

# 2016 MELBOURNE

23rd World Congress on Intelligent Transport Systems

Melbourne Convention and Exhibition Centre  
10-14 October 2016



FOLLOW US #ITSWC16  
[www.itsworldcongress2016.com](http://www.itsworldcongress2016.com)

Over 7,000 attendees and  
300 exhibitors from 60 countries

## MEET IN ASIA PACIFIC FOR THE WORLD'S LEADING TRANSPORT TECHNOLOGY EVENT

ACTIVATING GLOBAL MOBILITY SOLUTIONS

*ITS—ENHANCING LIVEABLE CITIES AND COMMUNITIES*

**REGISTER  
TODAY!**



Australian Government



HEADLINE PARTNER



Queensland Government



EXHIBITION PARTNER



PROGRAM PARTNER

PREMIER PARTNERS



MAJOR PARTNER

CONSULTING PARTNER

MOBILE APP PARTNER

GALA DINNER PARTNER

COFFEE CART PARTNER

REGISTRATION DESK PARTNER



SUPPORTING PARTNERS



LANYARD SPONSOR

WELCOME RECEPTION SPONSOR

WATER BOTTLE PARTNER

GENERAL PARTNER

SESSION SPONSOR

OFFICIAL AIRLINE PARTNER



MAJOR EXHIBITORS



QUEENSLAND PAVILION PARTNERS



HOSTED BY

CO-HOSTED BY

SUPPORTERS

SUPPORTED BY:

BOOK YOUR EXHIBITION STAND – FINAL PLACES REMAIN

GROUP ACCOMMODATION BOOKINGS AVAILABLE

# SCIENTIFIC AND TECHNICAL PAPER TOPICS



## Challenges and Opportunities of Big Open Data

The promise of Big Open Data is unlimited. The data and technology are there, and open access is increasing. The dramatic increase in data from infrastructure, vehicle and consumer sensors is complemented by organisations opening up access to their previously proprietary data. How do we now deliver the full promise of Big Open Data both within the industry and to consumers? How can we use this data to solve problems such as congestion, improving the practicality of car-pooling, multi-modal journey planning or simply keeping consumers informed? How can we manage issues such as privacy, data ownership and liability?

- Open data management and application
- Data sharing and exchange
- Ubiquitous sensing
- Technology for data collection
- Availability and quality of data
- Data visualisation
- Data fusion
- Predictive analytics
- New business models for traveller information
- Security in an open environment



## Smart Cities and New Urban Mobility

Cities continue to be engine rooms of global economic growth as well as prime centres of population growth. How can ITS help cities avoid being the victims of their own success, so that growth does not mean reducing liveability? Can new approaches to pricing help manage demand and provide more sustainable funding? Can next generation traffic management and incident management help smart infrastructure cater for these changing demands as well improve customer journey experiences? How can we make cities friendlier to people through integrated public transport, smarter parking and pedestrian friendly zones?

- Integrated transport system
- Next generation traffic management
- Transport modelling
- Road user charging
- Travel demand management
- Integrated ticketing and payment
- Incident management



## Automated Vehicles and Cooperative ITS

There are many problems associated with road use – fatality and injury, congestion, stress, pollution... Could automated and connected vehicles offer a transport nirvana, and if so, how can we get there? What are the barriers remaining on the road to automated and connected mobility and how and when will they be overcome? How will we manage the mixing of automated and legacy vehicles and vulnerable road users such as pedestrians and cyclists? Will the sharing economy mean that cars no longer sit idle for 23 hours a day and what might mobility as a service mean for our cities?

- V2X Communication technologies and Cooperative systems
- Human factors and human machine interface
- Field operational tests, pilots and demonstrations
- Positioning, mapping and navigation
- Security and integrity for connected and automated vehicles
- Mobility as a service - a transport revolution?
- Infrastructure and regulation needs for a mixed-capability fleet



## Mobile Applications

Its a mobile and increasingly connected world. Many of us knew a world where work could be done only at the office, but now every aeroplane, train, bus, café and home can also be a workplace. People demand information anywhere and at any time it is useful to them and the explosive growth of smartphones had led to all-conquering 'app'. As these apps start to appear on our dashboard and our cars use smartphones for infotainment, do any boundaries remain? How can we continue to provide an ever better customer journey experience and move from customers searching for relevant information to that information proactively coming to them?

- Multi modal real time information
- Multi modal journey planner
- Demand responsive public transport
- Taxi and parking reservation
- Real time traffic advisory



## Vehicle and Network Safety

The guiding vision of a safe system is that no person should be killed or seriously injured on our roads. How can we use ITS to help make this vision a reality? How can ITS help safer roads and roadsides, safer vehicles, safer drivers and safer speeds to avoid crashes from occurring? How can we improve post-crash responses so that more victims survive? How can we protect our most vulnerable road users?

- Speed advice and restriction
- Technology and system for safety and enforcement
- Advanced driver assistance and support systems
- Human factors
- Emergency pre-emption and notification
- Post-crash response
- Improving safety of vulnerable road users
- e-call
- Roadwork safety and inclement weather management
- Preventative and active safety systems



## Future Freight including Aviation and Maritime

Our economies depend on goods moving safely, efficiently and reliably on road, on rail, on water, through the air and through terminals. How can we use ITS to achieve smarter future freight? What role might unmanned vehicles play, on road, on rail, on water, through the air and through terminals? How can we offer seamless multi-modal solutions to customers and differentiate solutions for differing needs?

- Freight and fleet management
- Logistics
- Ports and border crossings
- Railway network operation
- Unmanned aerial vehicles (UAS / RPAS / Drones)
- Airspace management and navigation



## Environmental Sustainability

We all share the world in which we live and we need to care for this world. How can ITS make transport more environmentally sustainable, reducing not only its carbon footprint but also pollution and noise? How can we make active transport more convenient and appealing as part of a more liveable city? How can we help reduce the number of cars with only one occupant? How can we help accommodate the electrification of the vehicle fleet?

- Environmental impact reduction
- Electro mobility and charging
- Eco driving
- Reducing noise
- Car sharing, bicycle sharing and ride sharing
- Encouraging active transport and mode shift



## Policy, Standards and Harmonization

Successful ITS requires not only smart technologies but also policy and regulatory frameworks, governance and collaboration, defined architecture and standards and successful funding strategies and business models. How can we continue to strengthen these foundations for success and continue to address issues such as liability and privacy?

- Standardisation and architecture
- Transport policy and strategy
- Regulation and enforcement
- Funding strategies and business models
- Liability and privacy opportunities and challenges for connected and automated vehicles
- Measuring / Demonstrating the benefits (and costs) of ITS solutions

**REGISTER  
BEFORE  
5 SEPTEMBER  
AND SAVE!**



PROGRAM PARTNER



HEADLINE PARTNER



HOSTED BY



CO-HOSTED BY



SUPPORTED BY