

# XXIV<sup>th</sup> World Road Congress

Mexico City from 26<sup>th</sup> to 30<sup>th</sup> September 2011

Program of the congress sessions



Mobility, Sustainability and Development

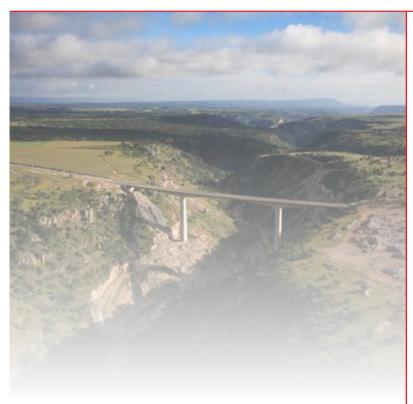


Somos un grupo de Empresas Mexicanas dedicadas a servicios de Ingeniería y Consultoría, con especialidad en proyectos de Infraestructura del Transporte. Hemos sido reconocidos como líderes en el diseño de Puentes de gran claro. Ofrecemos servicios en las áreas de Estudios, Diseño, Gerencia de Proyecto, Supervisión, Asesorías Especializadas e Ingeniería Independiente de:



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# SUMMARY



## Welcome Messages

Dionisio Pérez-Jácome Friscione Anne Marie Leclerc Fausto Barajas Cummings Clemente Poon Hung

**Organizing Committee** 

Presentation of the congress sessions

Exhibition

**Technical Visits** 

**Social Program** 

Welcome cocktail Congress dinner

**Centro Banamex Plan** 

**Practical Information** 

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Roads for a better life.



Dionisio Pérez-Jácome Friscione Secretary of State for Communications and Transport.

# Message from Dionisio Pérez-Jácome

The environmental sustainability has become a main challenge in our daily lives. The development of infrastructure and the satisfaction of the population's needs in terms of mobility are no exceptions. Nowadays, more than ever, it is necessary to keep offering people more and better roads, easing their access to education, health and well-being, within a context of sustainable development.

Mobility, infrastructure and sustainability are an equation that people have long tried to solve at different levels and on different ways in developed and developing countries. Reaching a balance of these factors is a major issue for academics, governments and private sector.

The government of Mexico has played the role of an international leader in climate change prevention and sustainability development. Moreover, it turned the development of infrastructure into a growth driving force. The XXIV World Road Congress reflects this spirit, and is a great opportunity to consolidate the progresses made the last years in our country in the field of infrastructure.

The themes to be discussed and analyzed in the framework of this forum will generate deciding answers for the future of transport and road infrastructure in Mexico and all over the world. We are convinced that, gathering efforts and sharing experiences, it will be possible to define more precisely the coming challenges and to design common strategies towards the sustainable development of our infrastructure.

Our country celebrates the holding of the XXIV World Road Congress and the emphasis put on sustainability and infrastructure development studies, a line of thinking adopted years ago by the Association, consolidated in the Paris edition of the Congress in 2007, and which should be followed in the future.

You are welcome to this wonderful and friendly country of Mexico. I wish this Congress, which brought together experts and professionals from all over the world, will greatly benefit to all of you, and that you will fully enjoy your participation.



Anne-Marie Leclerc, President of the World Road Association

# Message from Anne-Marie Leclerc

On behalf of the World Road Association, I am proud to welcome you to the XXIV World Road Congress. This is a must-attend event for members of the international road community, where all participants will have an opportunity to expand their knowledge and share their experiences.

Revolving around the theme "Roads for a better life: Mobility, sustainability and development", the program for the Congress focuses on the challenges that the transportation industry must overcome in the area of sustainable development from a political, strategic and technical perspective. Within this context, topics such as environmental responsibility, financing, safe mobility, the impact of climate change on infrastructures, and the sustainability and security of road networks will be discussed during the various sessions.

The exhibition, on fringe of the technical component of the Congress, will contribute to the success of this significant event by providing to Government members an exceptional showcase to highlight the dynamism of the transportation community in their country within their respective national pavilions, where governments and companies gather to create a better-performing public service.

This Congress not only represents the culmination and fusion of four years of remarkable efforts by hundreds of experts, it also marks the adoption of the Strategic Plan and the beginning of the next work cycle. Your active participation and contributions are essential to ensuring a certain degree of continuity, and to project the Association into the future in order to meet the next challenges of the industry.

The Mexican Organizing Committee has accomplished a Herculean task in order to provide you with an enriching, attractive and extremely relevant program. I encourage you to do everything in your power to make this event a resounding success that will contribute to the advancement of knowledge in the fields of roads and transportation.

> ION LE UTE

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Fausto Barajas President of the Organizing Committee of The XXIV World Road Congress and Undersecretary of State for Infrastructure, Secretariat of Communications and Transport.

# Message from Fausto Barajas

Since the beginning of the administration of President Felipe Calderón, meeting the needs of Mexico's population through highway infrastructure development, promoting social development, and encouraging sustainable regional economic growth have represented major challenges.

Today, five years after the implementation of the 2007-2012 National Infrastructure Program, the most comprehensive in the modern history of Mexico, more than 20,000 kilometers of roads and highways have been built or modernized, and road infrastructure is in its best physical condition in many years. This progress is representative of the Federal Government's significant strides toward achieving transformation and growth for the country in a sustainable way.

Within this context, Mexico's hosting of the XXIV World Road Congress represents both a milestone to celebrate and an opportunity to showcase the major infrastructure works and related progress in the domestic road sector that measure up to the motto of the Congress, which is to design, construct, and operate "Roads for a better life."

The Ministry of Communications and Transport (SCT) of Mexico, the World Road Association (PIARC) and the Mexican Association of Road Engineering (AMIVTAC) have jointly organized a Congress based on the general theme of "Mobility, Sustainability and Development" that will be further enriched with discussions and debates on such important strategic topics as sustainability of the road transport system, improvements in the provision of services, safety of the road system, and quality of road infrastructure. I am confident that the results, products, and conclusions derived from this Congress will enrich and facilitate the work of those of us who are responsible for road management throughout the world.

I am sure you will profit greatly from the lessons learned during the Congress. Meanwhile, I offer my best wishes for a pleasant stay and for your enjoyment of Mexico, where our rich history and modernity join to offer a wide range of possibilities for visitors.

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Clemente Poon Hung President of the AMIVTAC

# Message from Clemente Poon Hung

Since 2005, the Mexican Association of Road Engineering has taken on the role of the National Committee representative to PIARC. It therefore became the organ responsible for the diffusion of PIARC activities among road professionals in our country.

In this framework, several courses and seminars have been organized, and we have promoted the membership to PIARC of our partners.

This is the reason why, towards the organization of the XXIV World Road Congress, the Secretary of Communications and Transports decided to give our association the central operative and logistics role for the whole event.

We therefore contributed to draft technical individual papers and national reports, and we also provided all the necessary infrastructure and services for the celebration of this significant event. During 5 days, we will analyze in a joint-forum all the aspects of road planning, financing, building and operation, and therefore the contribution of the road sector to social development and improvement of life quality of human beings.

I am convinced it will be a great opportunity for all road professionals from all over the world to study and debate among colleagues the issues proposed by the Congress, in order to create an exchange and update of knowledge based on experiences and successful cases in the field of roads and road transport.

We, members of the association, are greatly honored to welcome you in Mexico. We wish you a pleasant journey, and we invite you to experiment our culture and our hospitality while discovering the cosmopolite and ancestral aspects of our city.

> WORLD ROAD ASSOCIATION MONDIALE DE LA ROUTE



Roads for a better life.

# ORGANIZING COMMITTEE

# MEXICAN ORGANIZING COMMITTEE

President: Fausto Barajas Cummings SCT Vice- President: Humberto Ibarrola Díaz AMIVTAC Vice- President: Clemente Poon Hung General Coordinator: Rodolfo Felix Flores General Reporter: Hector Bonilla Communications: Efrén García Marketing: Gerardo Muñiz Protocol: Pamela Castillo Registration: Laura Moreno Technical Program: Víctor Sotelo. Venue: Angel Barajas Exhibition: Marina Obregon Security and Transport: Delfino Cruz Financing and Administration: Luis Rojas Assistant to the President: Susana Cuevas Brun

# WORLD ROAD ASSOCIATION

The program of the World Road Congress was developed with the Strategic Planning Commission, the Technical Committees and the General Secretariat under the responsability of the Executive Committee of the World Road Association

# Executive Committee (at beginning of 2011)

President: Anne-Marie Leclerc (Canada-Quebec) Past-president: Colin Jordan (Australia)

Jim Barton (U-K), Francisco Criado (Spain), Dongchan Dai (China), Oscar de Buen RIchkarday (Mexico), Mario Fernandez Rodriguez (Chile), Riccardo Formica (Italy), Hreinn Haraldsson (Iceland), Joseph Haule (Tanzania), Menno Henneveld (Australia), Tchona Idossou (Burkina-Faso), Keiichi Inoue (Japan), Abdul Karim Judin (Malaysia), Sung-Hwan Kim (Rep. Korea), Josef Kuntz (Germany), Bojan Leben (Slovenia), Martin Lelièvre (Canada), Georghe Lucaci (Romania), Gunyasiwe Makaula (South Africa), Carlo Mariotta (Switzerland), Hicham N'Hammoucha (Moroco), Julio Cesar Ortiz Andino (Argentina), Jeff Paniati (USA), Virgaudas Puodziukas (Lituania), Christophe Saintillan (France), Claude Van Rooten (Belgium), Friedrich Zötter (Austria)

Strategic Planning Commission Chairman: Jim Barton, Secretary: Mike Winter (U-K)

## **General Secretariat**

Secretary general: Jean-François Corté Jean-Marc Philippeau, Véronique Anselin, Céline Le Graciet, Marie Pastol, Hanitra Rabetaliana, Nathalie Sabbah, Cécile Aurousseau

Miguel Caso-Florez, Byeong-Jin Lee, Yasuyuki Matsumoto, Claire Murdoch, Carolina Theolin-Palmell

# PRESENTATION OF THE CONGRESS SESSIONS

# OPENING CEREMONY

Mexico welcomes you with our arms open!

Monday, September 26th at 9:30. Room: Valparaíso 1, 2 and 3

All Congress delegates and accompanying persons are welcomed to this ceremony where the President of Mexico, Felipe Calderon Hinojosa will do the honor of opening the XXIVth World Road Congress. This will be the starting signal for a 5-day journey through topical themes, innovations and experience to share to create together roads for a better life.

# MINISTERS' SESSION

#### Monday, September 26th at 15:00. Room: Valparaíso 1, 2 and 3

Transport is a strategic priority for all countries. It is essential to their economic viability and represents a large investment that has long term benefits. Society must reconcile economic benefits and social demands with the environmental and social impacts. Ensuring mobility sustainable has become one of the main goals of road infrastructure administrations and agencies.

These issues will be addressed in a plenary session chaired by the Secretary of Communications and Transport of Mexico, Mr. Dionisio Pérez-Jácome Friscione.

Ministers from all over the world responsible for road policy will share their points of view, in three round tables conducted by a professional moderator, on the following topics:

# Round table 1: Sustainable transport financing.

Introductory speech by Mr. José Luis Irigoyen, Director of the Department of Transport, Water and Communications Technology of the World Bank.

# Round table 2: Environmentally responsible development

Introductory speech by Mrs. Carole Coune, Secretary General of the International Transport Forum of the Organization for Economic Cooperation and Development.

#### Round table 3: Safe mobility

Introductory speech by Mrs. Anne-Marie Leclerc, President of the World Road Association.

# **KEYNOTE SPEECHES**

On Tuesday 27th, Wednesday 28th and Thursday 29th, at 12:40, three keynote speeches will be delivered in plenary session after the morning parallel sessions.

#### Tuesday, September 27th:

*Global Road Safety Issues*, by Dr Etienne Krug, Director of the Department of Injuries and Violence Prevention of the World Health Organization.

#### Wednesday, September 28th

*Prospective of public road policies in the road sector* by Mr. Dionisio Pérez-Jácome Friscione, Secretary of Communications and Transport of Mexico.

## Thursday, September 29th

Lessons learned from the great earthquakes of Chile and Japan, by Mr. Mario Fernandez Rodriguez, Director General of Roads, Ministry of Public Works, Chile, and Mr. Shigenobu Kawasaki, Director for Road Engineering Analysis, National Highway and Risk Management Division, Ministry of Land, Transport and Tourism, Japan



#### Roads for a better life.

# PRESENTATION OF THE CONGRESS SESSIONS

# STRATEGIC DIRECTION SESSIONS

With the support of National Reports received from a Call for Papers, these sessions will focus on future prospects from a political and strategic vision. They are organized and chaired by the four Strategic Theme Coordinators of the PIARC Strategic Plan 2008 – 2011 and will address:

- Mitigating the impact of the road system on climate change;
- Delivering integrated transport modes and services to customers;
- A strategic approach for safety: putting knowledge into practice;
- Managing road assets in the context of sustainable development and climate change adaptation.

# SPECIAL SESSIONS

13 special sessions addressing topical issues complementing the Technical Committee sessions have been prepared with other international organizations related to the field of road infrastructure and road transport.

# TECHNICAL COMMITTEE SESSIONS

These sessions will be dedicated to discussing and sharing the results of activities and work of the Technical Committees of the World Road Association for the 2008 – 2011 period.

# POSTER SESSIONS

All accepted contributions from individual papers as a result of the Call for Papers will be displayed for half a day each at the Poster Sessions, where the authors will be able to meet and interact with Congress delegates.

# WORKSHOPS

Workshops will take place on "Airfield Pavements" and on the software HDM-4 dedicated to the analysis of road investments.

# CLOSING CEREMONY

# Friday September 30th at 14:00. Room: Valparaíso 3

The Closing Ceremony is the frontier between the end of a four year cycle and the beginning of a new cycle of intensive work which will lead to the next edition of the World Road Congress in Korea in 2015.

In this plenary session, highlights of the congress and the new Strategic Plan 2012 – 2015 of the World Road Association will be presented. This will be followed by introduction of coming congresses and the handover to Korea for the organization of the XXVth World Road Congress.

Anne-Marie Leclerc, President of the World Road Association and Fausto Barajas Cummings, President of the Mexican Organizing Committee will express their gratitude to the congress delegates and formally close the congress.

# PROGRAM OF THE CONGRESS

#### Monday 26 9:00-12:30 hrs.

#### Opening Ceremony Monday 26 Morning 9:30-12:

#### Palacio de Valparaíso

The opening ceremony will be honored with the attendance of the President of the Republic of Mexico Mr. Felipe CALDERÓN HINOJOSA who will deliver the opening speech. The Opening session will include:

- Welcome speech by Mr. Fausto BARAJAS CUMMINGS, President of the Organizing Committee
- Presentation of the Technical Program of the Congress by Mr. Jean-François CORTÉ, Secretary General of the World Road Association
- PIARC Prize Awards Presentation
- Address by Mr. Dionisio PÉREZ-JÁCOME FRISCIONE, Mexico's Secretary of State
- Secretaria de Comunicaciones y Transportes
- Address by Mrs. Anne-Marie LECLERC, President of the World Road Association
- Opening speech by Mr. Felipe CALDERON HINOJOSA, President of the Republic of Mexico

Lunch Time 13:30-15:00 hrs.

## Monday 26 15:00-17:30 hrs.

#### Ministers' Session

#### Monday 26 Afternoon 15:00-17:30

#### Palacio de Valparaíso

"Sustainable mobility within social policy" is the theme of the Ministers' session. Ministers from all around the world will be invited to share their point of view and explain the current challenges facing their countries and the solutions they are implementing. This session will be chaired by the Secretary of Communications and Transport of Mexico The session will be divided into three panel discussions:

- Transport sustainable financing
- Safe mobility
- Environmentally responsible development

## Tuesday 27 9:00-12:30 hrs.

# STA "MITIGATING THE IMPACT OF THE ROAD SYSTEM ON CLIMATE CHANGE" Time: Sep. 27, Tue. 9:00-12:30

#### Venue: Palacio de Valparaíso 2

Chair: Mr. Hicham NHAMMOUCHA, Road Director, Morocco, Strategic Theme Coordinator

#### Introduction

• Mr. Hicham N'HAMMOUCHA

An overview of climate change issues and contribution of the road system

• Mr. Simon PRICE, Chair of Technical Committee A1 Preserving the Environment

#### **Examples of national plans**

Norway

Ms. Eva SOLVI, Senior Principal Engineer, Norwegian Public Road Administration, Norway United Kingdom

Mr. Tony MARSHALL, ARUP, United Kingdom
 Discussion

#### มาอนิสริริโป

#### Break 10:30 - 11:00

#### **Examples of national plans**

#### Austria

Mrs. Viktoria REISS-ENZ, Ministry of Transport, Austria Japan

• Mr. Kunihiko OKA, Director, Road Environment Planning Office, Road Bureau, Ministry of Land, Infrastructure, Transport and Tourism, Japan

#### USA • Mr. Ian SAUNDERS, FHWA, USA

Spain

 Mr. Francisco Javier ALEJANDRE MINGUEZ, Deputy General Director for Planning, Road Directorate, Ministry of Development, Spain

#### Discussion Conclusions

Chair: Mr. Hicham N'HAMMOUCHA

#### TC B.5 "WINTER SERVICE"

#### Time: Sep. 27, Tue. 9:00-12:3 Venue: Casa del Diezmo 1, 2

Chair: Ms. Gudrun ÖBERG, VTI, Sweden, Chair TC B.5 Co-chairs: Mr. Paul PISANO, FHWA, USA Mr. Didier GILOPPE, DSGI CETE Normandie Centre, France

Mr. José del Pino ALVAREZ, GRUPISA, Spain

#### Introduction • Ms. Gudrun ÖBERG

#### Part 1. A Study of Winter Service Management Systems (WSMS) and Road User Information

- Mr. Martin HOBBS, Highways Agency, UK
- Mr. Rick NELSON, Nevada Department of Transportation, USA
- Part 2. Sustainable Development and Winter Road Service • Mr. Xavier COCU, Belgian Road Research Center, Belgium
- Mr. Didier GILOPPE, DSGI CETE Normandie Centre, France Discussion
- Part 3. Impact of Climate Change on Winter Service
- Mr. Mario MARCHETTI, CETE de l'Est- LRPC de Nancy, France
- Ms. Gudrun ÖBERG, VTI, Sweden

Part 4. Communication with Road Users

Mr. Kuno MÄNNIK, Estonian Road Administration, Estonia

Discussion

#### Break 10:30 - 11:00

#### Part 5. XIII International Winter Road Congress in Québec 2010 • Ms. Gudrun ÖBERG, VTI, Sweden

Part 6. Snow and Ice Data Book 2010

- Mr. Richard CHARPENTIER, Ministry of Transport, Quebec, Canada
- Part 7. Snow Plough Championship
- Mr. Didier GILOPPE, DSGI CETE Normandie Centre, France
- Part 8. Summary of Seminars in Czech Republic and Mongolia
- Mr. Didier GILOPPE, DSGI CETE Normandie Centre, France

Part 9. Proposal for next period 2012-2015 • Mr. Paul PISANO, FHWA, USA

#### Part 10. Round table – final discussion

#### Conclusions

- Mr. Paul PISANO
- Chair: Ms. Gudrun ÖBERG

#### SP 03. "INTEGRATION OF ROAD NETWORKS AND OTHER SURFACE TRANSPORT MODES AT CONTINENT LEVEL AND MODAL SHIFT"

#### Time: Sep. 27, Tue. 09:00 - 12:30 Venue: Palacio de Iturbide 2, 3

Chair: Mr. Fausto BARAJAS CUMMINGS, President of the Council of Road Directors for Iberia and Latin America (DIRCAIBEA)

#### Part 1. Integration of Transport Modes

Promoting modal shift and integration of road with other modes through development of inland dry ports in Asia

 Mr. Madan Bandhu REGMI, Officer-in-Charge, Transport Policy and Development Section, Transport Division, UN/ESCAP

Integration in South America

Ms. Graciela OPORTO, Undersecretary of Land Planning, Public Investment, Argentina Protecting roads in East Africa

 Ms. Rukia SHAMTE, Executive Secretary, Central Corridor, Kenya Perspective from Europe

Mr Szabolcs Geza SCHMIDT, DG MOVE, European Commission

#### Break 10:30 - 11:00

#### Part 2. Modal Shift. What can We Expect?

Potential effects of higher capacity vehicles on road freight activity, intermodal transport and modal shift

 Mr. Stephen PERKINS, Head of OECD/ITF Joint Transport Research Center HGV traffic transiting through the Swiss Alps: Model shift from road to rail?
 Mr. Rudolf DIETERLE, Director General, Federal Roads Office, Switzerland Panel Discussion

#### Conclusions

Chair: Mr. Fausto BARAJAS CUMMINGS

Program of the Congress

#### ASSOCIATION MONDIALE DE LA ROUTE

Roads for a better life.

#### SP 08. "GOOD GOVERNANCE AND INTEGRITY"

## Time: Sep. 27, Tue. 09:00 - 12:30

Venue: Casa del Diezmo 3, 4 Co-Chairs: Mr. Hreinn HARALDSSON, President of the Nordic Road Association and Mr. Carlo MARIOTTA, member of the World Road Association Executive

# Comittee

## Part 1. Recent Approaches

- Progress as seen from the civil society
- Mr. Eduardo BOHÓRQUEZ, Executive Director, Transparencia Mexicana, Mexico
- Lessons from review of World Bank projects

  Mr. Marc JUHEL, Transport Sector Manager, World Bank
- Fighting corruption, creating a level playing field The contractor's view
- Mr. Per NIELSEN, Senior Advisor to NCC Sweden, Sweden
- Mr. Per Nielsen, Senior Advisor to NCC Sweden, Sw Integrity: A daily challenge or a matter of course?
- Mr. Alexander WALCHER, ASFINAG, Austria

#### Break 10:30 - 11:00

# Part 2. Case Studies

#### Case study El Salvador

- Mr Gerson MARTINEZ, Minister of Public Works, El Salvador
- Best practice in the Romanian national administration in the field of good governance Institutional integrity
- Mr Petre DUMITRU, Director for Quality, National Company of Highways and National Roads of Romania, Romania
- Ethics: The cornerstone of good governance
- Mr. Nazir ALLI, Chief Executive Officer, South African National Roads Agency Ltd, South Africa

Conclusions • Chairs

#### SP 09. "ROAD SAFETY: THE UN DECADE OF ACTION"

Time: Sep. 27, Tue. 09:00 - 12:30 Venue: Palacio de Valparaíso 1

#### Co-Chairs: Ms. Susan MARTINOVITCH. President AASHTO and

Mr. Tchona IDOSSOU, Vice President AGEPAR, member of the World Road Association Executive Committee

#### Part 1. UN Decade of Action

- The UN Decade of Action: what is the plan and how do we achieve it?
- Dr. Etienne KRUG, WHO
- Adding value to the road infrastructure
- Ms. Karla GONZÁLEZ CARVAJAL, Consultant, Interamerican Development Bank
- Youth and road safety issues
- Mr. Floor LIESHOUT, Director YOURS
- Declaration from the World Road Association
- Ms. Anne-Marie LECLERC, President, World Road Association

Break 10:30 - 11:00

#### Part 2. Panel Discussion

(Moderator: Dr. Ahmad Farhan MOHD SADULLAH, USM, Malaysia, Chair TC C.2) Latin America Asia

#### Africa Conclusions

Chairs

#### Terminology

#### Time: Sep. 27, Tue. 12:00 – 12:30 Venue: Pavilion of the World Road Association (Exhibition hall)

Presentation of work and outputs of the Committee on Terminology and demonstration of the use of the multilingual technical dictionaries, lexicons and translation tools available on the Association's website.

## Tuesday 27 12:40-13:30 hrs.

#### Keynote speech Tuesday 27 Morning 12:40-13:30

#### Palacio de Valparaíso 3

A global perspective on road safety challenges and opportunities: Dr. Etienne KRUG, Director Department of Injuries and Violence Prevention, World Health Organization

Lunch Time 13:30-15:00 hrs.

#### STC "A STRATEGIC APPROACH FOR SAFETY: PUTTING KNOWLEDGE INTO

#### Time: Sep. 27, Tue. 15:00-18:30

#### Venue: Palacio de Valparaíso 1

#### Chair: Mr. Jeffrey PANIATI, FHWA, USA, Strategic Theme Coordinator

#### Introduction

#### Mr. Jeffrey PANIATI

#### Part 1. Strategic Plans and Approaches

World Bank- Its approach to promoting road safety

• Ms. Tawia ADDO-ASHONG, Program Coordinator, GRSF, Transport, Water, Information & Communication Technologies Department, The World Bank Group

 $\label{eq:china} China-Responses to the effects of growth of number of vehicles and recent declines in the number of crashes and fatalities$ 

 Ms. Cheng-cheng LI, Deputy Chief of the Road Safety Research Center of Ministry of Transport, China

- United States Toward Zero Deaths: A National Strategy for Highway Safety
- Ms. Susan MARTINOVICH, President, American Association of State Highway and Transportation Officials, USA
- Spain -Strategic Plan for Road Safety: Goals and Accomplishments

Mr. Roberto Llamas RUBIO, Road Safety Coordinator, Road General Directorate, Ministry of Public Works

#### Break 16:30-17:00

#### Part 2. The Transfer of Knowledge into Practice

Viet Nam- Developments in its National Road Safety Project

- Mr. Pham Quang VINH, Deputy Director General, Directorate for Roads of Viet Nam
- Australia- Application of innovative technologies for mitigation of road safety risks • Dr. Soames JOB, Director of the New South Wales Centre for Road Safety and Chair of the National Road Safety Strategy, Australia

France- "Training of professional and non-professional drivers regarding safe behaviour in tunnels"

- Mr. Marc TESSON, Centre d'Etudes des Tunnels (CETU), France
- Mexico Results on the implementation of training and education efforts listed in its National Report
- Dr. Jesús Manuel CHAVARRIA VEGA, Instituto Mexicano del Transporte, Mexico **Conclusions**
- Chair

#### TC A.3 "ROAD SYSTEM ECONOMICS AND SOCIAL DEVELOPMENT" Time: Sep. 27, Tue. 15:00-18:30

#### Venue: Palacio de Valparaíso 2

Chair: Mr. Alberto COMPTE, Cedex, Spain, Chair of TC A.3 Co-chair: Mr. Guillermo TORRES, Mexican Transportation Institute, Mexico

#### Introduction

• Mr. Alberto COMPTE and Mr. Guillermo TORRES

#### Part 1. Approaches to assessment of social impacts of road projects Systematic approaches for the ex ante evaluation

 Mr. Martin PÖCHEIM, Team leader 'Environmental and approval management', ASFINAG, Austria

Practices followed by the International Financial Institutions

 Mr. Laurent GNALÍN, Coordonnateur du Programme d'Ajustement et d'Investissements du Secteur des Transports en Côte d'Ivoire, Côte d'Ivoire

Contribution from ex post evaluation

• Mr. Maxime JEBALI, Directorate of Transport Infrastructure, Ministère de l'Écologie, du Développement durable, des Transports et du Logement, France

#### Open discussion

 Moderator: Mr. Ernest ALBUQUERQUE, Principal Advisor, New Zealand Transport Agency, New Zealand

#### Break 16:30-17:00

#### Part 2. Assessment of road pricing effects

Worldwide situation of road pricing

 Mr. Arpad SIPOSS, Toll Strategy Bureau, KKK, Coordination Center for Transport Development, Hungary

# Assessment of pricing effects

 Mr. Friedrich SCHWARZ-HERDA, Motorway Tolling, Federal Ministry for Transport, Innovation and Technology, Austria

#### Open discussion

Moderator: Mrs. Malika SEDDI, International Affairs, ASFA – French toll motorway companies association, France

#### Conclusions

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Chair: Mr. Alberto COMPTE and Mr. Guillermo TORRES

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#### SP 04. "LARGE CITIES: INTEGRATION OF THE SURFACE TRANSPORT MODES" Time: Sep. 27, Tue. 15:00 - 18:30

Venue: Casa del Diezmo 1,2

Co-Chairs: Mr. Clemente POON HUNG, President of AMIVTAC and Mr. Claude VAN ROOTEN, member of the World Road Association Executive Commitee

#### Part 1. City-wide Strategies

City-wide strategies for integration of surface transport modes in large cities • Ms. Anita CURNOW, Technical Committee B3, Australia

Mexico city

Ms. Adriana de ALMEIDA LOBO, Executive Director, Sustainable Transport Center of Mexico, Mexico

Beijing: Towards a world city with the People's, Hi-tech and Green Transportation System • Mr. Minwei LI, Beijing Transport Research Center, China

Ten years of the Zurich mobility strategy- Lessons learned and outlook

Mr. Martin BUCK, SNZ Ingenieure und Planer AG, Swizerland

#### Break 16:30-17:00

#### Part 2. Specific Treatments

Making existing roads operate better • Mr. Andrew SOMERS, Business Development Manager ITS, VicRoads Road User Services, Australia

 Road network and mass transit – The challenge of integration in the Montreal metropolitan region
 Mr. Michel VEILLEUX, Vice-president, Agence Metropolitaine des Transports, Canada-Ouebec

Urban mobility in the district of Bamako

 Mr. Malick KASSÉ, Direction Nationale des Transports Terrestres, Maritimes et Fluviaux, Mali Duplex A86 – An innovative and sustainable solution to fill the second ring road of greater Paris region

Mr. André BROTO, Deputy Director General, Cofiroute, France

Measures for use of public transport in Osaka City

• Mr. Satoshi ARAKI, Osaka City Government, Japan

Conclusions

Chairs

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#### SP 05. "SUSTAINABLE RURAL ROAD NETWORKS"

Time: Sep. 27, Tue. 15:00 - 18:30 Venue: Palacio de Iturbide 2, 3

Venue: Palacio de Iturbide 2, 3 Co-Chairs: Mr. Esteban DIEZ, InterAmerican Bank of Development & Mr. Julio César ORTIZ ANDINO, Member of the World Road Association Executive Committee

#### Introductory report

Mr. Terje TESSEM, International Labour Organization

Part 1. Accessibility and Planning of the Development of Rural Roads The Pradhan Mantri Gram Sadak Yojana, Program for rural roads development in India • Mr. P.K. ANAND, Director General, Rural Development, Ministry of Rural Development, India Accessibility and development planning of rural roads - Lessons learned in Latin America • Mr. Victor AREVALO LAY, International Forum for Rural Transport and Development, University Ricardo Palma, Peru

Case of Laos

Mr. Ounheuane SIRIAMPHONE, Senior Engineer, Department of Roads, Ministry of Public Works and Transport, Laos

#### Break 16:30-17:00

#### Part 2. Issues of Decentralization

Program of road maintenance with micro-enterprises

 Mir. Roberto SANDOVAL, Chairman of Bolivian Highway Administrator, Bolivia Decentralized management of rural roads - The case of the special project for rural transport in Peru

Mr. Mauro Maita FRANCO, Ministry of Transport and Communications, Peru

Conclusions

Chairs

#### SP 07. "PERFORMANCE-BASED MANAGEMENT OF THE ROAD TRANSPORT SYSTEM" Time: Sep. 27, Tue. 15:00 - 18:30

#### Venue: Casa del Diezmo 3, 4

Co-Chairs: Mr. Karim JUDIN, Chairman REAAA and Mr. Jim BARTON, member of the World Road Association Executive Committee

#### Introduction

Mr. Jim BARTON, President, Strategic Planning Commission of World Road Association
 Part 1. Case studies

Resource allocation decision making in the New South Wales context

Mr. Brendan NUGENT, Department of Transport, New South Wales, Australia

Governing and paying for England's roads • Mr. Michael SELFE, RAC Foundation, UK

Highway system performance management - state of play in the USA

Mr. Kirk STEUDLE, Michigan DoT, USA

#### Break 16:30-17:00

#### Continue 🍾

#### Part 2. Case Studies

Applying customer feedback to setting network levels of service

Mr. Rick BARBER, New Zealand Transport Agency, New Zealand
Performance-based management of the road transport system, about the experience in
Sweden

• Mr. Torbjörn SUNESON, Swedish Transport Administration, Sweden

- Performance-based management of the road transport system in South Africa
- Mr. Kos SMIT, Engineering Executive, The South African National Roads Agency Ltd, South Africa

Maintenance of rural roads in the Republic of Paraguay

Mr. Nelson RIVET, Director of Proximity Roads, Ministry of Public Works and

Communications, Paraguay

Conclusions

#### Chairs

# Time: Sep. 27, Tue. 15:00 – 18:30

#### Venue: Poster corner in Exhibition Hall

Presentation by the authors of accepted papers for:

**Topic 12:** Keeping Cities Moving **Topic 13:** Freight Transport

**Topic 19:** Managing Operational Risk in the Road Sector

#### Presentation of PIARC Prize papers Time: Sep. 27, Tue. 15:00 – 18:30

Venue: Palacio de Valparaíso 3 Chair : Mr Menno HENNEVELD, Chair of the International Jury

Presentation of the award-winning papers by their authors.

#### Wednesday 28 9:00-12:30 hrs.

# STB "DELIVERING INTEGRATED TRANSPORT MODES AND SERVICES TO CUSTOMERS"

Time: Sep. 28, Wed. 9:00-12:30

Venue: Casa del Diezmo 1, 2

Chair: Mr. Keiichi INOUE, Japan, Strategic Theme Coordinator

Co-Chair: Dr. Hirofumi OHNISHI, Japan Society of Civil Engineers, Japan

#### Introduction

## Chair: Mr. Keiichi INOUE Part 1. Pevolutionary intermedal passenger transport an

Part 1. Revolutionary intermodal passenger transport and logistics

Optimum utilization of limited financial resources: sweating the asset • Mr. Jim BARTON, First Delegate of United Kingdom

Large City

 Mr. Takumi YAMAMOTO, Director for Road Planning, Planning Division, Road Bureau, Ministry of Land. Infrastructure. Transport and Tourism. Japan

Appropriate means of transport for goods traffic: results from the Swiss national research programme

• Mr. Martin RUESCH, Rapp Trans AG, Zürich, Switzerland

Intermodal Passenger Transport Centers in Mexico City - Private-public investment project -• Mr. Edgar Amador ZAMORA, Under-Secretary for Financial Planning in the Finance Secretariat of Federal District Government. Mexico

#### Discussion

Presenters

• Mr. Carlos SANTILLAN, TCB.4 member of Mexico

#### Break 10:30 - 11:00

#### Part 2. Innovative measures against traffic congestion

Social innovation such as ITS, implemented in Austria

 Mr. Markus MEISSNER, Assistant of the General Manager, ASFINAG, Austria Social innovation such as ITS, implemented in United Kingdom

- Dr. John MILES, Former Chair of TC on Network Operations, United Kingdom
- Improvement of mobility in urban areas Case study of Mexico city and Chihuahua city -• Dr. Cecilia OLAGUE, TCB.3 member, Mexico
- Efficient utilization of financial resources
- Mr. Cristian ANDREI, Romania

# DiscussionPresenters

- Prof. Torbjorn SUNESON, Swedish Transport Administration, TCB.3 member
- Conclusions • Chair: Mr Keiichi INOUE

#### Roads for a better life.

#### TC A.2 "FINANCING, MANAGING AND CONTRACTING OF ROAD SYSTEM INVESTMENT" Sen. 28. Wed. 9:00-12:30

#### Venue: Palacio de Valparaíso 2

Chair: Mr. Henri CHUA, IM Technologies, United Kingdom, Chair TC A.2

#### Introduction

Mr. Henri CHUA

#### Part 1.

- TC A2 and Activities 2008-2011
- Mr. Gerardo GAVILANES, Ministry of Development, Spain
- Road Funding in PIARC Countries
- Mr. Takaaki NAMBU, Hanshin Expressway Company, Japan
- Road Funding in Sub-Sahara Africa and the Case of Ivory Coast
- Mr. Olivier KOUDOU, Université d'Abidjan Cocody, Ivory Coast
- PPPs and Contingent Liabilities: A Texan Case
- Mr. Rafael ALDRETE, Texas Transportation Institute, USA
- **Questions and answers**

#### Break 10:30 - 11:00

#### Part 2.

- Introduction
- Chair: Mr. Mike GOODALE, Ministry of Transport of Ontario, Canada Private Sector Roles
- Mr. Jean-Francois LANGUMIER, Autoroutes Paris-Rhin-Rhône (APRR), France
- Contractual Arrangements for Private Sector Maintenance Services in PIARC Countries
- Mr. Brian NOBLE, Main Roads, Western Australia, Australia
- Road Rehabilitation and Maintenance in Colombia
- Mr. Juan Bocarejo SUESCUN, Universidad de los Andes, Colombia
- Integrated Services Arrangements in Western Australis
- Ms. Maria SARUBIN, Main Roads, Western Australia, Australia

#### **Questions and answers** Conclusion

Chair: Mr. Henri CHUA

#### TC C.1 "SAFER ROAD INFRASTRUCTURE"

#### Ved. 9:00-12:30

Venue: Palacio de Valparaíso 1

Chair: Mr. Hans-Joachim VOLLPRACHT, Consultant, Germany, Chair TC C.1 Co-chair: Mr. Mike GREENHALGH, Amey, United Kingdom

#### Introduction

#### Chair: Mr. Hans-Joachim VOLLPRACHT Part 1. Incorporating human factors in road design for influencing driver behaviour

- Ms. Sibylle BIRTH, Intelligenz Transfer Potsdam, Germany & Mr. Emilio FRANCISCO, Mexico Mr. Daniel AUBIN, Dessau, Canada-Quebec
- Strong feeling of right-of-way and reaction times Analysis of accidents in intersections
- Ms. Marina HUGHES / Mr. Joël YERPEZ, IFSTTAR, France
- An innovative geometric road design for a safer infrastructure
- Mr. Eric LOCQUET, Egis, France

#### Part 2. Work Zone Safety: A Growing Issue for Emerging Countries

- Mr. Mike GREENHALGH, Amey, United Kingdom
  Mrs. Elizabeth ALICANDRI, FHWA, United States of America
- Mr. Aditya BAHADUR, India

#### Break 10:30 - 11:00

rogram of the Congres

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#### Part 3. Urban Development Issues: Linear settlements, vulnerable road users and the implications for urban land use and development • Mr. Hans-Joachim VOLLPRACHT, Germany

- Ms. Marion DOERFEL, BFH AHB, Switzerland
- Policies and solutions for preventing linear settlement
- Mr. Abou AYASH, Public Establishment for Road Communications, Syria
- Safer Roads in Bangladesh: Addressing the Challenges of Road Infrastructure Safety and Linear Settlements
- Dr. Md. Mazharul HOQUE, Department of Civil Engineering, Bangladesh University of Engineering and Technology, Bangladesh

#### Part 4. A new Road Safety Strategy: Road Safety Impact Assessments on

## **Master Plans and Strategic Enhancements**

The new approach of Road Infrastructure Safety Management - Preconditions, Instruments and Examples

- Mr. Jürgen GERLACH, University of Wuppertal, Germany
- Evaluation of Some Results of the 2010 AASHTO Highway Safety Manual
- Mr. Alberto MENDOZA, Mexican Transportation Institute, Mexico
- Innovative tools and pragmatic methods for improvement of safety on the national roads network in France
- Mr. Rodolphe CHASSANDE-MOTTIN, Ministry of Ecology, Sustainable development, Transport and Housing, France
- The Turkish Application of Safety Impact Assessment Tool Mr. Cumhur AYDIN, Atilim University, Turkey
- Conclusion
- Chair: Mr. Hans-Joachim VOLLPRACHT

#### SP 01. "SUSTAINABILITY OF ROAD TRANSPORT. WHERE ARE WE HEADING, HOW DO WE ASSESS SUSTAINABILITY?

# Time: Sep. 28, Wed. 09:00 - 12:30

Venue: Casa del Diezmo 3, 4 Chair: Mr. Christian LEYRIT, Ministry of Ecology, Sustainable Development, Transport and Housing, France, Former Vice-President of the World Road Association

#### Part 1. Assessment of Sustainability

Assessment of road projects : From the classical cost-benefit analysis towards an integrated approach of sustainability

• Mr. Damien GRANGEON, SETRA, Ministry of Ecology, Sustainable Development, Transport and Housing, France

SDA and eCBA – A new holistic approach to include social impacts in appraisal procedures for road infrastructure investments

. Mr. Gerd SAMMER, University for Natural Resources and Life Sciences, Austria Sustainability toolkit for transport projects

• Mr. Marc JUHEL, Transport Sector Manager, World Bank

#### Break 10:30 - 11:00

#### Part 2. Case Studies

The road towards sustainable infrastructure - A review of dutch experiences with including sustainability aspects in design & build contracts

- Ms. Monica ALTAMIRANO, Deltares, The Netherlands
- Evolving concepts of transport sustainability: U.S. experience
- Mr. Robert SKINNER, Executive Director, Transportation Research Board, USA

Findings of the socio-economic impact study of the road maintenance and rehabilitation program in Papua New Guinea

- Mr. William ASIGAU, Department of Works, Papua-New Guinea
- Assessing the wider economic benefits of transport projects: the New Zealand experience Mr. Ernest ALBUQUERQUE, New Zealand Transport Agency, New Zealand

#### Conclusions

Chair: Mr. Christian LEYRIT

SP 06. "TRANSPORT AND LAND USE PLANNING - HOW WELL INTEGRATED

#### ARE THEY?' ep. 28, Wed. 09:00 - 12:30

#### Venue: Palacio de Iturbide 2, 3 Chair: Mr. Karim GHELLAB, Minister Equipment and Transport, Morocco

#### Part 1. Institutional and Other General Aspects

Institutional barriers to integrating land use and transport planning and the way forward -Case study of India and Kuwait

- Mr. O.P. AGARWAL, Sr Urban Transport Specialist, World Bank
- Strategic planning process in Argentina

• Ms. Marta AGUILAR, Ministry of Planning, Public Investment and Services, Argentina Perspectives on the integration of transportation and land use planning in the United States Ms. Paula HAMMOND, Washington DoT, USA

#### Break 10:30-11:00

Conclusions

Venue: Montejo 1

Part 1. Introduction

Break 10:30 - 11:00

www.aipcrmexico2011.org • www.piarcmexico2011.org

Introduction to HDMGlobal

• Dr. Eric STANNARD, HDMGlobal

• Dr. Fric STANNARD, HDMGlobal

Current and future developments

Mr Bon BOPER ABBR/HDMGlobal

Chair: Mr. Karim GHELLAB

- Part 2. Urban Aspects Introductory presentation: comparative analysis on different large cities
- Mr. André BROTO, Deputy Director General, Cofiroute, France

• Mr. Simon COUTEL, Prospective Department, Cofiroute, France

The medium-term strategy to realize multi-modal mobility in Tokyo metropolitan region Mr. Takashi YAJIMA, Institute of Behavioural Sciences, Japan

• Ms. Soledad PÉREZ-GALDÓS, General Director of Roads of Madrid Region, Spain

Viewpoint on greater Paris region situation

The Madrid case study: The HVO-Bus system

Chair: Dr. Eric STANNARD, HDMGlobal

Workshop HDM-4. INTRODUCTION (In English) Time: Sep. 28, Wed. 9:00-12:30

Overview of HDM-4 and main improvements in version 2

#### Part 2. Applications

Illustrations of applications of HDM-4 throughout the world • Mr. Robert MESNARD, EGIS/HDMGlobal Support for HDM-4 in Latin America(1): Role of Chilean Concrete and Cement Institute • Mr. Mauricio SALGADO, ICH/HDMGlobal Support for HDM-4 in Latin America(2): Role of Mexican Transport Institute • Mr. Ricardo SOLORIO, IMT/HDMGlobal

**Questions / Answers** 

#### Poster sessions

Time: Sep. 28, Wed. 09:00 – 12:30 Venue: Poster corner in Exhibition Hall

Presentation by the authors of accepted papers for: **Topic 20:** Sustainable Approaches for Road Tunnels

Topic 23: Road Bridges

Topic 24: Innovations in the Treatment and Use of Marginal Local Materials Topic 25: Innovations in Construction and Maintenance of Unpaved Roads in Developing Countries

#### Wednesday 28 12:40-13:30 hrs.

#### Keynote speech

Wednesday 28 Morning 12:40-13:30

Palacio de Valparaíso 3

"Prospective of public road policies in the road sector", par Mr. Dionisio PÉREZ-JÁCOME FRISCIONE, Secretary of Communications and Transport of Mexico.

#### Lunch Time 13:30-15:00 hrs.

#### Wednesday 28 14:00-14:30 hrs.

#### Terminology

Time: Sep. 28, Wed. 14:00 - 14:30

Venue: Pavilion of the World Road Association (Exhibition hall)

Presentation of the work and outputs of the Committee on Terminology and demonstration of the use of the multilingual technical dictionaries, lexicons and translation tools available on the Association's website.

# Wednesday 28 15:00-18:30 hrs.

ST D "MANAGING ROAD ASSETS IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE ADAPTATION"

#### Time: Sep. 28, Wed. 15:00-18:30

Venue: Casa del Diezmo 3, 4

Chair: Professor Gheorghe LUCACI, University Politechnica of Timisoara, Romania, Strategic Theme Coordinator

Introduction

#### Professor Gheorghe LUCACI

#### Part 1. Sustainable Management of Road Assets

The Perenniality of infrastructures in the Context of Sustainable Development • Mr. Richard CHARPENTIER, Ministry of Transportation of Quebec, Canada

Road Management System based on HDM 4

• Mr. Ricardo SOLORIO, Mexican Institute for Transportation, Mexico

The National Account for Road Infrastructures

Mr. Fernando CRESPO DIU, Institute for Road Infrastructure (InIR), Portugal Discussion

#### Break 16:30-17:00

#### Continue 🔪

# Part 2. Climate Change, Sustainability, Quality. Specific Innovative Solutions for Materials and Technologies

Impact of Climate Change on Road Performance • Mr. L. GASPAR and C. KOREN, Szechenyi Istvan University, Gyor, Hungary Technical Solutions and Sustainable Policies for Material Recycling • Mr. Suneel VANIKAR, FHWA, USA

Recycling Materials from Road Pavements

 Mr. Stefan MARCHPRENKER, Research Institute of the Austrian Association of the Cement Industry, Austria

Sustainable Road Pavements. Accelerated Test

Mr. Radu ANDREI, Professor, Technical University "Gheorghe Asachi", Iasi, Romania
 Discussion

**Conclusions and future actions** 

Chair: Professor Gheorghe LUCACI

#### TC A.1 "PRESERVING THE ENVIRONMENT" Time: Sep. 28, Wed. 15:00-18:30

### Venue: Palacio de Valparaíso 2

Chair: Mr. Simon PRICE, United Kingdom, Chair TC A.1

Co-chair: Ms. Lisa ROSSITER, New Zealand, English Speaking Secretary of TC A.1

#### Introduction

Mr. Simon PRICE

#### Part 1.

#### Climate change adaptation and mitigation policies and approaches

• Mr. Pierre DORCHIES, Director of Sustainable Development, Sintra, Canada-Quebec Road system energy – a review of alternatives

 Mr. Ian CLARKE, Associate Director, Environment and Sustainability, Amey, United Kingdom Environmental Sustainability as a Performance Measure for Assessing Preventive Maintenance Policies

• Mr. Filippo GIUSTOZZI, USA

The challenge of including system effects and system boundaries into the environmental evaluation of road projects

• Mr. Ulrich LETH, Austria

#### Break 16:30-17:00

#### Part 2.

#### Monitoring environmental impacts of road transport

 Ms. Agnes JULLIEN, French Institute of Science and Technology for Transport and French Speaking Secretary of TC A.1, France

Conserving Biodiversity in Road Development: a multiple level approach

Mr. Juan D. QUINTERO, USA

The ASF biodiversity conservation program • Mr. Fredrick DEPAEPE, Autoroutes du Sud de la France, France

Conclusions

Chair: Mr. Simon PRICE

#### TC B.1 "GOOD GOVERNANCE OF ROAD ADMINISTRATIONS" Time: Sep. 28, Wed. 15:00-18:30

#### Venue: Casa del Diezmo 1, 2

Chair: Mr. Paul van der KROON, DWW, The Netherlands, Chair TC B.1

#### Introduction

Mr. Paul van der KROON

Part 1. Best Practice For Good Governance

Corruption in the broader sense (issues, cost and societal implications, and interaction between the cycles of integrity and corruption)

The cost of corruption and the case for integrity

• Mr. Jonathan SPEAR, Atkins Transport Planning and Management, UK The cycle of integrity – societal considerations

• Mr. Soren FOGH, Danish Road Directorate, Denmark

Part 2. Improved Services for Customers Steps of customer cooperation and the segmentation of customers

The Auckland Motorway Alliance approach focusing on users, neighbours, agencies and

citizens: 'tell us about your motorway'

Mr. Dave RENDALL, Auckland Motorway Alliance, New Zealand

Changes undertaken to better understand and address the diverse transportation needs of Singaporeans

• Mr. Chandrasekar PALANISAMY, Land Transport Authority, Singapore

#### Break 16:30-17:00

#### Part 3. Mind the Gap! Human Resources for the Future.

Key topics: Identify skills gap, attract/recruit/retain, influence education Recruitment and training processes for the Trans-Maghreb Motorway

# Mr. Aïssa BENTABET, Egis, France Questions and answers

Conclusions

Chair Mr. Paul van der KROON



Roads for a better life.

#### TC C.2 "SAFER ROAD OPERATIONS"

#### Time: Sep. 28. Wed. 15:00-18:30 Venue: Palacio de Valparaíso 1

Chair: Dr. Ahmad Farhan MOHD SADULLAH, USM, Malaysia, Chair TC C.2

#### Introduction

#### Dr. Ahmad Farhan MOHD SADULLAH

Part 1. National Road Safety Policies and Plans

#### Comparison between nations

- Mr. George MAVROYENI, VicRoads, Australia
- Sustainable Development of a Road Safety Framework
- Mr. Seng Tim HO, Land Transport Authority. Singapore
- Innovative Safety Analysis Resources from the U.S
- Mr. Mike GRIFFITH, Federal Highway Administration, USA
- Vehicle trajectory analysis: a new approach of road safety
- Mr.Bernard JACOB, IFSTTAR, France

#### Break 16:30-17:00

#### Part 2. Road Safety Campaigns

Best practices in Road Safety Campaigns • Mr. Randall CABLE, South African National Roads Agency Limited, South Africa

#### Part 3. Cost Effectiveness

Cost Effectiveness of Safety Measures and Allocation of Resources • Mr. Wim WIJNEN, SWOV Institute of Road Safety Research, The Netherlands

- Part 4. Panel Discussion: Ensuring Safer Road Operations
- Mr. Ahmad Farhan MOHD SADULLAH, Malaysia : Moderator
- Mr. Seng Tim HO, Land Transport Authority, Singapore
- Mr. Wim WIJNEN, SWOV Institute of Road Safety Research, The Netherlands
- Mr. Mike GRIFFITH, Federal Highway Administration, USA
- Mr. George MAVREYONI, VicRoads, Australia
- Mr. Randall CABLE, South African National Roads Agency Limited, South Africa Conclusions

Chair: Dr. Ahmad Farhan MOHD SADULLAH

SP 02. "WHAT ARE THE PERSPECTIVES FOR ROAD TRANSPORTATION SYSTEMS IN DIFFERENT PARTS OF THE WORLD?" Time: Sep. 28, Wed. 15:00 - 18:30

#### Venue: Palacio de Iturbide 2, 3

#### Co-Chairs: Federico PATIÑO, Banobras and

Mr. Menno HENNEVELD, member of the World Road Association Executive Committee

#### Part 1. Perspectives for Road Transport Systems

For the well-off society and sustainable development: perspectives for road transportation system of China.

- Mr. Xinghua LI, Director General, Transport Planning & Research Institute, China Perspective of development of road transport in the UEMOA space: case study of the
- hinterland countries (Burkina Faso, Mali and Niger)

• Mr. Habou Soufiane MAGAGI, Director Infrastructures, Niger

- Perspectives of the road transport system in Mexico
- Mr. Oscar de BUEN RICHKARDAY, Consultant, Former Undersecretary of Infrastructure, Mexico
- Transport infrastructure development in the Russian Federation.

• Mr Anatoly CHABUNIN, Director of the Federal Road Agency, Ministry of Transport, Russian Federation

#### Break 16:30-17:00

#### Part 2. Perspectives for Road Transport Systems(continued)

The Mesoamérica project: promoving road safety and quality of the road network in Central America

• Mr. Alejandro MOLINA SOLIS, Director of Public Works, Ministry of Public Works and Transport, Costa Rica

Future of the United States transportation system

Mr. Victor MENDEZ, Administrator FHWA, USA

Perspectives from India

• Mr R. P. INDORIA, Director general, from Ministry of Road Transport and Highways, India Conclusions

#### Chairs

Program of the Congres

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#### WORKSHOP ON AIRFIELD PAVEMENT, Part 1 Time: Sep. 28, Wed, <u>15:00-18:30</u>

#### Venue: Casa Monteio 1

Chair: Mr. Cyril FABRE, AIRBUS, France

#### Welcome and Seminar Overview

 Mr. Cvril FABRE, AIRBUS, France ICAO Perspectives, AP-AOSWG-Pavement Subgroup Working program

• Ms. Lia RICALDE, ICAO Regional Office, Lima, Peru

#### Session 1. Functional Requirement / Surface Characteristics of Airfield **Pavements**

(Chair:Pr. Imad L. AL-QADI, University of Illinois) Balancing Asphalt Rut Resistance with Durability and Safety Requirements on Runway Rehabilitations

• Mr. Emile HORAK, Kubu Consultancy (Pty) Ltd., South Africa

- Slipperv Asphalt Runways After Rejuvenation
- Mr. Stephen EMERY, University of Witwatersrand, South Africa

#### Break 16:30-17:00

A Dynamical Time-Domain Analysis for Heavy Weight Deflectometers Backcalculations • Mr. Michaël BROUTIN, French CAA, France

## Session 2. (Part 1) Airfield Design / Full-scale Testing / Modeling

(Chair: Navneet GAARG, FAA) Aircraft Cockpit Ride Quality in Ground Maneuvers

• Mr. Gordon HAYHOE, FAA Airport Technology R&D, USA Full-scale Traffic Tests on Flexible Pavements with 6- and 10-Wheel Gear Configurations Mr. Gordon HAYHOF, FAA Airport Technology R&D, USA

Day 1 Close

## Time: Sep. 28, Wed. 15:00 – 18:30

Venue: Poster corner in Exhibition Hall

Presentation by the authors of accepted papers for: Topic2: Innovative Road Management Arrangements Topic3: Funding of Road Infrastructure Topic4: Shadow and Direct User Toll (PPP) Topic 5: Economic Aspects of Mobility Pricing Topic6: New Approaches to Appraisal of Social Impacts of Road Projects

## Thursday 29 9:00-12:30 hrs.

TC A.4 "RURAL ROAD SYSTEMS AND ACCESSIBILITY TO RURAL AREAS" Time: Sep. 29, Thu. 9:00-12:30 Venue: Palacio de Valparaíso 2

#### Chair: Mr. Enrique LEON DE LA BARRA, Chair TC A.4

#### Introduction

• Mr. Enrique LEON DE LA BARRA

#### Part 1. Sustainability of Maintenance

Introduction

Mrs. Manon BARIL, Transports Canada, Canada

Gravel road maintenance policies define the service level of the unpaved road network in Finland

• Mr. Pasi PATRIKAINEN, Centre for Economic Development, Transport and the

Environment for North Savo, Transport and Infrastructure, Finland

- The rural roads program in Benin: Long lasting maintenance of rural roads
- Mr. Isséré Joseph DOSSOU, COWI, Benin

#### Break 10:30 - 11:00

#### Part 2. Involvement of local communities

Introduction

Mr. Prabha Kant KATARE. India

Community participation on development of rural roads • Mr. K.C. DHIMOLE, Chief Executive Officer, Arunachal Rural Roads Development Agency, India

Towards sustainable maintenance of rural roads uncoated

• Mr. Luc BEAULIEU, Université Laval, Canada-Quebec

Roads to live better

Mr. Abraham E. CADENA SANCHEZ, Mexico

Conclusions

Chair: Mr. Enrique LEON DE LA BARRA

#### TC B.2 "ROAD NETWORK OPERATIONS"

#### Time: Sep. 29, Thu. 9:00-12:30 Venue: Casa del Diezmo 1. 2

#### Chair: Mr. Martial CHEVREUIL, Egis, France, Chair TC B.2

#### Introduction

Overview of the TC B.2 activities Mr. Martial CHEVBEUII

#### Part 1. Management of congested areas and road corridors

Review of case studies, main lessons learned and recommendations

- Mr. Robert ABNOLD, Office of Transport Operations, USA
- Mr. Phil LAWES, Department for Transport, Energy & Infrastructure, South Australia, Australia

• Ms. Susan SPENCER, ITS, Transport Canada, Canada

#### Part 2. The ITS and Network Operation handbooks

Presentation of the website

Mr. John MILES, Ankerbold, UK

#### Part 3. Implementation of B2 recommendations in the next cycle Questions and answers

Moderator: Mr. Martial CHEVREUIL

#### Break 10:30 - 11:00

#### Part 4. Selected examples of measures for operations

Monash-City Link-West Gate Upgrade - Freeway Management System

• Mr. Andrew SOMERS, Vicroads, Australia

Ensuring An Appropriate Level of Expressway Management by Using Outcome Indicators • Mr. Katsuhiko NAKAMURA, Japan Expressway Holding and Debt Repayment Agency, Japan

Modelling Toll Plazas using queue theory

Mr. Felipe SOUSA, Consórcio Univias, Brazil

Towards an eco-comparator of road works stealth

• Mr. Gérard VALLAT, Egis Routes, France

Dynamic traffic management equipment for road network optimization

#### Mr. Christophe DESNOUAILLES, SETRA, France **Questions and answers**

Conclusions

Chair: Mr. Martial CHEVREUIL

#### TC C.3 "MANAGING OPERATIONAL RISK IN ROAD OPERATIONS"

#### Time: Sep. 29, Thu. 9:00-12:30

Venue: Palacio de Valparaíso 1 Chair: Dr. Michio OKAHARA, Advanced Construction Technology Center, Japan, Chair TC C.3

Co-chair: Mr. Hiroyuki NAKAJIMA, Hanshin Expressway Eng. Corp., Japan

Introduction

#### Dr. Michio OKAHARA Part 1. Introduce Risk Management Techniques in the Road Sector

#### Overview of the WG #1 final report

• Mr. Johan HANSEN, Swedish Road Administration, Sweden

Proactive risk management in winter maintenance

• Mr. Kai TATTARI, The Centre for Economic Development, Transport and Environment for Uusimaa. Finland

Hazard based approach to the management of operational safety risk on highways schemes Mr. Ryszard GORELL, Mouchel, U-K
Part 2. Risks Associated with Natural Disasters, Climate Change, Man-made

# **Disasters and Security Threats**

Overview of the WG #2 final report

Mrs. Connie YEW, Federal Highway Administration, USA

The Great East Japan Earthquake Disaster

• Dr. Keiichi TAMURA, Public Works Research Institute, Japan

#### Break 10:30 - 11:00

Managing Risks Associated with Climate Change in Road Sector

 Mr. Gustavo MORENO, Seguros Especializados, Mexico Natural risk assessment in Chilean road network

• Mr. Tomas ECHAVEGUREN, Dept. of Civil Eng. Univ. of Concepcion, Chile

Landslide Hazard and Risk Assessment, Management and Mitigation for the Scottish Road Network

#### Mr. Mike G. WINTER, TRL, UK

#### Part 3. Social Acceptance of Risks and Their Perception

Overview of the WG #3 final report Mr Boberto ABDITL SINA S n A Italy

UN Millennium Development Goals and transport policies: how risk assessment and measures for road safety could play a rewarding role for regions with economies in transition

Ms. Luciana IORIO, Ministry of Infrastructures and Transport, Italy

#### Conclusions

Chair: Dr. Michio OKAHARA

#### TC D.2 "ROAD PAVEMENTS" (PART 1) Time: Sep. 29, Thu. 9:00-12: Venue: Casa del Diezmo 3, 4

#### Chair: Mr. Michel BOULET, IFSTTAR, France, Chair of TC D.2

#### Introduction

Introduction to Committees (D2a, D2b, D2c) and summary of work themes Mr. Michel BOULET

6th Symposium on Pavement Surface Characteristics (Portoroz, Slovenia, 2008) • Mr. Bojan LEBEN, Slovenia

#### Part 1. Reducing Construction Time and Cost

Introduction of the Working Group 1 Activities Mr. Luc RENS, Managing Director, EUPAVE, Belgium Pavement reconstruction of the Mexico - Queretaro highway

• Mr. Juan José OROZCO, Mexico

Rapid intersection reconstruction in Washington State

Mr. Suneel VANIKAR, FHWA, USA

Case study

 Mr. Keizo KAMIYA, NEXCO Research Institute, Japan **Discussion and Conclusions** 

#### Break 10:30 - 11:00

#### Part 2. Outline of Seminars

International Seminar on Maintenance Techniques to Improve Pavement Performance (Cancún, México, 2009)

• Mr. Rodolfo TÉLLEZ, Mexican Transportation Institute, Mexico

Concrete Pavements Seminar (Seoul, Korea, 2009)

Mr. Suneel VANIKAR, FHWA, USA

Latest Advancements in Concrete Pavement Design and Construction (Buenos Aires, Argentina, 2011)

• Mr. Diego CALO, Institute of Portland Cement of Argentina, Argentina

#### Part 3. Improved Maintenance Methods Introduction of the Working Group 2 Activities

• Mr. Johan LANG, Benoit PETITCLERC, Canada-Québec

- 10 years of concrete pavement maintenance innovation to extend service life Mr. David HEIN, Applied Research Associates, Canada
- Methodology for determining strategies for pavement preservation

• Mr. Francisco Javier MORENO, Alta Tecnología en Ingeniería de Pavimentos y Seguridad, México

Presentation of the German manual for repair of concrete pavements • Mr. Stefan HÖLLER, Bundesanstalt für Straßenwesen, Germany

#### **Discussion and Conclusions**

#### TC D.3 "ROAD BRIDGES"

#### Time: S Sep. 29, Thu. 9:00-12:3 Venue: Palacio de Iturbide 2, 3

Chair: Dr. Satoshi KASHIMA, Japan Bridge Engineering Center, Japan, Chair TC D.3 Co-chair: Mr. Brian HICKS, Transport Canada, Canada

Mr. Pablo DIAZ SIMAL, CEDEX - Ministry of Public Works, Spain

#### Introduction

Dr. Satoshi KASHIMA

#### Part 1. Inspection and Assessment of the Condition of Road Bridges Inspector Accreditation, Non-Destructive Testing and Condition

Assessment for Bridges

• Ms. Erica SMITH, Asset Manager Bridges, Main Roads, Western Australia, Australia

Large Road Bridges Management, Monitoring and Maintenance • Mr. Thierry KRETZ, SETRA, Ministry of Ecology, Sustainable Development, Transport and Housing, France

Rio Papaloapan Bridge: Design and Successful Application of Non-Destructive Inspection Techniques

Mr. José-Alfredo LOPEZ, Mexican Institute of Transport, Mexico

Part 2. Innovative Maintenance/Repair Techniques

Study on Reduction of Vibration Control Devices for Akashi- Kaikyo Bridge • Mr. Susumu FUKUNAGA, Long-span Bridge Engineering Center, Honshu-Shikoku Bridge

Large Road Bridges Rehabilitation, Example of Aquitaine Bridge • Mr. Thierry KRETZ, SETRA, Ministry of Ecology, Sustainable Development, Transport and

Inspection of Prestressed Concrete Road Bridges by the Ultrasound 3D Tomographer System

• Mr. Guy RAPAPORT, Ramboll Finland Oy, Infrastructure & Transport, Bridge Engineering, Finland

Mr. Borre STENSVOLD, Bridge Director, Norwegian Public Roads Administration, Norway

Mr. Borre STENSVOLD, Bridge Director, Norwegian Public Roads Administration, Norway

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MONDIALE DE LA ROUTE

Mr. Emilio CRIADO, State Road Office, Ministry of Public Works, Spain

#### Expressway Co., Ltd., Japan Discussion

Break 10:30 - 11:00

Adaptation to Climate Change

Chair: Dr. Satoshi KASHIMA

Management of the Bridge Stock

Maintenance Plans for Highway Bridges

Housing, France

Discussion

Discussion Conclusions Roads for a better life.

#### WORKSHOP ON AIRFIELD PAVEMENTS, Part 2 Time: Sep. 29, Thu, 09:00-12:30

Venue: Casa Montejo 1

Chair: Mr. Cyril FABRE, AIRBUS, France

#### Session 2. (Part 2) Airfield Design / Full-scale Testing / Modeling

(Chair: Navneet GAARG, FAA) Quantification of the Effect of Tire Contact Stresses on Runway Pavement Responses Mr. Hao WANG, University of Illinois at Urbana-Champaign, USA

Top-down and Bottom-up Cracking Mechanism in Failure Stage Two

Mr. Edward GUO, FAA's Consultant, USA

#### Session 3. Construction of Airfield Pavement, including PCN Calculation (Chair: David BRILL, FAA)

PCN Determination - Case Studies and Observations of the FAA PCN Methodology • Mr. Michael ROGINSKI, The Boeing Company, USA

#### Break 10:30 - 11:00

The New Test Technology for Evaluating the Anti-Cracking Performance of Concrete Runway of the Airport under Construction

### • Mr. Yan LIU, China Airport Construction Group Corporation of CAAC, China

Session 4. Maintenance, Restoration and Pavement Management System for **Airfield Pavements** 

(Chair: Andreas LOIZOS, University of Athens)

Maintaining Operational Efficiency When Resurfacing the Runway ar Billund Airport with a New Overlay in Three Days

Mr. Hans Christian KORSGAARD, Denmark

Pavement Sustainability and Performance Improvement: Case Studies

Mr. Iswandaru WIDYATMOKO, URS/Scott Wilson, UK

**Seminar Conclusions & Close** 

#### Workshop HDM-4. FOR USERS OF VERSION 2 (in Spanish)

Time: Sep. 29, Thu, 9:00-12:30 Venue: Palacio de la Canal 4

Chair: Mr. Ricardo SOLORIO. IMT/HDMGlobal

#### Part 1. Introduction

HDM-4 use in preparing reference projects for granting multi-annual road maintenance projects (CPCC)

 Mr. Carlos ROMERO, Director General of Road Maintenance, Ministry of Communications and Transport, Mexico

HDM-4 applications: The Nicaraguan experience

Mr. Germán CRUZ, Road Maintenance Fund, Nicaragua

Steps to successfully implementing HDM-4 within a road organisation

• Mr. Mauricio SALGADO, Chilean Cement and Concrete Institute, Chile

#### Break 10:30 - 11:00

#### Part 2. Application Cases

A HDM-4 based pavement management system for the National Infrastructure Fund Road Network

Mrs. Marcia PÉREZ, Technical Directorate, CAPUFE, Mexico

Mexican Transport Institute developments related to HDM-4 and Road Infrastructure Management

• Mr. Roberto HERNÁNDEZ, Mexican Transport Institute, Mexico

HDM-4 Usage in South Africa

Mr. Stephan KRYGSMAN, the regional HDM-4 champion for Southern Africa. South Africa

Time: Sep. 29, Thu. 09:00 – 12:30 Venue: Poster corner in Exhibition Hall

#### Presentation by the authors of accepted papers for:

Topic 15: Linear Settlements: the World-Wide Disaster for Road Safety Topic 16: Methods for Road Safety Impact Assessments

Topic 17: Road Safety System Approach

Topic 18: The System Approach of Human Factors in Road Design and Operations

## Thursday 29 10:30-11:00 hrs.

Time: Sep. 29, Thu. 10:30 – 11:00 Venue: Pavilion of the World Road Association (Exhibition hall)

Presentation of the work and outputs of the Committee on Terminology and demonstration of the use of the multilingual technical dictionaries, lexicons and translation tools available on the Association's website.

## Thursday 29 12:40-13:30 hrs.

#### Thursday 29 Morning 12:40-13:30

Palacio de Valparaíso 3

Lessons learned from the great earthquakes of Chile and Japan, by Mr. Mario FERNANDEZ RODRIGUEZ, Road Director, Ministry of Public Works, Chile and Mr. Shigenobu KAWASAKI, Director for Road Engineering Analysis, National Highway and Risk Management Division, Ministry of Land, Transport and Tourism, Japan

Lunch Time 13:30-15:00 hrs.

#### Thursday 29 15:00-18:30 hrs.

#### TC B.3 "IMPROVED MOBILITY IN URBAN AREAS"

lime: Sep. 29, Thu. 15:00-18:30

Venue: Casa del Diezmo 1, 2

Chair: Mr. Hubert PEIGNÉ, Ministry Ecology, Sustainable Development, Transport and Housing, France, Chair TC B.3

#### Introduction

Mr. Hubert PEIGNÉ

Part 1. Compared strategies on walking and cycling in 41 cities in the world -surveys, results and prospective

Report of Technical Committee TCB.3 working group 3

- Mr. Emese MAKO, Professor, Szechenyi Istvan University Gyor, Hungary
- Mr. Marc ELLENBERG, Associate Director, CERTU, France
- Promoting sustainable cities through sustainable transport options :Cycling in Accra, Ghana Mr. Magnus QUARSHIE, Centre for Cycling Expertise, Accra, Ghana
- Pedestrian Priority Zones initial evaluation of results in three cities
- Mr. Gilles BLANCHARD, CETE de l'Ouest, Ministry Ecology, Sustainable Development, Transport and Housing, France

#### Break 16:30-17:00

#### Part 2.

#### Strategies for balancing the share of modes to improve mobility and reduce road congestion

Report of Technical Committee TCB.3 working group 1

- Mr. Lajos KISGYORGY, Budapest University of Technology and Economy, Hungary • Ms. Anita CURNOW, VicRoads, Australia
- Looking Back and Moving Forward How to create a legacy of sustainable transportation in an evolving field
- Mr. Trent LETHCO, Associate Principal, ARUP, New York, USA
- Introducing V'el Audit an innovation for cycling infrastructure
- Mr. Gilles BLANCHARD, CETE de l'Ouest, Ministry Ecology, Sustainable Development,

Transport and Housing, France Conclusions

Chair: Mr. Hubert PEIGNÉ

#### TC C.4 "ROAD TUNNELS SAFETY"

#### Time: Sep. 29, Thu. <u>15:00-18:3(</u> Venue: Palacio de Valparaíso 1

Chair: Mr. Pierre SCHMITZ, Brussels Mobility, Ministry of the Region Brussels Capital, Belgium , Chair TC C.4 Co-chair: Mr. Rafael LOPEZ GUARGA, Ministry of Development, Spain

#### Part 1. Current activities of the C4 committee

Introduction • Mr. Pierre SCHMITZ, TC C4 Chair

Part 2. Overview of activities in the 2008-2011 cycle

• Mr. Robin HALL, C4 English-speaking secretary, Mott MacDonald, UK Part 3. Presentation and discussion of significant topics studied by C4 Working Group 1 : Road tunnel operations Recommendations for strategic tunnel safety management

Good practice for road tunnel emergency exercises Management of maintenance and technical inspections of road tunnels

Life cycle aspects of electrical road tunnel equipment • Mr. Jean-Claude MARTIN, WG1 leader, CETU, France

Part 4. Presentation and discussion of significant topics studied by C4 Working Group 2 : Manage and improve road tunnel safety Current practice for risk evaluation of road tunnels

Improving safety in existing tunnels

• Mr. Bernhard KOHL, WG2 leader, ILF, Austria Part 5. Presentation and discussion of significant topics studied by C4 Working Group 3 : Influence users' behaviour in tunnels Driver's education

• Mr. Marc TESSON, WG3 leader, CETU, France

rogram of the Congres

#### Continue 🔪

#### Break 16:30-17:00

#### Part 6. Presentation and discussion of significant topics studied by C4 Working Group 4 : Air Quality, Fire and Ventilation

Vehicle emissions and air demand for ventilation

Design fire characteristics for road tunnels

Mr. Ignacio DEL REY. WG4 leader. ETSII - UPM. Spain

Part 7. Presentation and discussion of significant topics studied by C4 Working Group 5 : Knowledge management

Road Tunnel Manual

Road Tunnel Dictionary

Mr. Pierre SCHMITZ, WG5 leader, Brussels Mobility, Belgium

Part 8. Papers submitted on sustainable approaches for road tunnels • Alexandre DEBS, C4 French speaking secretary, Ministry of Transport, Canada-Quebec

Part 9. Future directions and possible new topics

Where are we? What do we need now?

• Mr. Robin HALL, C4 English-speaking secretary, Mott MacDonald, UK Part 10. Discussion on future directions and new topics for the new TC on

**Road Tunnel Operations** 

• Mr. Ignacio DEL REY, WG4 leader, ETSII - UPM. Spain

Conclusions

Chair: Mr. Pierre SCHMITZ

SP 10. "PRACTICAL EXPERIENCES IN PUBLIC-PRIVATE PARTNERSHIPS (PPPs) IN DEVELOPED AND DEVELOPING COUNTRIES"

#### Time: Sep. 29, Thu. 15:00 - 18:30 Venue: Palacio de Valparaíso 2

Chair: Ms. Inmaculada RODRÍGUEZ-PIÑERO, Secretary General for Infrastructures, Spain

#### Part 1. Impact of the GFC on road PPPs

Overview of the evolution of financing conditions since 2008

• Mr. Jose Luis IRIGOYEN, Sector Director for the Transport, Water and ICT Department, World Bank

#### Part 2. Measures Taken by Governments to Facilitate Road PPPs in Response to the GFC

Measures taken by Mexico in response to the global financial crisis to facilitate Public Private Partnership

- Mr. Amado Athie RUBIO, Deputy Director of Project Formulation, SCT, Mexico
- Measures taken by Korean government to facilitate road PPPs in response to the GFC

• Mr. Keechoo CHOI, professor of AJOU University, Korea

PPP Experiences in Spain in the current economy context Mr.José María PERTIERRA DE LA UZ, Director General of Highways, Ministry of

Development, Spain

#### Break 16:30 - 17:00

#### Part 3. Conditions Necessary for Successful Road PPPs in Today's Market Presentation as an introduction to the Panel Discussion

Mr Henri CHUA Chairman of TC A 2

#### Part 4. Panel Discussion of Lenders/Investors/Public Authorities looking to the Future

(Moderator: Mr. Oscar de BUEN RICHKARDAY, Consultant, Former Undersecretary of Infrastructure, Mexico) Representatives from Road Agency or Road Administration Representative from Bank Representative from Investors Representative from Concessionaire Company Conclusions Chair: Mrs. Inmaculada RODRÍGUEZ-PIÑERO

# SP 13. "FUTURE OF AUTOMOBILE TRANSPORT(TECHNOLOGY AND USAGE) AND ITS IMPACTS ON ROAD INFRASTRUCTURE AND OPERATIONS" Time: Sep. 29, Thu. 15:00 - 18:30

Venue: Palacio de Iturbide 2, 3

#### Co-Chairs: Dipl.-Ing. Mr. Christoph HUSS, Past-President FISITA & Mr. Dongchang DAI, member of the World Road Association Executive Committee

#### Part 1. Future of Automobile Technology

CO2 reduction and automotive technologies: The road ahead

• Mr. Masafumi USUDA, Japan Automobile Manufacture Association, Japan

Future automobile technology: How the auto industry adapts to new mobility demands in large metropolitan cities

• Mr. Christoph HUSS, Vice-president for Development Abroad, BMW Group / Past FISITA President

Infrastructure needs for road vehicles; will car ownership growth outpace road building? Mr. François CUENOT, International Energy Agency

#### Discussion

#### Break 16:30-17:00

#### Continue 🔪

#### Part 2. Future of Vehicle Usage

Triggering the development of electrical mobility: A review of public policies • Ms. Elisabeth WINDISCH, Laboratoire Ville Mobilité Transport, Université Paris-Est, France The Norwegian model for financing, building and operating charging infrastructures for Electric Vehicles

• Ms. Eva SOLVI, Senior Principal Engineer, Norwegian Public Roads Administration, Norway The Future of automotive transport and the impacts of technology on road infrastructure, design and operations

• Mr. John HORSLEY, AASHTO, USA

New modes of driving and their possible consequences: The example of Car-Sharing in Swizerland

Mr. Christoph JAHN. Federal Roads Office. Switzerland

Conclusions

Chairs

# TC D.2 "ROAD PAVEMENTS" (PART 2) Time: Sep. 29, Thu. 15:00-18:30

# Venue: Casa del Diezmo 3, 4

Chair: Mr. Michel BOULET, IFSTTAR, France, Chair of TC D.2

#### Part 4. Noise

Introduction of the Working Group 3 Activities

• Mr. Filippo PRATICO, University of Calabria, Italy

Long Lasting Durable Mix as Alternative of Porous Asphalt

• Mr. Keizo KAMIYA, NEXCO Research Institute, Japan

- 3-D characterization of asphalt pavement macrotexture for skid resistance evaluation
- · Mr. Yinghao MIAO, Beijing University of Technology, China The poro-elastic road surface (PERS): a powerful weapon against traffic noise
- Mr. Luc GOUBERT, Belgian Road Research Centre, Belgium

#### Discussion and Conclusions

#### Part 5. Monitoring of Innovation

Introduction of the Working Group 4 Activities

- Mr. David HEIN, ARA, Canada
- Road Foundation Construction Using Tyre Bales A Lightweight, Low-Energy Alternative • Mr. Mike WINTER, Transport Research Laboratory, U.K
- Photocatalytic applications in Belgium, purifying the air through the pavement
- Ms. Anne BEELDENS, Belgian Road Research Centre, Belgium
- Seismic retrofit of asphalt pavements using confined-reinforced earth
- Mr. Tsutomu ISHIGAKI, Nippo Corporation Research Institute, Japan

#### **Discussion and Conclusions**

#### Break 16:30-17:00

#### Part 6. Adaptation to Climate Change

Introduction of the Working Group 5 Activities • Mr. Benoit VERHAEGHE, South Africa

- Adapting Road Infrastructure to Climate Change: Innovative Approaches and Tools Mr. Yves ENNESSER, Egis, France
- Impact of climate change on the development of rutting

• Mr. Alexander ZEISSLER, Institute of Urban Engineering and Road Construction,

Germany Pavement preservation processes in Latin America, energy use and GHG emissions

#### Ms. Patricia IRRGANG, USA

**Discussion and Conclusions** 

- Conclusions
- Chair: Mr. Michel BOULET

# Time: Sep. 29, Thu. 15:00 - 18:00

#### Venue: Palacio de Valparaíso 3 Chair: Mr Friedrich ZOTTER, Representative of the National Committees on the World Road Association Executive Committee

Presentation of the role and activities of the National Committees, how to establish a National Committee, questions and answers.

#### This session is organized in three parts:

15:00 - 16:00 in Spanish 16:00 – 17:00 in English 17:00 - 18:00 in French

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# XXIV<sup>th</sup> World Road Congress

Mexico City, from 26<sup>th</sup> to 30<sup>th</sup> September 2011

#### Roads for a better life.

ep. 29, Thu. <u>15:00 – 18:30</u> Time: Se Venue: Poster corner in Exhibition Hall

#### Presentation by the authors of accepted papers for:

Topic 1: Environmental Evaluation of Road Projects Topic 7: Sustainable Maintenance of Rural Roads Topic 8: Project Governance and Institutional Integrity Topic 9: Capturing and Understanding Customer Needs Topic 10: Human Resources for the Future Topic 11: Management of Roads

### Friday 30 9:00-12:30 hrs.

#### TC B.4 "FREIGHT TRANSPORT AND INTERMODALITY"

#### Time: Sep. 30, Fri. 9:00-12:30 Venue: Casa del Diezmo 1. 2

Chair: Mr. Hans SILBORN. Norwegian public roads administration. Norway. Chair TC B.4

#### Introduction

Mr. Hans SILBORN

Part 1. Management of freight corridors, intermodal freight terminals and urban freight transport, presentation of technical reports from TCB.4

Management of strategic freight corridors

- Mr. Don HOGBEN, VicRoads, Australia
- Intermodal freight terminals challenges and good practice
- Mr. Martin RUESCH, Rapp Trans AG, Switzerland
- Public sector governance over urban freight transport Prof. Eiichi TANIGUCHI, Kyoto University, Japan

#### Part 2. Presentation of individual papers

Relationships between commodity flow and land use

- Mr. Mitsuru SAITO, Brigham Young University, USA
- Freight movement between Maguiladora industry and ports of entry
- Mr. Jose VIDANA. Universidad Autónoma de Ciudad Juárez, Mexico and Texas Transportation Institute, USA

#### Break 10:30 - 11:00

#### Part 3. Existing and future challenges in intermodal freight transport

• Mr. Jorge MEDINA, Director for Intermodal Sales, Kansas City Southern de México, México

#### Part 4. Round table discussion: Challenges and measures in freight transport for a sound development

- Mr. Jorge MEDINA, México
- Mr. Don HOGBEN, Australia
- Mr Martin BUESCH Switzerland
- Prof Eiichi TANIGUCHI Japan
- Moderator: Mr. Benoit CAYOUETTE, Ministry of Transport, Canada-Quebec Conclusions

Chair: Mr. Hans SII BORN

#### TC D.1 "MANAGEMENT OF ROAD INFRASTRUCTURE ASSETS" Time: Sep. 30, Fri. 9:00-12:30

#### Venue: Casa del Diezmo 3,4

Chair: Ms. Anita KÜNKEL-HENKER, Section of Pavement Design and Road Maintenance, Federal Highway Research Institute, Germany, Chair TC D.1 Co-chair: Mr. Mick LOLENZ, Department of Transport, Energy and Infrastructure, Australia

#### Introduction

Ms. Anita KÜNKEL-HENKER

#### Part 1.

rogram of the Congress / Exhibitio

- Benchmarking of Asset Management Methods
- Mr. Ramesh SINHAL, Highway Agency, United Kingdom
- High level management indicators
- Mr. Philippe LEPERT, Institute of Science and Technology of Transport, Development and Networks, France

Allocation of Resources across Asset Classes

• Mr. Louw KANNEMEYER, National Roads Agency, South Africa

#### Break 10:30 - 11:00

#### Continue 🔪

#### Part 2. Road asset management in practice

#### Learnings from Africa

• Ms. Sophie TEKIE, Roads Authority, Namibia and Mr. Philippe LEPERT, Institute of Science and Technology of Transport, Development and Networks, France

- Asset Management of Japanese Expressways after the Earthquake Mr. Shigeru SHIMENO, Nippon Expressway Research Institute, Japan
- Current Practise of Road Management in Mexico
- Mr. José Ricardo SOLORIO MURILLO, Mexican Transportation Institute, Mexico
- Improved Efficiency in Road Management through Level of Service based Contracts • Mr. Pietro GIANNATTASIO, University of Rome "Tor Vergata", Italy
- Moving forwards with Performance based Asset Management
- Mr. Stephen J. GAJ, Federal Highway Administration, USA

#### **Discussion and Conclusions**

• Chair: Ms. Anita KÜNKEL-HENKER

# TC D.4 "GEOTECHNICS AND UNPAVED ROADS" Time: Sep. 30, Fri. 9:00-12:30

Venue: Palacio de Iturbide 2, 3 Chair: Mr. Martin SAMSON, SNC-Lavalin Inc., Canada, Chair TC D.4

#### Introduction

#### Mr. Martin SAMSON

#### Part 1. Innovation in the treatment and use of local materials General presentation 1

Mr. Martin SAMSON

Presentation of the technical report « Innovative approaches for the use of local marginal natural materials

- Mr. Bernard DETHY, CRR, Belgium et Guy RAOUL, SPTF, France
- Assessment of clay materials stabilized with lime, cement and other products Ms. Natalia PÉREZ, IMT, Mexico
- Use in earthworks of fine soils believed to be unsuitable for treatment Studies of weathered schists in the region Bretagne - Pays de Loire
- Mr. Jean Claude AURIOL, IFSTTAR, France
- Improvement of local materials on the motorway serving the port of Tangiers
- Mr. Mohamad CHOUH, Société Nationale des Autoroutes, Morocco

#### Break 10:30 - 11:00

#### Part 2. Innovation in the construction and maintenance of unpaved roads in developing countries

General presentation 2 Mr. Martin SAMSON

Presentation of a summary of the seminar in Cotonou concerning unpaved roads

• Mr. Tele David OLODO, Secretary General, Ministry of Public Works and Transport, Benin Vulnerability reduction and damage repairs using best practices on low volume roads

Mr. Gordon KELLER, USDA Forest Service, USA

Soil stabilization - An innovative measure for unpaved roads

• Mr. Mohamad SHUKOR, Public Works Department, Malaysia

#### Part 3. Adaptation to climate change

General Presentation 3

Mr. Martin SAMSON

- Presentation of the technical report "Adaptation to climate change"
- Mr. Aurèle PARRIAUX, GEOLEP, EPFL, Switzerland

#### Conclusions

Chair: Mr. Martin SAMSON

#### SP 11. "ROAD USER CHARGING SCHEMES - LESSONS LEARNED AND FUTURE PROSPECTS"

#### Venue: Palacio de Valparaíso 2

Co-Chairs: Mr. Skirmantas SKRINSKAS, Director of Lithuanian Road Administration, member of Conference of European Directors of Roads (CEDR) and Mr. Joseph HAULE, member of the World Road Association **Executive Committee** 

#### Part 1. Lessons Learnt and case studies

Implementing congestion charges: Efficiency and acceptability • Mr. Stephen PERKINS, Head of OECD/ITF Joint Transport Research Center Road pricing for managing traffic in Singapore • Mr. Chandrasekar PALANISAMY, Land Transport Authority, Singapore Road user charging in Norway - Unique in the World? A presentation of the past, present and future of RUC in Norway.

• Mr. Arve KIRKEVOLD, Norwegian Public Roads Administration, Norway Discussion

Break 10:30 - 11:00

#### Continue 🔪

#### Part 2. Case studies

Present and future schemes for Switzerland

• Mr. Rudolf DIETERLE, Director General, Federal Roads Office, Switzerland Heavy goods vehicle tolls In Germany

 Mr. Ulfert JOOP, Federal Ministry of Transport, Building and Urban Development, Germany

Introduction of an eco-tax for trucks in France

• Mr. Guillaume LAPIERRE, Transport Infrastructures Directorate, Ministry of Ecology, Sustainable Development, Transport and Housing, France

#### Discussion

Conclusions

Chairs

SP 12. "INTELLIGENT TRANSPORT SYSTEMS(ITS) FOR SAFER AND MORE EFFICIENT TRAFFIC MANAGEMENT "

#### Time: Sep. 30, Fri. 09:00 - 12:30

Venue: Palacio de Valparaíso 1 Co-Chairs: Mr. Gabriel SANCHEZ, Executive Vice-President IRF Washington and Ms. Anne-Marie LECLERC, President of the World Road Association

#### Part 1. Promising Developments in Vehicle and Communications Technology Presentation from the Joint PIARC/FISITA Task Force on Cooperative Systems

· Mr. Robert CONE, Consultant, Wales, UK

- Connected Vehicle Research in the United States
- Ms. Shelley ROW, ITS Joint Program Office Director, USA
- Cooperative ITS: Information services of the future for travellers and infrastructure operators Mr. Paul KOMPFNER, ERTICO

Dynamic Navigation: Car manufacturers and traffic management operators working hand in hand

• Mr. Martin HAUSCHILD, Leader, Traffic Engineering & Traffic Management, BMW Group

#### Break 10:30 - 11:00

#### Part 2. Deployment of ITS for Traffic Management

- Deployment of Next-Generation ITS Trend of ITS deployment in Japan • Mr. Fumihiko KANAZAWA, Head of ITS division, National Institute for Land and
- Infrastructure Management MLIT, Japan
- Perspectives of ITS in the daily life of Korean Expressways Intelligent and Intermodal • Mr. Jai-Young RYU, Executive Director, Khris, Korea
- Contribution of ITS to safer and more efficient traffic management in Chile
- Mr. José Miguel ORTEGA, Vice-president of ITS Chile, Chile
- Conclusions Chairs

Time: Sep. 30, Fri. 09:00 – 12:30 Venue: Poster corner in Exhibition Hall

Presentation by the authors of accepted papers for: Topic 21: Adaptation of Road Pavements to Climate Change Topic 22: Innovation in Road Pavements

Lunch Time 13:30-15:00 hrs.

# Friday 30 14:00-15:30 hrs.

#### Closing Ceremony Friday 30 Afternoon 14:00-15:30 Palacio de Valparaíso 3

The closing session will include a summary of the congress highlights and a presentation on the future 2012-2015 Strategic Plan which will guide the activities of the World Road Association in the coming four years.

The host country of the next World Road Congress, Korea, will invite delegates to experience the wonders and innovation of their country during an official handover of the Congress by the Association.

- The Closing Ceremony will consist of the following:
- · Congress highlights
- Introduction of the next Strategic Plan 2012-2015 for the World Road Association
- Invitation to coming congresses
- The 17th IRF World meeting
- The 14th International Winter Road Congress in Andorra (2014)
- The 25th World Road Congress in Korea (2015)
- Handover to the 25th World Road Congress
- Address by the President of the World Road Association and the President of the
- Mexican Organizing Committee
- · Closing remarks

# EXHIBITION

The technical exhibition of the 24th World Road Congress covering more than 12,000 m2 will be open every day. This is a great opportunity to meet and do some networking with government agents, experts, professionals, contractors and suppliers to share ideas and experiences from all over the world. For detailed list of exhibitors and their business activities, please refer to the catalogue of exhibitors.

#### **Exhibition Time Table:**

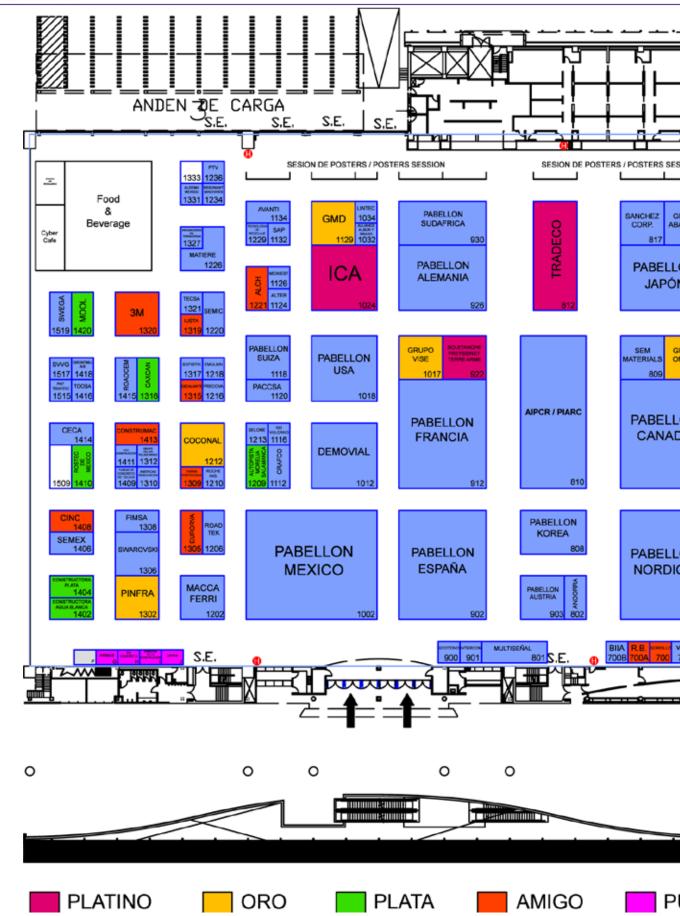
Monday 26th : 13:00 - 20:30 hrs Tuesday 27th to Thursday 29th : 10:00 – 19:30 hrs. Friday: 10:00 - 14:00 hrs.





Roads for a better life.

# ΕΧΡΟ ΜΑΡ



Expo Map

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UBLICACIONES





Roads for a better life.

# **TECHNICAL VISITS**

- A reception point for the technical visits will be located on the foyer of Casa del Diezmo and Casa Montejo, see map on page 27.
- All visits depart from and return to Centro Banamex.
- Some visits will have English translation others French please be aware of which one is on your needs.
- A detailed information sheet for each of the visits will be distributed on the bus on the day of the visit.
- For each visit you must present your badge on entering the bus with the coupon which you were given



at the time of registration.

# V1 Northern Arc

Meeting 9:00 am. Return 17:00 pm. Visit organizer: SCT



# V2 Mexican Institute of Transport

Meeting 9:00 am. Return 18:30 pm. A light lunch will be offered Visit organizer: IMT

# V3 National Control Center CAPUFE

Meeting 9:00 am. Return 17:00 pm A light lunch will be offered Visit organizer: CAPUFE

# V4 Suburban Train

Meeting 9:00 am. Return 13:30 Visit organizer: SCT



# V5 UNAM's Engineering Institute Laboratories

Meeting 9:00 am. Return 16:00 Visit Organizer: UNAM

# SOCIAL PROGRAM

## Welcome Cocktail.

#### Monday September 26th at 18:00 hrs. Room: Exhibition Hall "A" and "B".

A taste of the country's beverages will be offered as a welcome greeting. Having a drink is always nice with one condition; not to be alone. The company is essential. The name cocktail implies mixture and combination. It means not only welcoming our guests but to celebrate with joy their willingness to visit us.

The Mexican Organizing Committee has prepared a casual party for all the Congress participants. You are invited to savor Mexican snack service stations that will be placed in the exhibition corridors jointly with folkloric musical groups from different parts of the country so we all colleagues spent a splendorous night in great harmony and friendship.

#### Congress Dinner.

#### Thursday September 29th at 17:30 hrs. Room: Exhibition Hall "C".

In a magnificent environment we will be travelling through music and dance of the Mexican province. Historically, it has been a space for mergers and expressions that despite the intense force of other nations cultures had succeeded in preserving the greatness of its roots. "JAROCHO" a show produced by the University of Veracruz in the central east of the country will be greeting all Congress participants.

During 16 different performances full of history, tradition, color, dance and music interpreted in a contemporary aesthetic the sparkle and excitement that has been shown in different countries will be contagious to the audience with the grace and joy of the artists.

This wonderful experience will be accompanied by the opportunity to get acquainted with the exuberant flavors of the Mexican cuisine in a friendship and cheerful setting.

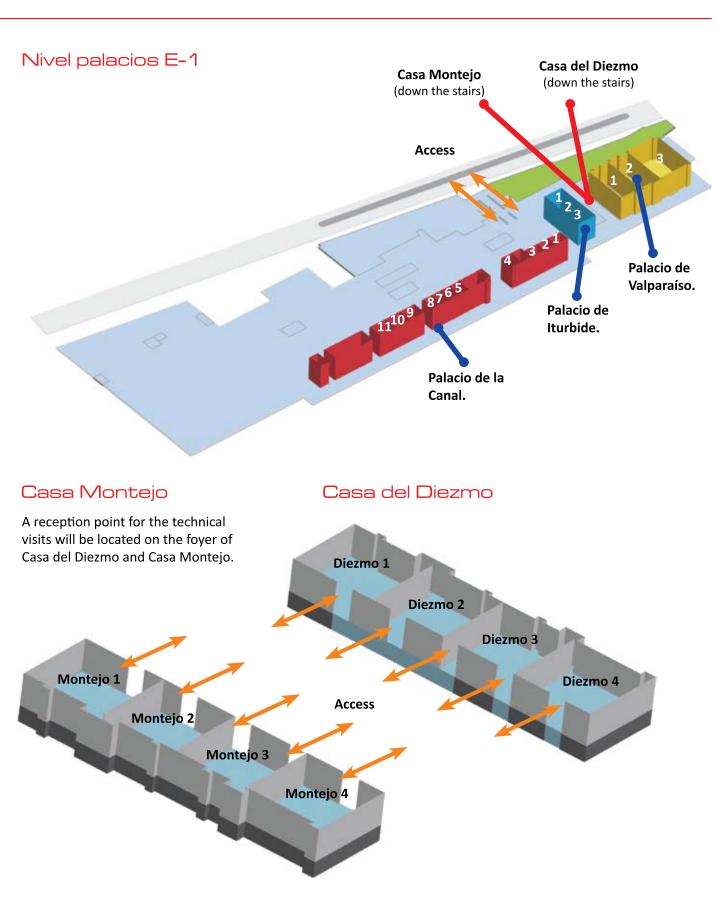
At 11:30 pm after dinner the buses will be ready to return all Congress delegates and participants to their hotels on a night tour through the streets of the City.



Roads for a better life.

# **CENTRO BANAMEX**





WORLD ROAD ASSOCIATION MONDIALE DELA ROUTE



Roads for a better life.

# LIST OF EXHIBITORS

3M México, S.A. de C.V.	Francia
Acciona Infraestructuras	G.D. Vulcano
Agua Blanca	Geomembranas y Geosintéticos
AlPCR Comitato Nazionale Italiano	Global Marketing Corpotation
ALCH Construcción	Gluyas Construcciones
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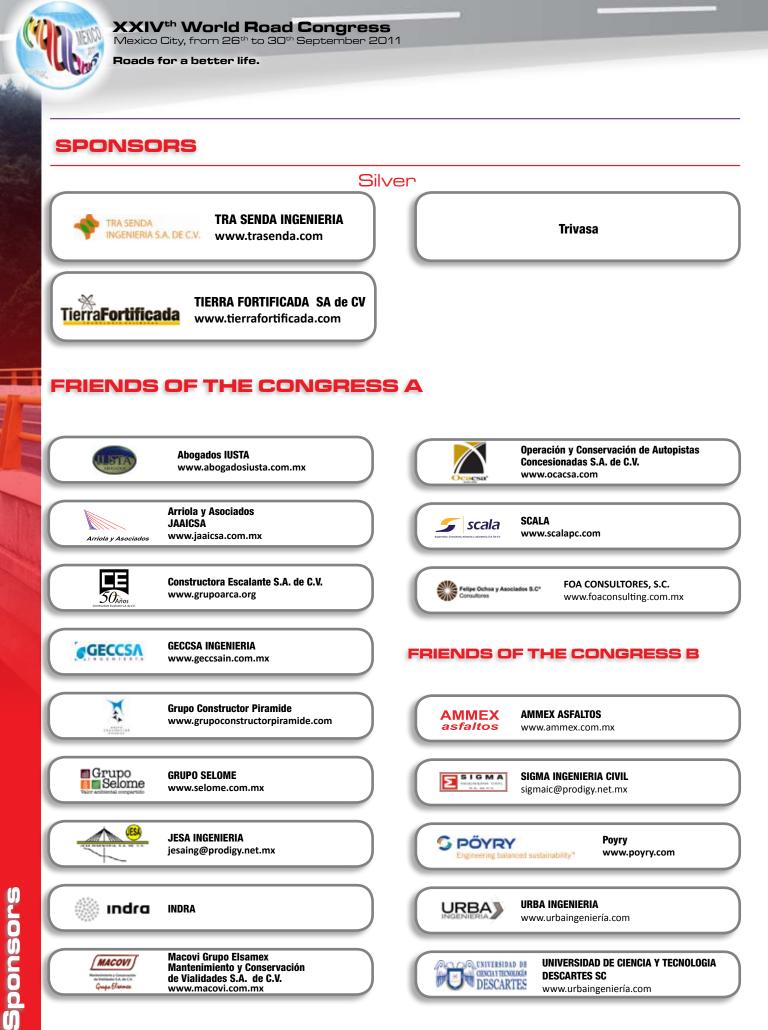
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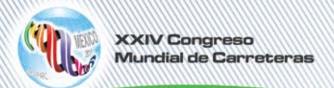
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