18th WORLD ROAD IRF MEETING
14-17 NOVEMBER 2017
DELHI, INDIA

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CALL FOR PAPERS

SAFE ROADS and SMART MOBILITY: The Engines of Economic Growth

The International Road Federation (IRF) is putting out this Call for Papers to invite authors to submit abstracts for presentation at the World Road Meeting (WRM) in 2017 [(Submit Abstract).]

The World Road Meeting is organized once every four years by the IRF, an independent, not-for-profit, membership based federation serving the needs of the road Transport and Mobility sector. The WRM is a prestigious event and is expected to attract over 4,000 participants.

This call for papers is for the conference that is being organized as part of the WRM - 2017. The theme for WRM – 2017 is **Safe Roads and Smart Mobility: The Engines of Economic Growth.** This conference will be of interest to professionals, academics, researchers, policy makers, and practitioners involved with road transport and mobility. The conference will take place from 14 – 17 November, 2017 in Delhi, India.

INTRODUCTION

Road transport and mobility are the lifeline of a modern economy and contribute significantly to economic growth and our well being and are an essential part of the social development of countries. A well functioning transport system provides access to markets, jobs, education, healthcare, and does so as efficiently and safely as possible, while minimizing its adverse environmental impacts.

Faced with an increasing number of road accidents, fatalities, congestion, and climate change, countries, regardless of their level of development, are faced with severe challenges in meeting the road transport and mobility needs of their populations. These challenges include expanding, developing, maintaining, and operating the transport infrastructure as efficiently and safely as possible, along with minimizing the adverse environmental and other impacts of the sector.

Meeting these challenges requires action on many fronts; arranging the necessary financing, implementing appropriate policy, developing legal and regulatory frameworks to safeguard the public interest without inhibiting competition, ensuring the functioning of markets, stimulating technological innovation, developing effective instruments to steer and nudge the travel and trip behavior and choices made by people on a daily basis, and collecting and safeguarding data to support the making of policy, and to support the operation of this sophisticated and complex sector.

WRM – 2017 is aimed at identifying and discussing the range of challenges that are faced in delivering safe, sustainable, and smart road transport and mobility at an affordable price, the legal, policy, and regulatory issues, instruments that are available to policy and decision-makers, new concepts and technologies for delivering transport and mobility, and the possibilities offered by "big data" and technology to reshape the road transport and mobility system to face future challenges.

Thus, we invite authors to submit abstracts on one or more of the themes and sub-themes listed below.

THEME 1: SAFE ROADS FOR ECONOMIC GROWTH

Transport and mobility contribute to economic growth and well being by providing access to education, health care, jobs, and markets. The lack of a proper road infrastructure constrains the development and growth of an economy. The development of good road networks is seen as an integral part of the development of an economy. This theme is to explore the economic impacts of developing road networks and strategies to maximise the potential contribution of road networks to economic growth.

1.1. Economics of Safe Road Development

1.2. Economics of Low Volume (Rural) Road Development

1.3. Development of Strategic Transport Corridors

1.4. Access to Ports and Regional Growth Centres

1.5. Cross Border Transport

1.6. Impact of safer roads on community health and economic growth

THEME 2: SAFE MOBILITY

The full benefit of safe road networks can only be achieved by simultaneously ensuring better safety standards for the Automotive Sector. While there has been rapid technological advancement in this sector, there has been insufficient emphasis on Safe Mobility. The Decadal Action Plan for Road Safety cannot be achieved unless concerted efforts are made by the Automobile Sector and the Governments, through their regulatory framework, to bring about across the board improvements in the safety features installed in vehicles. The New Vehicle Safety Assessment Programme needs to be encouraged and taken up in all countries, thereby throwing challenge to the Automobile Sector and bring about all around technological advancements to ensure safe mobility.

2.1. Safety considerations in designing of vehicles

2.2. Safety standards and their effect to reduce fatalities and injuries

2.3. Campaigns to improve vehicle safety standards

2.4. Vehicle crash testing programs

2.5. Safety standards for second in use vehicles

2.6. Regular and periodic inspection of vehicles

THEME 3: MOBILITY CHALLENGES

In the past few decades, there has seen a huge shift of populations from rural areas to cities. This on-going urbanisation poses new challenges in meeting the mobility and transport needs of populations. It is clear that meeting the future challenges of transport and mobility will require solutions that include integrated, inter-modal, and multi-modal transport for both freight and passengers. These solutions will also have to address the mobility and transport need of a wide variety of groups, including the physically challenged, vulnerable road users, and rural populations, amongst others. This theme is intended to explore these and other related challenges.

3.1. Integrated Transport Systems

3.2. Mobility for Vulnerable Road Users

3.3. Accessibility for Physically Challenged

3.4. Transit (Public Transport) and Para-Transit Planning

3.5. Travel Demand Management

3.6. Urban and Rural Transport

3.7. Traffic Enforcement & Safety

THEME 4: MANAGING ROAD ASSETS

Once roads have been built, timely and proper maintenance is essential if the benefits from investment in roads are to continue to be realised. When this is not done, the costs of deferred maintenance can be significantly higher. This theme is intended to explore the technical managerial, and financial issues surrounding road asset management.

4.1. Building and Managing Database for Assets

4.2. Maintenance Strategy and Budgeting

4.3. Pavement Evaluation Systems & Technology

4.4. Asset Valuation and Prediction

4.5. Asset Management & Preservation

4.6. Low Volume-Low Cost Roads (Rural Roads)

4.7. Performance Based Maintenance Contract

4.8. Performance Monitoring of Roads, Bridges & Tunnels

THEME 5: INNOVATIVE ROAD INFRASTRUCTURE

This theme is intended for issues related to innovative uses of technology, design, and materials for enhancing the durability, safety, and reduction of cost of construction and operation, together with improving the quality, speed of delivery, reduction of the carbon footprint and other adverse environmental impacts

5.1. Innovative Road Infrastructure Design

5.2. Trends in Pavement Materials and Design

5.3. Techniques in Construction & Maintenance

5.4. Recycling Methods and Technology

5.5. Potential of Energy Harvesting

5.6. Bridge Design, Construction, Maintenance and Operation

5.7. Tunnel Design, Construction, Maintenance & Operation

THEME 6: INSTITUTIONAL FRAMEWORK & CAPACITY DEVELOPMENT

The development, operation and maintenance of affordable, safe, and green road networks requires good planning and management, capable and competent human resources, empowered organisations and institutions, coherent and consistent policy, legal and regulatory frameworks. This theme is intended to explore institutional, organisational, and capacity development issues related to the development of the road sector as a whole.

6.1. Policy, Legislation and Regulatory Systems

6.2. Management and Implementation of Transport Network Plan

6.3. Strategic Planning & Decision-making Tools

6.4. Organizational Performance

6.5. Training and Skill Development

6.6. Creating Awareness in Engineering Profession

6.7. Developing Integrity and Accountability

THEME 7: SUSTAINABLE AND GREEN TRANSPORT INFRASTRUCTURE

The road transport sector is one of the biggest contributors of Green House Gases, almost 25% of all GHG emissions are related to the transport sector as a whole. This theme is intended to address issues around the negative environmental impacts of roads including construction and operation, (for example, GHG emissions, noise and visual pollution), ways to address these problems, tools to help the road sector identify, quantify, and manage these issues, and strategies for making transport infrastructure more sustainable and "green."

7.1. Adapting Road Infrastructure/Services to Climate Change
7.2. Air and Noise Quality Management
7.3. Reducing Carbon Footprint for Road Construction, Operation & Maintenance
7.4. Impact of Using Local/Marginal Materials
7.5. Assessment & Mitigation of Environmental Impact of Roads
7.6. Assessment & Mitigation of Social Impact of Roads
7.7. Infrastructure for Sustainable Transport Modes
7.8. Landscaping & Aesthetics

THEME 8: INNOVATIVE ROAD FINANCING & PROCUREMENT

One of the biggest challenges for the road sector is the financing. While, new road construction is usually able to attract financing, road maintenance does not. This theme is intended to explore the innovative ways of financing of road construction, operation and maintenance.

8.1. Financing options for safe road development
8.2. Reforms in Road Financing Policies
8.3. Managing PPP Projects (Urban and Rural)
8.4. Green Public Procurement
8.5. Road Pricing & Congestion Charging
8.6. Insuring Risk in Road Infrastructure
8.7. Equipment Leasing & Financing
8.8. Contracting Innovation for Road Safety
8.9. Financing of Rural (Village) Road Network
8.10. Creation and Management of Road Funds

THEME 9: SAFER ROADS

Road accidents are one of the most prominent causes of non-natural death amongst all age groups – more than 1.3 million people die in road accidents every year. As countries become wealthier and motorisation rates increase across the world, the number of road accidents and fatalities will, unless appropriate steps are taken, continue to increase. Improving safety is thus imperative! This theme is intended to explore every dimension of the subject of road safety.

9.1. Institutional Framework
9.2. Legislative & Regulatory Framework
9.3. Social & Economic Cost of Road Accidents
9.4. Financing for Road Safety
9.5. Planning, Design and Operation
9.6. Safety on high speed roads
9.7. Road Safety Challenges for VRUs
9.8. Crash Investigation and Black Spot Removal
9.9. Road Safety Audit & Rating of Roads
9.10. ITS for Road Safety
9.11. Vehicle Certification & Testing
9.12. In-Vehicle Safety Devices
9.13. Safety of Pre-Owned Vehicles
9.14. Road User Behaviour and Safety
9.15. Education & Awareness
9.16. Road Safety education for School Children
9.17. Driver & Vehicle Licensing System
9.18. Role of Enforcement in Road Safety
9.19. Incident Detection, Response and Recovery
9.20. Post-Crash Response System
9.21. Training for Emergency Response

THEME 10: INTELLIGENT TRANSPORT SYSTEM

Intelligent Transport Systems cover a broad range of technologies with a wide range of applications that include, for example, smart traffic lights that detect and adjust to traffic flows at intersections and junctions, on-board driver assist technologies to make driver behaviour safer, to technologies for connected cars and autonomous vehicles. These technologies are changing the general concept about transport and mobility (UBER, TOM-TOM, and Google being examples of companies that are in the forefront of innovations. This theme is intended to explore the technologies, applications, and challenges associated with using these advanced technologies to improve the efficiency and safety of existing road infrastructure.

10.1. Intelligent Road Infrastructure

10.2. ITS Architecture & Standards

10.3. Smart Tolling

10.4. Smart Parking Systems

10.5. Driverless Vehicles

10.6. Connected Vehicles

10.7. Transport Services on Demand

10.8. Institutional and Regulatory Framework for ITS Infrastructure & Operations

10.9. Financing of ITS Infrastructure & Operations

IMPORTANT DATES

Deadline for Submission of Abstracts	31 January, 2017
Invitation to Authors to Submit Full Papers	31 March, 2017
Deadline for Submission of Full Papers	31 May, 2017
Deadline for Submission of Final Paper and Acceptance	15 August, 2017

INSTRUCTIONS FOR SUBMISSION OF ABSTRACTS

- Please complete and use the online form for submission of abstracts [(Submit Abstract).]
- The abstract should make clear the objective and relevance of the proposed contribution to one or more of the themes and sub-themes. The abstract should not exceed 2200 characters.
- CONTACT: If you have questions regarding this call for papers please email: WRM-Conference2017@irfnet.ch

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