

ITS Canada Leads Submission of 511 Application

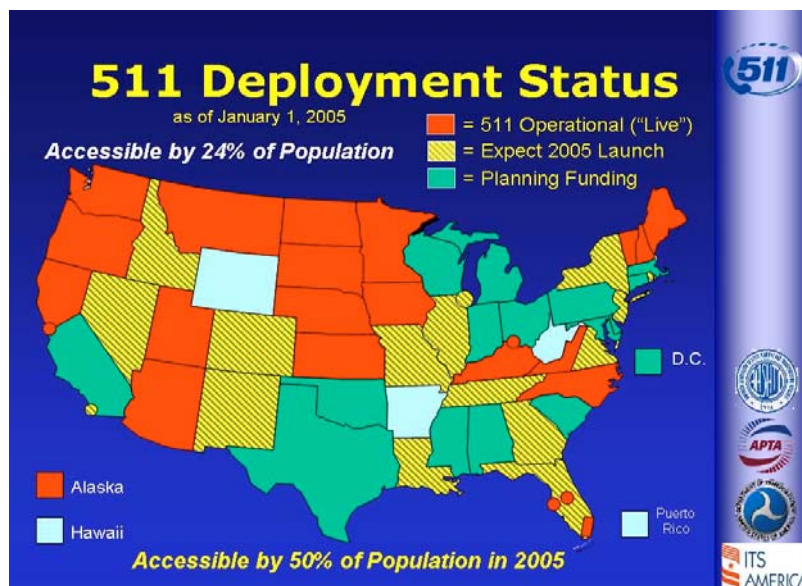
By Paul Frigon, Vice Chair

On January 10, 2005, ITS Canada, on behalf of the Canada 511 Consortium, filed an application with the CRTC for the assignment of 511 for weather and traveller information services. The application identifies members of the Canada 511 Consortium as Environment Canada, Transport Canada, the Canadian Urban Transit Association, the Transportation Association of Canada, ITS Canada, all ten provinces, and the Yukon Territory.

The application includes an introduction and review of the purpose of the application, background, a summary of the application participants and supporting organizations, objectives and benefits of weather and traveller information services, current weather and traveller information services across Canada, compliance with CRTC guidelines, technology and industry requirements, implementation, costs, and cost recovery. The application and letters of support can be viewed at:

www.crtc.gc.ca/PartVII/eng/2005/8698/j44_200500240.htm

The latest U.S. deployment status is shown below.



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ITS Canada News

The View from TRB - ITS: State of the Industry

By William Johnson, Director – ITS Canada

The Transportation Research Board's 84th Annual Meeting took place January 9 to 15, 2005, in Washington, D.C. The TRB Annual Meeting continues to be the world's preeminent conference dedicated to transportation research and development. This year, officials estimated the attendance at 9,500 professionals. There were 2,600 papers and presentations in 500 sessions and meetings of 200 standing committees, setting new records for scale.

TRB Standing Committees organized sessions related to their specialties. The ITS Committee organizes an annual event called "ITS: State of the Industry" at which invited speakers from the leading ITS organizations present their perspectives on the current state of the ITS industry. This year, Session 349 took place on Monday afternoon, the opening day of the Annual Meeting, before a capacity crowd (in a larger room than last year). This year, the speakers were from ITS America, USDOT, AASHTO, and General Motors Corporation. This is a brief summary of the principle points made by each of the speakers. Their reports include perspectives on restructuring of ITS at USDOT, and reauthorization of ITS funding by Congress.

Neil Shuster, President of ITS America, focused his presentation on three themes – reorganization, reauthorization and renewal. Reorganization, he opined, is occurring in industry, at USDOT and at ITS America simultaneously. Many private sector firms are seeking to diversify with more products and services in aid of mobility that respond to state and local government needs. At the USDOT, they are rethinking how government should invest in ITS. At ITS America, the new Business Leadership Council integrates the many points of view, and provides leverage to address future markets. Reauthorization is a hot topic at this time. In preparation for this, the 10-Year Plan was recently revisited. It is still relevant and the plan has made a difference, but parts of it are not finished. The USDOT has identified nine major initiatives to emphasize under reauthorization. Renewal has taken hold at ITS America with a stronger advocacy role to raise awareness, workshops on hot topics, an annual meeting with "Best of ITS" awards, forum meetings and a demonstration of the "amber" program and, this year, hosting of the ITS World Congress in San Francisco.

Jeff Paniati, Director of Operations at FHWA and Acting Director of the Joint Program Office USDOT, focused his presentation on restructuring of ITS at USDOT, an update on major ITS initiatives, and other key activities. Restructuring will focus ITS on fewer, larger, higher risk and higher pay-off programs. This will result in nine major Tier-1 ITS initiatives selected as problem-driven, supportive of USDOT goals, multi-modal, engaging the private sector, pushing the ITS frontier, and moving ITS toward deployment.

There will also be continued ongoing support for existing high-profile projects (511, Wireless 911, CVISN, IVI) and cross-cutting activities (ITS architecture and standards, now required for USDOT funding). The nine major initiatives are Intelligent Vehicle-based Systems; Cooperative Intersection Collision Avoidance; Next Generation 911; Integrated Corridor Management Systems; Mobility Services for All Americans; Clarus (weather systems); Emergency Transport Operations; Universal E-Freight Manifest; and, Vehicle Infrastructure Integration (VII).

John Horsley, Executive Director of AASHTO, spoke of the state and local government perspectives and their active support for the USDOT programs. As well, he provided an update on the status of the ITS program reauthorization. He outlined the involvement of AASHTO members in the VII initiative, and described how it can improve operations at intersections, reduce signal violations, provide traffic data through vehicle probes, improve border operations, facilitate payment services, and help implement Amber Alerts. He also outlined AASHTO member involvement in 511, ITS Outreach, the upcoming ITS World Congress, and national incident management. Reauthorization of the ITS program by Congress is an important issue at this time. AASHTO has recommended \$125 million for research, \$142 million for nationwide deployments (e.g., CVISN, etc.) and \$500 million for "state formula" activities. Congress is in the process of considering these funding requests, but there have been delays and differing views by the Senate and House on the amounts to approve. He also let slip that AASHTO has expressed a strong preference for the JPO to remain in FHWA and not to be moved to the new RITA organization in USDOT (Research, Innovation and Technology Administration).

Terry Connelly, Senior Executive in General Motors Corporation, presented a private sector perspective. He emphasized that good safety as well as good mobility is good for business. This philosophy has led to the CAMP initiative, or Crash Avoidance Metrics Partnership, of GM, Ford and other auto companies. This consortium is working on forward collision avoidance, driver workload, enhanced digital maps, and vehicle safety communications (DSRC). The CAMP program has been an effective tool for pre-competitive cooperation to improve understanding, advance the state of the art, and to cooperate with USDOT. The next steps will include promoting vehicle safety communications, developing functional requirements for near-term safety systems, and getting a better understanding of human performance and driver issues. He opined that CAMP aligns well with the nine new USDOT Tier-1 initiatives.

Session 349 provided an excellent overview from four perspectives on the state of the ITS industry in America at the beginning of 2005. Further information: www.TRB.org.



ITS Canada News

Regional Updates

ALBERTA

By Allan Lo, Alberta Infrastructure and Transportation

Alberta Infrastructure and Transportation continues working with Transport Canada to co-fund ITS initiatives. We have recently signed a bilateral agreement with Transport Canada to fund ITS research and development (R&D) projects. The first approved R&D project is a pilot to investigate the application of mobile communications technology. We will be working with the Centre for Transportation Engineering and Planning (C-TEP) to solicit other R&D proposals from the transportation industry.

Another federal contribution agreement for ITS general deployments has been finalized and will be signed shortly. Under the deployment agreement, Transport Canada has approved two projects, including the second phase of automated vehicle location system (AVLS) for snowplow trucks, and a joint project with the British Columbia Ministry of Transportation to co-fund the software development of a weigh-in-motion central server.

Under the AVLS project, 570+ additional snowplows working on the provincial highways will be outfitted over a three-year period. Seventy-two trucks were successfully equipped in October 2004 and are being monitored and used. The next phase is to develop and test the new billing software. Partners include Grey Island Systems.

In late November, the request-for-proposal (RFP) for the 75 Road Weather Information System (RWIS) stations was advertised. A great deal of interest has been generated through the ITS Canada membership. With the latest extension, the RFP will end January 26, 2005. This project will also be partially funded by Transport Canada.



ALBERTA (Continued)

The other major ITS initiative underway in Alberta is the Condition Acquisition Reporting System (CARS) pilot project. This is Internet-based traveller information software that was developed for first-time deployment in Canada. The software will allow department staff and others to immediately input major incidents, construction activities, road conditions, and other events that impact travel on the highways in a near real-time basis, and to have the information disseminated to the public and media. The eight-month CARS pilot project was selected by Transport Canada for contribution funding under the ITS R&D program. Partners include Castle Rock Consultants in the United States, Morrison Hershfield, the Cities of Edmonton and Calgary, and the Alberta Motor Association (AMA). Launch of the public website is planned for late January.

ONTARIO

On November 15, the Governments of Canada and Ontario signed an agreement to provide up to \$298 million each over the next five years to improve public infrastructure in small urban and rural municipalities throughout the province. Total contributions from municipalities are expected to equal that amount, so that almost \$900 million will be available for municipal infrastructure projects to provide safer local roads and bridges, along with other improvements.

On December 23, 2004, the Governments of Canada and Ontario and GO Transit announced that they are making major headway on 12 construction projects aimed at improving rail and bus transit in the Greater Toronto Area. Along with the Governments of Canada and Ontario, several municipal governments will contribute to the financing of a \$1.05 billion expansion. GO carries over 45 million passengers per year. Ridership is expected to double over the next 20 to 30 years.

For more information, visit:

www.tc.gc.ca/mediaroom/releases/nat/2004/04-h132e.htm



ITS Canada News

IBEC Invites Participation

IBEC is a cooperative working group set up to coordinate and expand on international efforts, to exchange information and techniques, and to evaluate the benefits and costs of ITS. IBEC brings together the best knowledge and ITS evaluation experience, and is the focal point for discussion and debate, which is of interest to the international evaluation community. IBEC encourages more effective use of ITS evaluation information that does, in particular, facilitate ITS decision-making. The benefits of IBEC membership include access to information and advice, news on forthcoming activities; contact with ITS experts around the world; exchange of information; informal networking; feedback on your ideas.

Following the successful workshops on ITS benefits evaluation and costs at recent ITS World Congress meetings, there was a feeling among the workshop organizers that it would be helpful to set up both a more formal mechanism for planning future workshops, and a permanent forum for exchanging information about the benefits and costs of ITS.

The IBEC Committee has begun planning for the World Congress in San Francisco. Information about IBEC and its activities can be found on their website: www.ibec-its.org

The International Benefits Evaluation and Costs Working Group would like to invite members with an interest in the benefits and costs of ITS to join the group. For information, please e-mail IBEC@trl.co.uk

International Benefits Evaluation and Costs
Co-operative Working Group



*Welcome New ITS Canada
Corporate Member*

Barco Visual Solutions

News bITS

German Truck Tolling Begins

Satellite-based highway truck tolling in Germany began on January 1, 2005. The system operates on a reduced version of the software that connects the trucks' onboard units to the central computers of the operator, Toll Collect. Expansion to other streets is operationally possible. For information, visit www.toll-collect.de.

Smart Cards Come to Copenhagen

A smart card system is being introduced gradually throughout Denmark, starting in the Greater Copenhagen Region followed by phased introduction throughout the rest of the country over a number of years. A country-wide electronic ticket system, TRAVEL CARD, will replace the present multi-journey tickets, season passes, and many cash tickets, and will become the future form of payment for travel. For information, visit www.rejsekort.dk.

Members in the News

Delcan Corporation has been awarded a contract by the U.S. State of Maryland's Department of Transportation (MDOT) to develop, deploy, and operate a regional traffic information system using data from mobile phone systems. The service will cover the Baltimore Metropolitan Area, and aims to be financially self-sufficient after two years. Other consortium members include global mapping specialist **NAVTEQ**, as well as a U.S. specialist in short-term traffic prediction, two mobile phone service providers, and a satellite-based broadcaster to deliver low-cost communication of data.

In December 2004, **International Road Dynamics (IRD)** announced that sales of in-vehicle Driver and Fleet Management Systems surpassed the 1,500-unit milestone, tripling their customer base in this segment in less than 12 months. This reflects a quick return on their development investment in more highly functional and integrated vehicle management solutions utilizing state-of-the-art wireless RF, cellular communication and GPS technologies in conjunction with the basic on-board computer system.

Canada's Road Weather Information Network

By Mario Ouellet, Meteorological Service of Canada

The Meteorological Service of Canada (MSC) launched the first prototype of its Road Weather Information Network (RWIN) in early January, bringing Canada an important step closer to having an integrated, nation-wide system for monitoring hazardous road conditions.

RWIN will serve as the central repository for observational data collected by environmental sensors installed within and beside roads. It will also provide quality control, issue alerts, and deliver data in real time to provincial transportation agencies for use in forecasting pavement temperatures and conditions.

The network is a key component of the Road Weather Information System for Canada (RWISC) initiative—a federal, provincial, and territorial effort to initiate the creation of a network of automated stations reporting weather and road conditions at key points along the National Highway System (NHS) and elsewhere. Transport Canada and each participating province or territory will share equally the cost of acquiring and installing a limited number of new stations (hundreds of fixed and mobile stations are presently in operation in Canada) along the NHS, while Environment Canada will develop and maintain the data network.

The data collected by road weather information systems, when combined with suitable weather forecasts, give road maintenance crews the information they need to apply anti-icing treatments—that is, treat roads before ice and snow have a chance to bond with the pavement. Applying a brine solution to the road before such bonding occurs has been proven to reduce the accident rate on snowy days by 40 per cent, and the use of road salt (a substance that is toxic to the environment) by about 25 per cent.

In 2003, Environment Canada announced that it would devote \$5 million over five years to develop RWIN. A team of computer scientists and meteorologists are working on the project, which is about to enter its third year.



Winter road maintenance can be challenging in Canada, but RWIN will give maintenance crews an edge

Once the prototype has been tested over the winter, it will be adjusted and improved, and operational version 1.0 will be rolled out at the end of spring 2005.

Also making headway is the signing of the contribution and data-sharing agreements between the federal government and the provinces/territories that define the parties' involvement in the RWISC. Contribution agreements between Transport Canada and two provinces, New Brunswick and Nova Scotia, have already been announced, and other announcements are pending. Environment Canada's data-sharing agreements are expected to be concluded with many provinces/territories soon.

The MSC is also involved in discussions with its counterparts in the United States, where a similar initiative named "Clarus" has been launched. The purpose of the talks is to ensure the standardization of road weather data, and the eventual creation of a seamless North America-wide system.

Adapted with permission from the Environment Canada publication Zephyr, January 2005

Transport Canada Announces New Project Funding for Intelligent Transportation Systems

Full details available at: www.tc.gc.ca/mediaroom/releases/nat/2005/05-h001e.htm

On January 12, 2005, Transport Canada announced twenty-five new projects that will receive funding under Transport Canada's Intelligent Transportation Systems (ITS) Plan, aimed at making transportation in Canada safer, more reliable and efficient. The selected projects will receive a total of \$5 million in funding. The winning projects are located in various locations across Canada. Projects and the funding awarded include:

- Integrate and deploy video-based technology into the existing traffic management system in **Burlington**, to provide for enhanced data collection and improved management of the city's streets as traffic conditions change: \$246,640
- Deploy and integrate ITS at Capilano Bridge in **Edmonton** to implement a full traffic management and traveller information system: \$250,000
- Integrate **Kelowna's** and the provincial traffic signal systems under a central traffic control system, to minimize traffic delays and incorporate transit signal priority: \$250,000
- Undertake a feasibility, planning and integration study to develop and demonstrate a prototype management system for the movement of oversized vehicles: \$100,000
- Establish an advanced traveller information system for all modes of transportation for the City of **Toronto** and the Greater Toronto Area: \$200,000
- Undertake a pilot project for an integrated data and communication management system for public works vehicles in **Ville de Trois-Rivières**: \$250,000
- Deploy and integrate an advanced video management system for automatic incident detection in **Toronto** into the current traffic management system, to better manage incidents throughout the city's arterial and expressway road network: \$150,000
- Deploy an advanced transit management system to assist **Guelph** Transit in providing efficient and cost-effective service, maintaining good customer satisfaction and service reliability: \$250,000
- Add a transit signal priority system to the suite of technologies already integrated within **Mississauga** Transit's Smart Vehicle initiative, to allow vehicle tracking, automatic passenger counting, and status monitoring: \$250,000
- Deploy a web-based inter-provincial, inter-agency advanced traveller information system in **Alberta** and **British Columbia**: \$100,000
- Deploy an integrated regional signal system in **Vancouver** and surrounding areas that facilitates coordinated operation between adjacent jurisdictions and operational agencies: \$250,000
- Design and deploy an integrated and unified ITS for transit services in **York Region**: \$250,000
- Implement a regional advanced traveller information system in **Vancouver** through the deployment of a condition acquisition and reporting system: \$120,000
- Implement an integrated operations and communications system for police services in **Ville de Trois-Rivières**: \$250,000
- Implement GPS technology to enhance service and provision of real-time information to travellers in **Laval**: \$250,000
- Deploy an adaptive traffic control system for the delivery of traffic management and control services in **York Region**: \$250,000
- Integrate, deploy and evaluate a graphical intersection monitor into existing advanced transportation management systems in **five Canadian municipalities**, to improve current intersection visualization tools and operational efficiency: \$98,000
- Implement a pilot deployment for bus rapid transit in **Halifax** as an initial step to an integrated corporate vehicle tracking and communication system: \$250,000
- Design, develop and deploy a web-based traveller information and trip planning demonstration tool: \$34,938
- Deploy an advanced system to display real-time train information at stations in **Toronto** and surrounding areas: \$250,000
- Undertake a pilot deployment of an advanced fleet management system throughout the maintenance operations of the **Calgary** Handi-Bus, a specialized transit service. The technology will be used to improve maintenance and repairs in the special vehicles: \$79,678
- Deploy and evaluate a tourist information system in **Sherbrooke**: \$96,604
- Undertake an ITS blueprint strategy and partially deploy an integrated transit signal priority and traffic signal control system in **Edmonton**: \$250,000
- Design and implement a dedicated ITS telecommunication network, linking the various components of ITS systems in **Calgary**: \$250,000
- Implement a real-time bus arrival notification system for transit passengers of the **Victoria** handyDART accessible transportation service, which serves seniors and disabled passengers: \$250,000.

ITS Canada Export Development Activities Planned for 2005



ITS Canada is once again planning a number of export development initiatives aimed at helping members to market ITS technologies around the world. Following are details regarding the various missions being considered. We encourage members to participate. Please contact us to express your interest in any of these opportunities via e-mail to itscanada@itscanada.ca, and we will ensure your organization is kept fully apprised as details are finalized.

Smart Moving

April 19-21, 2005

Birmingham, England

www.its-uk.org.uk/events.html / www.traffex.com

The theme for this event is "The future is Smart". This popular Conference runs simultaneously with Traffex, which is perhaps one of the largest exhibitions in the world.

5th European Congress and Exhibition on ITS

June 1-3, 2005

Hannover, Germany

www.itsineurope.com/hannover

After the unification of Europe, Hannover strengthened its position as one of the most important crossroads of European road, rail, and maritime transport. Congress topics will focus on these complex transport networks, and an interactive exhibition of 5000m² will showcase exciting ITS achievements in these areas. The Congress program will also be enriched with demonstrations organized on a newly built test track, which will show real applications at work.

The 15th IRF World Meeting

June 14-18, 2005

Bankok, Thailand

www.irf2005.com

The IRF World Meeting, held once every four years, is by far the largest and most important event aimed at invigorating and renewing policy for road development as a fundamental means to further economic development and improved living standards. The IRF 2005 theme is "Roads: primary asset of nations - management and operations for the 21st Century". The Asian region remains a key development area for road construction, expansion, and road safety. This event will include discussions, meetings, and presentations of world-class experts on road technology.

7th ITS Asia-Pacific Conference and Exhibition

August 9-11, 2005

New Delhi, India

www.itsindia.org/ap2005/about_conf.htm

This forum will gather researchers, experts and professionals, government officials, and policy makers from around the world, particularly from the Asia-Pacific region, to present, discuss and exchange experiences on recent development in ITS. An exhibition will be held at the same time, providing opportunities for interaction between forum participants and commercial exhibitors.

Pan Am ITS

October 2005

Rio de Janeiro, Brazil

In April 2004, a coalition was formed to create Pan American ITS (PAITS). The intention is to establish a multilateral relationship and to develop cooperation among charter members: ITS Canada, ITS America, ITS Argentina, ITS Brasil and ITS Chile. The ITS committee of the Mexican Department of Transportation participate as a non-signatory member. The objectives are to promote research, educational, and commercial cooperation among the ITS organizations of North, Central and South America. This is the inaugural event for the coalition. ITS Canada is planning to host a stand at this event.

12th World Congress on ITS

November 6-10, 2005

San Francisco, California

www.itsworldcongress.org

The 2005 theme "Enabling Choices in Transportation" communicates the emphasis on the end-user in transportation. ITS Canada will host a stand at this event. As well, ITS Canada's very popular hospitality evening will also be organized.

Gulf Traffic

December 12-14, 2005

Dubai, UAE

www.gulftraffic.com

Continuing to grow in size, this bi-annual event is expected to be another sell-out success. The 2003 conference saw over 30 speakers from 16 countries address over 250 conference delegates on three main areas, including mass transit, intelligent transport systems, and urban planning. The exhibition runs alongside the conference, both dealing with issues facing professionals in the traffic and transport industries in the Middle East. ITS Canada is considering hosting a stand at this event.



Upcoming Events

- **Vehicle Infrastructure Integration Meeting**
February 9 and 10, 2005 - San Francisco, California
www.itsa.org/vii_meeting.html
- **2nd India Infrastructure Show (TIIS)**
February 9 to 12, 2005 - New Delhi, India
www.ietfindia.com/2005/index.htm
- **City Tech International 2005**
February 10 to 13, 2005 - Chennai, India
www.zakgroup.com
- **ITS Business Opportunities Forum**
March 8, 2005 – Brooklyn, New York
New York Transportation Agencies will present ITS project opportunities
www.its-ny.org
- **12th Industrial Automation Fair - Otomasyon**
March 17 to 20, 2005 - Istanbul, Turkey
www.win-fair.com/en
- **40e Congrès annuel de l'AQTR**
April 10 to 12, 2005 – Laval, Quebec
www.aqtr.qc.ca
- **Smart Moving 2005 / Traffex**
April 19 to 21, 2005 -Birmingham, England
smartmoving@its-uk.org.uk
- **ITS America Annual Meeting and Exposition**
May 2 to 4, 2005 - Phoenix, Arizona
www.itsa.org/annualmeeting.html
- **ITS Canada Annual Conference**
May 15 to 17, 2005
Quebec City, Quebec
www.itscanada.ca/quebec2005
- **Intertraffic Eurasia**
May 18 to 20, 2005 – Turkey
www.intertraffic.com
- **ITS Hannover 2005 - 5th European Congress and Exhibition on ITS**
June 1 to 3, 2005 – Hannover, Germany
www.itsineurope.com/hannover
- **Federation of Canadian Municipalities' Annual Conference**
June 3 to 6, 2005 - St. John's, Newfoundland
www.fcm.ca
- **15th Annual Canadian Conference on Intelligent Systems**
June 5 to 7, 2004 – Quebec City, Quebec
www.precarn.ca
- **2005 CITE Conference**
June 5 to 8, 2005 – Saskatoon, Saskatchewan
www.cite7.org/saskatoon/
- **Canadian Multidisciplinary Road Safety Symposium**
June 5 to 8, 2005 - Fredericton, NB
info_auto21@uwindsor.ca
- **ITS New York 12th Annual Meeting**
June 9 to 10, 2005 - Saratoga Springs, New York
www.its-ny.org
- **15th IRF World Meeting**
June 14 to 18, 2005 - Bangkok, Thailand
www.irf2005.com
- **Intertraffic Asia**
June 16 to 19, 2005 – Bangkok, Thailand
www.intertraffic.com
- **5th International Conference on ITS Telecommunications** - "Telecommunications in a Futuristic Transport World" – call for papers issued June 27 to 29, 2005 – Brest, France
<http://conferences.enst-bretagne.fr/itst2005>
- **7th Asia-Pacific ITS Forum and Exhibition**
August 9 to 11, 2005 - New Delhi, India
www.itsindia.org
- **TAC Annual Conference**
September 18 to 21, 2005 – Calgary, Alberta
www.tac-atc.ca
- **Intertraffic North America**
September 27 to 29, 2005 – Baltimore, Maryland
www.intertraffic.com
- **12th World Congress on ITS**
November 6 to 10, 2005 – San Francisco, U.S.A.
Call for papers – deadline January 14, 2005
www.ntpsow.com/shows/itswc05
- **2nd International Conference on Driver Behaviour and Training**
November 15 to 17, 2005 – Edinburgh, UK
www.dbt2005.info
- **Gulf Traffic**
December 12 to 14, 2005 – Dubai, UAE
www.gulftraffic.com

