ITS AUSTRALIA SUBMISSION TO THE HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON TRANSPORT AND REGIONAL SERVICES INQUIRY INTO VARIABLE SPEED LIMITS – A CASE STUDY OF INTELLIGENT TRANSPORT SYSTEMS

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EXECUTIVE SUMMARY

This submission puts the case that Australia requires a Nationally consistent approach to Transport System Strategy driven by the Federal Government rather than single focused localised implementation of technology such as Variable Speed Limit Systems (VSLS).

By the use of case studies from examples around the World ITS Australia submits to the House of Representative Standing Committee that without a consistent approach as described in the National Strategy for ITS in Australia, ***e-transport***, Australia will lag behind the rest of the World.

A National Strategy for Intelligent Transport Systems (ITS) was published in November 1999 (included Anderson reference) and estimated that Australia could gain up to $14.5 billion in reducing the total cost of road accidents, congestion and vehicle emissions by the use of ITS. Without a view of the transport system as a whole these savings will not be realised.

A simple example is the difference we find in the policies that are enforced in the Aviation Transport sector compared to the lack of policy behind road safety.

> It is a fact more people are killed in road transport accidents than in air transport.
>
> In 1996 the cost to the community for aviation accidents was $112 million versus road accidents $2.236 billion.
>
> Yet there is a continuing push for more and more sophisticated systems such as Ground Proximity Warning Systems, Collision Avoidance Systems, Transponders, Radar systems, all systems that are all mandated if you wish to carry passengers in the Australian Airspace and more and more regulations are being developed surrounding the maintenance and operations of aircraft.
>
> However in Road Transport we only mandate less sophisticated systems such as safety belts, anti theft immobilisers, and while we have standards and rules in regards to crash worthiness for vehicles no such rules exist for more active safety systems such as speed limiting devices and collision warning systems for which technology has solutions today and that would dramatically reduce the cost to the community of Road Trauma.

Change is driven by two factors:

- Market driven change, and
- Government and Policy driven change.

If the market drives change it is because of commercial interest for the shareholders not necessarily in the interest of providing a more cost efficient and safer transport system.

It is the Federal Government that must take the lead in a firm but consultative approach with the industry and the community to provide a plan to the future that will take into account the National Interests of Australia.

RESPONSE TO TERMS OF REFERENCE OF THE INQUIRY

Theme

The theme of this submission is to compare the strategy of the Federal Government looking at localised implementations of strategy such as Variable Speed Limit Signs versus the strategy of moving towards a National Transport System Management Plan that encompasses a National focus with the key benefits going to the tax payer and the community. The National ITS Strategy, e-transport, and subsequent plans developed upon the conclusion of e-transport should be regarded as an essential complimentary element of such a nationally consistent approach.

Intelligent Transport Systems (ITS)

Intelligent Transport Systems (ITS) are being developed and deployed across the world to improve the performance of transportation, providing improved social outcomes for communities and increased economic dividends for governments and markets. ITS is defined as:

"The application of modern computer and communication technologies to transport systems, to increase efficiency, reduce pollution and other environmental effects of transport and to increase the safety of the travelling public."

The benefits to community and business implicit in the above definition are being produced in tangible and measurable ways in the many locations where ITS systems have been deployed. ITS typically return a benefit/cost of 10:1. These gains provide the political justification for investing in or supporting such technologies.

National Strategy for Intelligent Transport Systems (e-transport)

To maximise the benefits of ITS technologies and avoid potential dysfunctional outcomes for transportation, it was recognised that a systematic and structured strategy for the identification of ITS priorities and for their development and application was needed. In November 1999, the ATC endorsed e-transport, The National Strategy for Intelligent Transport Systems.

The ten strategic goals of e-transport are shown below.

- Improved transport safety and security.
- Improved transport efficiency, performance and quality for the movement of people (by public and personal transport) and goods, by covering all transport modes and their linkages.
- Reduced congestion and travel times, and improved travel demand management.
- Improved effectiveness of use of transport infrastructure.
- Improved transport environmental outcomes, including reduced environmental and energy (including greenhouse) impacts.
- Improved contribution to Australia's economic development, including regional, rural and remote area development.

- Improved transport contribution to sustainable development.
- Improved transport accessibility and equity.
- Enhanced transport planning, policy-making and delivery.
- Achievement of a growing share of the world's ITS market for Australian-based business.

The National Strategy provides a necessary reference point for all major ITS initiatives. Australia's Federal and State Transportation Ministers have made a commitment to the implementation of its vision and its individual actions.

Case Studies

Automotive Assistance for Vehicle Safety

In 2001, 1,756 people died on Australian roads. In addition to the burden of personal suffering, the monetary cost of crashes is in the order of $15 billion per annum (1996 data).1 Relative to other OECD countries Australia was ranked 12th in respect of road deaths per 100,000 population in 1998 and sits on the OECD median performance level. If deaths per 10,000 registered vehicles are considered, Australia ranks equal sixth in the OECD.2

The Australian Transport Council adopted the National Road Safety Strategy 2001-2010 in November 2000. The Strategy provides a framework that complements the road safety strategies of State, Territory and local governments.

Vehicle safety systems are recognised as an integral part of any fatality and trauma reduction program. "This technology, commonly known as Intelligent Transport Systems, will typically involve engineering systems built into the vehicle and/or the road that intervene when users suffer lapses of concentration or make unsafe decisions. It has the potential to:

- ensure that restraints are used prior to driving;
- maintain safe following distances between vehicles;
- prevent speed limits being exceeded;
- control cornering response to maintain adherence with lane markings and stability on wet surfaces;
- ensure that the driver's licence conditions are adhered to;
- monitor driver alertness (preventing driving while fatigued or intoxicated);
- require the driver to perform a breath test before starting a car (e.g. alcohol interlock); and
- detect the occurrence of a serious crash and automatically notify emergency services of the location and severity of the crash and the number of occupants involved.

So far there has been no push by Government to direct policy toward saving lives, instead State Governments have adopted an approach which some argue is a 'bandaid' approach of using speed enforcement policies instead of looking at more active safety systems such as speed limiting devices, adaptive cruise control and lane keeping

[1] Transport Australian Safety Board -The National Road Safety Strategy - 2001 to 2010.
[2] (see ATSB website: www.atsb.gov.au/road/stats/benchmk.cfm)

guidance systems. ITSA believes that we are significantly behind the policy developments and policy statements of many countries in this area where targets are being set and plans being developed to achieve these targets. (The EU e-safety and ITS America 10 year plan as two such examples)

Vehicle Theft Deterrent Systems

Motor vehicle theft remains a significant social and economic problem. Almost 139,000 vehicles were stolen in Australia during 2000/1, representing an estimated increase of around 6 per cent over the previous year. Australia recorded that one vehicle was stolen for every 92 vehicles that were registered in 2000/01 and an amazing one stolen every four minutes. In respect of vehicle theft, Australia is ranked second behind the UK.

The cost of motor vehicle theft continues to impact on the whole of the community including the criminal justice system, the insurance and motor vehicle industries, and individual victims of theft. With an average insurance claim cost of $8100 for theft claims finalised in 2000/1, the cost of car theft is estimated at be at around one billion dollars annually.

Late model vehicles (1992 onwards) fitted with an Australian Design Rule equivalent immobiliser, as standard equipment comprised 32 per cent of Australia's late model vehicle fleet in 2000/1. Only one of these vehicles was stolen for every 304 that were registered, while late model vehicles with no immobiliser were stolen at a rate of one vehicle for every 193 registered. Interestingly, preliminary findings of a Council study into the theft of immobilised vehicles revealed that over half of the vehicles were stolen because the thief gained access to the vehicle's original key and transponder.

Immobilisers though are old hat. New telematics units can not only detect and track a stolen vehicle, but also switch off the car's engine when police are following it. Called Car Com this unit is one of many such systems now being deployed by manufacturers like Holden. CarCom (Holden Assist) is now standard on some vehicles and an option for every Commodore.

Given the long lead time for vehicle design and production (models are now being designed for 2005) and lack of pecuniary incentive to include ITS active safety and security systems it has been left to commercial market pressures to drive innovation in this area. Given the lack of public awareness of potential for these technologies, it is unlikely in the short term that consumer pressure nor demand will drive inclusion of these systems. The old age of Australia's car fleet (average age still 10.5 years) does not assist either, and without fleet buyers leading the charge for inclusion of such technologies, including 'government', the largest fleet buyer, it is likely that such technologies will take many years to filter through to the broader vehicle pool.

From a communications perspective, it is virtually impossible for designers to know what spectrum and bandwidth (GPRS, 3G, UMTS etc) will be available three years from now and if existing services are used, will these be available for the warranty (3 years) and maintenance and parts availability obligation period (7 years)

VSLS Western Ring Road

Vic Roads are in the process of installing a Variable Speed Limit System (VSLS) on the Western Ring Road.

This system will have approximately 74 VSL Signs over the 26-kilometre Western Ring Road. Incident detection is supplied by Inductive Loops in the Road spaced every 500 meters (approximately 104 loops). All of these devices have communication links back to a central processor.

The primary aim of this system is to improve road safety and traffic flow on the Western Ring Road however it is limited to that piece of road.

VSS and VSLS systems are now in use on hundreds of highways around the world and have been used in Australia in many projects such as the Westgate bridge in Melbourne, the Domain and Burnley Tunnels in Melbourne and many others. There is really no need to investigate the use of a stand alone ITS technology such as VSS. If it is critical to understand broader benefit cost beyond that which is readily available through web sites such as www.benefitcost .its.dot.gov which describe in detail VSS programs. One example quoted is:

"Speed limits were adjusted in response to the level of congestion on the M25, one of the most congested freeways in England. Using variable message signs (VMS) and loop detectors measuring traffic density and speed, speed limits were lowered in increments as congestion increased.....

The study found that motorists were more inclined to keep to their lane when a "faster lane" no longer existed. They were also more inclined to keep to the inside lane and to keep proper distances between successive vehicles, resulting in smoother traffic flow which actually increased average travel times of traffic. Results show that traffic accidents decreased by 28% during the 18 months of operation."

VICS

In Japan the national Vehicle Information and Communication System Center's (VICS) Center processes and edits information about traffic congestion, road control, and other traffic information, and transmits it in real time, in words and graphics, to navigation devices installed in vehicles and car radios.

VICS aims to improve the efficiency of its service so as to meet driver's requests, cut down costs by shortening the time of transportation, ensure safety by providing accurate information on the flow of road traffic, and preserve the environment by streamlining traffic. In this way, it aims to contribute to social and economic development and to achieve a more comfortable lifestyle. One issue all nations in the world are facing as the turn of the century approaches is how to eliminate traffic congestion on highways and roads in general, decrease traffic accidents and improve the road environment.

With these road traffic conditions as the background, VICS will help drivers choose appropriate routes for smooth, comfortable driving. VICS will properly distribute the flow of traffic further improving its safety and smoothness.

These functions of the VICS system are generating great expectations.

The Vehicle Information and Communication System Center's major operations are as follows; Collecting, processing and editing road traffic information and providing the information through communications and broadcast media; Conducting research, study and development in the field of road traffic information and communication;

Collecting domestic and overseas knowledge on road traffic information and communication, and carrying out exchange with other agencies and organizations concerned with road traffic information and communication.

VICS features the following four functions:

- Information gathering function which systematically collects information on road traffic conditions;
- Information processing function which processes and edits the information collected;
- Information providing function which transmits the information processed to navigation systems installed in vehicles;
- Information utilization function which helps drivers utilize the information
- Provided via systems installed in their vehicles.

The VICS Centre is the key station which systematically unites these four functions and makes them function as one

Flow of information on the road traffic conditions processed and edited by the VICS Centre is sent out from beacons set up on roads, using infrared rays on main trunk roads and radio waves on expressways. The providing of the road traffic information needed by drivers becomes possible through the use of these beacons. Also, information on road traffic conditions covering wide areas is provided by FM multiplex broadcasts via FM radio waves. This interdepartmental approach to betterment of the nation's transport system is also commercially successful as over 4.4 millions VICS systems are now in use. A national approach was required to secure data across jurisdictions.

National Traveller Information Access

In Australia there are over 36 different numbers which travelling public, tourists and commercial vehicle operators can call to obtain public transport, traffic and incident information or to report incidents.

These include:

NSW RTA Traffic Info	132701	VicTrip Regional	136196
NSW RTA Incident Rpt	131700	VicTrip Incident MTrams	1800 800120
N.R.M.A.	131122	Transport SA	1800 064 054
NSW Transport Infoline	131500	NTH SA Roads Report	1300 361 033
QLD TransInfo	131230	Transport SA Incdt Rpt	1800 018 313
QLD TrafficInfo	131940	TransAdelaide	08 82182362
QLD RACQ	1300 130 595	Alice Springs Area	1800 246 199
QLD Motorways	(07) 3390 8633	Desert Parks Pass	1800 816 078
VICROADS Incident rep	131170	Main Roads WA	1800 013314
VicTrip Public Transport	131638	TransPerth	13 16 08
VicTrip Incident YTrams	1800 800 166		

Whilst ITSA applaud the use of these numbers, we also recognise that unless a national telephone number and FM radio frequency is allocated for use in transport information, these systems and thence the management of the network cannot be developed to its full potential, necessitating costly infrastructure development as opposed to better infrastructure management. In the USA (511) and the EU (112) specific easy to remember telephone numbers are now being deployed to facilitate access to information. Localised traffic and incident information ca also be provided by FM radio much like tourist radio to better inform travellers. An AM system could also be developed. This development will however require a significant shift from the current conceptual valuation of traffic and transport information.

Milk Link

The first project of its kind in Australia to replace an entire paper based farm and quality management system with simple to use hand held computers - called Milk Link, this project is a Demonstration Project funded under e-transport. MilkLink takes traditional on farm paper based systems and brings them into our age. Traditional paper records are not intelligent, are not searchable and provide little value in managing transport and logistics. Information integrity, accuracy and timeliness along the supply chain for perishable products is good, but can be improved. The food industry:

- is highly fragmented and involves numerous participants along the supply chain
- has a high number of transactions
- is dispersed across a wide geographic area
- has a high proportion of perishable, time-critical goods.
- Transaction processing costs are very high relative to the value of the order in most cases
- Costs of poor quality assurance are high
- Transport is coordinated on historic and inaccurate data

The fresh freight market is highly fragmented and there are many supply chain participants. The total in Australia is about 207,000 people. Given each participant typically deals with several (if not hundreds of) others, the number of bi-lateral relationships is significantly higher again. Furthermore, each participant will tend to have their own unique procedures, systems, trading terms, etc. This introduces an even

greater level of complexity and fragmentation. Inevitably, this has resulted in further inefficiencies in the supply chain.

Murray Goulburn produces of 30% of Australia's milk. In the international market the ability to ensure that the product is safe and free from mad cows, antibiotics etc are critical. Food safety is another important safety consideration in the chain. Again safety in transport should refer to freight and passengers. Data is captured while the Farmer is in the field or dairy to Forecast Litres, Quality, Food safety, etc

Farmers will have key vaccination data calculated and maintained electronically.

Whilst this e-transport project provided value seed funding of $70,000, it is revolutionising the dairy industry; and now other industries such as fisheries are looking at the benefit of application of these ITS technologies. The benefits to freight export and food safety if this style of system was applied more broadly would be significant to say the least.

E911

In a series of orders since 1996, the US Federal Communications Commission (FCC) has taken action to improve the quality and reliability of 911 emergency services for wireless phone users, by adopting rules to govern the availability of basic 911 services and the implementation of enhanced 911 (E911) for wireless services.

The Commission's wireless 911 rules seek both to improve the reliability of wireless 911 services and to provide enhanced features generally available for wire line calls.

Equity issues exist between fixed and mobile wireless phone users.

'000' callers in Australia when calling from a fixed landline enjoy CLI which can locate the caller and dispatch emergency services accordingly. When on the move mobile users whether in vehicle or on foot or in public transport cannot be located at present.

E-911 in the USA sought to solve this problem and significant work has been done to move toward enhancing emergency service provision to mobile users.

Wireless carriers are required to provide Automatic Location Identification (ALI) as part of E-911 implementation. The ALI can be provided by the handset or calculated by the network. All of America's carriers will still be required to complete the full E911 rollout by the original December 31, 2005 deadline, and be able to locate 95% of callers to within 100 meters.

In Australia, we have no timeline for deployment of an e-911 (e-000) service.

The Way Forward

Rural Remote Requirements

From the case study on the Western Ring Road applying the same technology across a 1000 kilometre freeway versus a 19-kilometre freeway is a very different prospect. The

number of loops in the road, the number of signs, the communications infrastructure and costs are prohibitive in providing a solution in the rural area.

There are also many regional and rural areas that do not have Mobile Phone Coverage and even though Telstra has recently announced that they will subsidise Satellite Mobile Phones in Outback Areas.

Any National Transport Strategy must take into account all transport users regardless of location, vehicle type or socio-economic standing.

Integrated National Solution

To maximise the benefits of ITS technologies and avoid potential dysfunctional outcomes for transportation, it was recognised that a systematic and structured strategy for the identification of ITS priorities and for their development and application was needed. In November 1999, the Australian Transport Council of Ministers [ATC] endorsed ***e-transport,*** *The National Strategy for Intelligent Transport Systems.*

Intelligent Transport Systems [ITS] comprise an expandable list of identified User Services, the logical architecture that supports the provision of those Services, the physical architecture and infrastructure to implement the Services and the standards and protocols that are defined to support the implementation. The listing of User Services varies from country to country in minor ways but in general all developed countries consider the area in much the same way as the Australian classification[3] shown in Table 1. The 32 services are grouped into categories for convenience of assigning priority and other attributes.

FUNDAMENTAL ITS USER SERVICES	
Service category	**Service name**
Traveller information	Pre-trip information On-trip driver information On-trip public transport information Personal information services Route-guidance and navigation
Traffic management	Transportation planning support Traffic control Incident management Demand management Policing / enforcing traffic regulations Infrastructure maintenance management
Vehicle-related	Vision enhancement Automated vehicle operation Longitudinal collision avoidance Lateral collision avoidance Safety readiness Pre-crash restraint deployment
Freight and Fleet	Commercial vehicle pre-clearance Commercial vehicle administrative processes Automated roadside safety inspection Commercial vehicle on-board safety monitoring Commercial vehicle fleet management

[3] A National Reference Architecture for ITS. ITS Australia. May 1999

FUNDAMENTAL ITS USER SERVICES	
Service category	**Service name**
Public Transport	Public transport management Demand responsive transport management Shared transport management
Emergency Management	Emergency notification and personal security Emergency vehicle management Hazardous materials and incident notification
Electronic payment	Electronic financial transactions
Safety	Public travel safety Safety enhancement for vulnerable road users Intelligent junctions and links

Table 1 – Fundamental Intelligent Transport Systems User Services

The above potential ITS services can provide significant positive benefit cost however unless they are part of an overall National Transport Plan, their full potential will not be enjoyed.

National Incident Detection System – a Focus on Safety for All Modes
EPIRBs are completely self-contained radio transmitters designed for emergency use. When activated, they simultaneously transmit an internationally recognised distress signal on both 121.5 and 243 MHz.

EPIRBs permit approximate location identification by satellite (those fitted with GPS locate to within 150 metres immediately) and then subsequent Sea Air Rescue can home in on the beacon to rescue personnel.

They are designed to be used when the safety of sailors, hikers, aircrew, skiers, outdoor staff or their craft or crew is endangered and there is no other means of communication. EPIRBs are completely waterproof, they are fitted with long life batteries capable of retaining up to 90% of their original capacity after 10 years, they operate continuously for 48 hours at full power. EPRIBS provide global coverage, cost as little as US$100.

Australia needs a similar low cost device for use in all modes of transport to provide global emergency coverage irrespective of vehicle type. This would require extensive modifications and extensions to the business models of organizations such as AUSSAR however if we are permitting bushwalkers to use these safety beacons, why would we not use them in trains, trucks and cars.

ITS Australia proposes the following principle for **safety** in **and around** Australia:
universal coverage for distress and emergency calls regardless of vehicle type or location.

Vehicle Safety Incentives for Manufacturers

As previously described systems such as the Carcom unit are now available as an option on vehicles such as the Holden commodore. This unit not only notifies the National Emergency Response Centre in the event of a vehicle being stolen but also if the vehicle is involved in a serious collision, providing a precise location of the event in addition to enabling rapid emergency response. As previously stated whilst the

government is yet to play a lead role in specifying these safety and security options in its own fleet, it can also facilitate broader adoption through offering financial incentives or tax concessions to manufacturers and purchasers including the public. Incentives to embed tag technology in the vehicle will also accelerate the use of smart cards used in public transport ticketing for tolling, parking and other uses. Incremental revenue from these activities could flow to manufacturers and government providing positive incentive to adopt other safety and security technologies and importantly develop export capability in this value added technology area.

The European Union and the United States of America are now looking toward mandating inclusion of technology in vehicles to achieve the safety, security and emission reduction targets. At the most recent ITS World Congress held in Sydney late 2001, Mr. Juhani Jaaskelainen, Director General, Information Society, European Commission cited ongoing commitment to ITS in the EU. Key actions include:

- 50% of major European motorways are to be equipped with congestion and incident management systems by 2002.
- Start to introduce active safety and Driver Assistance Systems in all new vehicles sold in Europe by the end of 2002;
- and to achieve by 2010 a:
- 50% reduction of road accidents
- 20% reduction of time spent travelling
- 50% increase in effective road capacity through ITS
- 20% increase in vehicle ITS utilisation and a significant reduction in vehicle CO2 emissions

Full details of the IS EU program can be found at: http://www.cordis.lu/ist/

One forecast proposes that by 2006 about 50% of new cars being sold in the US, Western Europe and Japan will be telematics-capable. In Japan alone 8.8 million vehicles are fitted with car navigation, and 5.0 million of these are supplied with real time traffic information free of charge.

Australia has significant capacity in this area including the Robert Bosch Centre of Competence for Body Electronics, the Motorola Software development centre and the many others that are valuable participants in the information economy. ITS is a high growth industry that employs software engineers and other highly skilled workers. Simple technology addition incentives can reduce our brain drain.

National Traveller Information

Whilst ITS does not require specific spectrum allocation of delivery of services, it must be considered as an important user (of national significance) of all forms of spectrum including broadband and digital. In the USA and EU specific radio frequencies are allocated to transport much like the local tourist radios in Australia. Much like tourist radio, specific incident, travel time and traveller specific weather alerts can be delivered in a timely and relevant fashion localised for the user. Unlike other emergency systems used in tunnels, these radio transmitters require the user to tune into the station. Radio minimises driver distraction (unlike SMS) and is relatively ubiquitous. The Australian

broadcasting authority should be encouraged to allocate a specific national radio frequency for use, on conclusion of a trial of this service in Victoria.
A central phone number can alleviate the confusion in trying to remember multiple numbers to obtain weather, traffic and incident information via different phones numbers. A feasibility study is nearing completion by ITS Australia, however significant funds will have to be applied if disparate state data sources are to be aggregated and delivered in a user friendly fashion as are the services being delivered in the USA and EU with the 511 and 121 numbers respectively.

Provision of national traveller information is critical if we are to continue advances in traffic management, incident response and importantly facilitate freight movement out of the inner urban corridors.

ITS Australia Recommendations

There urgently needs to be a funded National Transport Strategy Plan that considers the recommendations above.

Transport is not about mode, nor about load, it is about the carriage of people and goods and importantly information across the modes.

ITS Australia is an organisation ideally placed to facilitate access to information about ITS matters, and is also able to provide informed advice about the latest market developments and applications of ITS technologies.

e-transport recognises that numerous organisations, public and private, need to work together if the National Strategy is to deliver its objectives..

Section 4.2.2 of e-transport details that "Transport Ministers at Commonwealth, State and Territory levels inform other Ministers (including communications, planning, industry, science, environment and trade) and enlist their support in implementing the Strategy, including consideration of appropriate institutional mechanisms."

Section 4.4 of e-transport aims to foster a Competitive Australian-based ITS Industry
"The ITS industry has many advantages - it is information-based, high technology, high value-adding and a rapidly growing sector of the global economy. The competitiveness of the Australian ITS industry can be improved by coordinating access to relevant national resources and R & D programs."

Furthermore e-transport encourages "the development of Australian-based ITS equipment and software"(4.4.2), and to "Promote Australia overseas as a developer of high technology ITS products, services and achievements."(4.5.2)

Finally the linkages into the automotive sector assistance arena are demonstrated in Section 4.4.3 "Commonwealth Government advice be sought, on the inventory of development assistance programs available to the ITS industry from all levels of government, recognising the development and export potential of the industry."

"Many leading industrialised countries have embarked on major national ITS strategies to ensure they integrate ITS successfully into modernising their transport systems. Capturing the potential of ITS to facilitate social, safety, economic, environmental and

commercial objectives is involving these countries in higher levels of cooperation, R & D and investment, across both the public and private sectors."

"This Strategy will harness ITS to meet Australia's transport challenges. Estimates suggest an overall reduction in the total costs of road accidents, congestion and vehicle emissions by at least 12% by 2012 from using ITS, is achievable, and indeed should be a minimum expectation of the total gains from using ITS."

Intelligent Transport Systems Australia Inc (ITSA)

ITSA represents Australia's eyes on the ITS World, helping Australia to play an active role in shaping international ITS standards and providing a framework for local ITS developments to ensure that they are compatible with national and international standards.

ITSA is able to provide the Commission with further assistance as this inquiry moves through its stages of investigation. Our capacity to assist your investigations is due to the organisational attributes that we have developed since our inception. ITSA is:

1. A clearinghouse for ITS knowledge.
ITSA has a strong membership base, and is seen by many ITS stakeholders as both a repository and conduit for ITS related information.

2. A transaction hub for ITS interaction.
Our membership base, capability register and involvement in a number of ITS related initiatives and events provides a sound basis for ITSA to serve as a facilitator of links between industry participants.

3. The only multi-modal ITS institution.
The ITSA charter maintains that we represent ITS issues for all modes of transport. This is an important attribute given the growing recognition of the benefits of cross-modal integration and interoperability.

4. The "Endorsed" agency for management of ITS industry growth.
ITSA is central to the implementation of the National Strategy for Intelligent Transport Systems, and is represented in a number of important ITS forums.

The House of Representatives Standing Committee on transport and Regional Services Inquiry is therefore encouraged to consider the National Strategy for ITS, e-transport and the opportunity meld a National Transport Plan with the 10 year National ITS Strategy currently under development.

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