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Message from the Chair



Dr. Meng Lu Chair of IBEC

I am delighted to be taking over the Chair of the International Benefit, Evaluation and Cost Working Group (IBEC) at such an exciting time. It is a time of change – we have elected a new Management Committee, President and Vice-President; and we have a new secretariat (ERTICO). For the benefit of new readers I'll give a little history of our organisation.

From its early days, some 25 years ago, the field of Intelligent Transport Systems (ITS) has undergone a substantial development to become a mature field embracing a wide variety of ICT-based technologies and expertise to make transport and logistics better and more sustainable. It has been moved forward by a close cooperation of industry, governments and academia and this

deployment has brought significant benefits to society as a whole.

For over 15 years IBEC has been an international forum for the evaluation of ITS; our Mission Statement is at the end of this Newsletter. Practitioners have gathered informally to address and promote the importance of the evaluation and assessment of ITS for quantifying, and thereby clearly demonstrating, the benefits that can be delivered by ITS. The meetings have helped to identify the best solutions for deployment, and to support roll-out and wide-spread adoption. Robust monitoring and evaluation of the impacts of ITS technology can stimulate increased integration of ITS concepts into processes of planning and decision-making in support of deployment. Further exploitation of the benefits of ITS will considerably increase its impact on the sustainability of the entire transport, mobility and logistics system, including economic, environmental and social dimensions, and thereby progressively contribute to economic prosperity and general welfare.

On behalf of IBEC and its Management Committee, I sincerely thank Tom Kern, the previous IBEC Chair, for his substantial contributions during the past years. I would like to acknowledge my colleagues on the IBEC Management Committee for their kind support. Special thanks go to Eric Sampson, Richard Harris and Patty Fusaro for their very kind help during the phase of transition to a new President and Chair. I am looking forward to working with the Management Committee and all IBEC members to attract new members, to strengthen the

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position of IBEC in the area of evaluation of ITS development and deployment, and in general to move ITS evaluation forward

IBEC News and Activities

IBEC Successes at the 21st ITS World Congress in Detroit

- Pre-Congress Workshop
- Special Sessions

IBEC organised a popular pre-congress workshop on Sunday 7 October just before the formal start of the 21st World Congress on ITS. Over 70 people attended most of whom were new members.

We also organised five Special Interest Sessions:

- 1) Evaluation of Connected Vehicles
- 2) Evaluation of highly automated driving and truck platooning
- 3) Will there be an attractive/convincing cost benefit case introducing C2X and automated vehicle driving in road transportation?
- 4) Evaluating benefits and business cases for Cooperative ITS (connected vehicles)
- 5) Evaluation and the Technology Showcase

The topic "benefits of connected and vehicles and automated driving" received high attention from the congress participants

If you attended the ITS World Congress as a delegate you will have access to all presentations from the IBEC sessions. All

you have to do is login to www.itswc.conferencespot.org and go to the tab 'Speaker Presentation Index', then 'Executive, Special and Annual Meeting Sessions'

IBEC 1: Will there be an Attractive/Convincing Cost Benefit Case Introducing C2X and Automated Vehicle Driving in Road Transportation?

The still increasing number of fatalities and injuries in road transportation create a dramatic burden on the states social budget, daily traffic jams over hours and miles reduce the national GDP significantly. Studies in recent years in Europe and U.S. have verified these figures and consequently created big concern on both a policy and industry level. Technology developments in the last 10 years around the globe like 'vehicle automation' and 'connected vehicles' promise a bright future but will require quite a significant investment on the vehicle side as well as on the infrastructure side. Above that legal regulations as well as optimized utilization of infrastructure capacity (traffic management) needs to be revised fundamental. What drives this development? Is there a chicken and egg problem? Who has to start with what and when? Public bodies? Private organizations? Vehicle industries? Insurance companies? Car Users? Will there be a balanced business case for all groups involved? The session will discuss these topics with respect to the technical aspect, the financial aspect, emotional aspect (driver), legal aspect (mandatory equipment), organizational aspect (traffic management) and the operational aspect with respect to the transition phase from 'zero' penetration rate to 100%.

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IBEC 2: Evolution of connected vehicles

The connected world of vehicles and infrastructure promises to revolutionize mobility services. From vehicles that will not crash into each other to unprecedented information derived from increased data quality and volume – the connected world provides intriguing opportunities to save lives, increase efficiency, and to secure community-wide benefits of ITS. Understanding the potential of these innovations and how they would operate in a real-world environment is critical for policy development, investment strategies, network operations and management, driver education, and legal and regulatory aspects.

IBEC 3: Automation of Highly Automated Driving and Truck Platooning

The expected deployment of highly or fully automated road transport for both individual passenger cars and for trucks increasingly raise questions about how these new ITS-based systems can and will be evaluated in terms of their benefits and costs. These systems promise to: (i) improve traffic safety by reducing driver workload and minimizing human errors due to driver distraction or reduced vigilance; (ii) increase mobility through a reduction of congestion in urban areas and on motorways by increasing vehicle density and minimizing speed variations; (iii) reduce vehicle emissions and fuel consumption; and (iv) provide important individual, organizational and commercial productivity improvements (e.g. through road-trains for freight distribution). However, to what extent, if any, are these benefits actually likely to be

realized? Can we model the future? How will drivers actually behave and react? What happens when there is a crash - are occasional tragedies something we can factor in to the benefits and costs calculations? What new metrics and performance measures do we need to consider in planning field operational tests? The session will focus on the challenge of evaluating these potential benefits and costs, and feature illustrative evaluation studies on such automated transport.

IBEC 4: Evaluating Benefits and Business Cases for Cooperative ITS (connected vehicles)

Cooperative ITS (also called C-ITS and connected vehicle) provides services that involve communicating information between vehicles (V2V) and/or between vehicles and the road infrastructure (V2I). Services include short latency safety messages (e.g. pre-collision preparation), collection of “probe vehicle” travel times, and provision of dynamic congestion and routing information. As well as cellular communications some countries have established dedicated beacon infrastructures for V2I services or are trialing a beacon-based architecture for some applications. With such a wide range of services and options, pre-deployment assessment and during deployment evaluation are both challenging and important. This session will discuss methods of evaluating the incremental benefits of C-ITS beyond non-cooperative systems and provide examples of on-going deployment practice.

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<https://www.flickr.com/photos/itsofamerica/sets/72157648061186045/>

The Management Committee Annual General Meeting

- Management Committee Members
- IBEC Presidency
- Secretariat
- Congress Sessions Coordinator
- Membership
- Communications

Dr Tom Kern of ITS America, the outgoing Chair, had indicated that he would not be

able to stand again and Dr Meng Lu of Dinalog The Netherlands was elected as Chair and Mr Russell Whale of Transfield Services Australia as Vice-Chair.

Professor Eric Sampson of Newcastle University UK had indicated that after 5 years as President he felt it would be healthy to have a change in that position. Tom Kern was elected President and Eric was appointed a Vice-President.

For number of year the IBEC secretariat function has been delivered by ITS America. The Management Committee warmly welcomed an offer by ERTICO – ITS-Europe to take over this function and we are delighted to welcome Rasmus Lindholm, Carla Coppola and Svetlana Popova who will be responsible for different aspects of our support. The meeting also wanted to record its thanks to Mr Martin Boehm of AustriaTech who has agreed to a new role as Coordinator for our Special Interest Sessions at World Congresses.

IBEC Framework for White Paper on Evaluation

www.ibec-its.c

The IBEC mission

1. To advocate/promote the use of evaluation in planning, decision making and monitoring of the deployment of smart technology for mobility with the ITS industry and government agencies
2. To develop and share a Body of Knowledge, by international practitioners for international practitioners, on how to conduct evaluation (and CBA) of ITS programmes and individual services/applications.
3. To attract an international cadre of professionals and students from across academic institutions, the public sector, and private companies who bring a range of expertise to transportation.
4. To compile and add to the growing body of evaluation and assessment resources that give meaning and direction to smart transportation choice. To work closely with organisations to highlight evaluation and assessment through their channels.

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5. To facilitate efforts of transportation organisations around the world to make choices, including, but not limited to the:
- ✓ compilation of knowledge resources that highlight effective evaluation and assessment
 - ✓ development of new knowledge resources that highlight effective evaluation and assessment
 - ✓ promotion and distribution of these resources
 - ✓ engagement of its subject matter experts
 - ✓ undertaking of training and education services to promote evaluation and assessment

Future Events and Calendar 2014-2015

IBEC Management Committee Meetings in 2015

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IBEC Annual General Meeting 2015

Lu Meng <wkml@xs4all.nl>

IBEC workshop/sessions, ITS World Congress and Exhibition 2015

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Other ITS related events:

TRB 2015
IEEE IV 2015
IEEE ITSC 2015

Disclaimer:

The IBEC Newsletter is published by the IBEC Management Committee as a service to the members of IBEC and the ITS community. The editorial committee makes every effort to ensure accuracy in the content of the newsletter and will take action to correct any errors brought to its attention.

Please direct comments and questions to the IBEC secretariat at
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