

Strengthen the reputation of conferences such as “World of Emulsions”, “E&E Congress Emulsions Element,” “International Symposium on Asphalt Emulsion Technology.”



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Action Plan – List of events


2019 Events	Date	Location
AEMA	Feb 18-21	Cancun Mexico
HAPA	Feb 19-20	Siofok Hungary
Conference in Poland	March 2019	Poland
18th AAPA	Aug 18-21	Sydney Australia
XXVI World Road Congress	Oct 6-10	Abou Dhabi
CAPSA2019	Oct 13-16	South Africa
Asphalt Pavements 2019	Nov 26-27	Czech Republic
CILA	Nov 25-29	Guadalajara Mexico
2020 Events		
E&E Congress Eurasphalt Eurobitume	May 12-14	Madrid
ISAET	nov-01	Arlington USA



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IBEF Vision-Mission-Strategy

 ibef International Bitumen Emulsion Federation	International Bitumen Emulsion Federation Strategy		
<p>Vision: The International Bitumen Emulsion Federation is the recognized and acknowledged international reference for bitumen emulsion technology enhancement and information exchange.</p> <p>Mission: Promote efficient, effective, and safe use of bitumen emulsions as viable solution for road maintenance throughout the World. Collect market information and promotional material used in various emulsion-producing countries and disseminating it for the benefit of all. Exchange information and best practices on standardization, safety standards, production and use of bitumen emulsions. Actively seek opportunities with existing platforms at international and local levels to provide representation and be the voice for the Bitumen Emulsion Industry. Conduct periodic worldwide technical symposiums dedicated to bitumen emulsions.</p>	Strategic Focus		
	<p>Member Conectivity: Attract national associations to join the IBEF. Create, enlarge and strengthen a community in order to develop the awareness of emulsion based technologies. Encourage membership growth and engagement through industry meetings, programs and communications. Develop a strong and proactive virtual network within the membership and related supporters.</p>	<p>Asphalt Emulsion Promotion: International, national, regional and local promotional and support efforts to increase use of asphalt emulsions Worldwide. Empower the IBEF members for dissemination on behalf of the IBEF its messages at international / national / local level.</p>	<p>Technical Exchange: Embrace the opportunity for member knowledge transfer from best practices, experiences and specific expertise to help to develop the industry overall and create a positive market environment for future marker growth. Become the trusted reliable source to professional engineers, researchers and testing agencies to help shape specifications, standards and policies.</p>



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THANK YOU



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