From the Ambassador David Frost CMG

6 March 2008

Carina Christensen Minister for Transport Ministry of Transport Frederiksholms Kanal 27F DK-1220 Copenhagen K Trafikudvalget (2. samling) TRU alm. del - Bilag 206 Offentligt



British Embassy Copenhagen

Kastelsvej 36-40 2100 Copenhagen Ø Denmark

Tel: + 45 35 44 52 08 Fax: + 45 35 44 52 14 Mobile: +45 22 43 67 80 david.frost@fco.gov.uk

Dear Minister

INTELLIGENT TRANSPORT SYSTEMS – KNOWLEDGE EXCHANGE BETWEEN BRITAIN AND DENMARK

- 1. Now that you have had time to settle into your new job, we wanted to draw your attention to some work which this Embassy and Dansk Industri have been doing on the subject of "Intelligent Transport" that is, how we make better use of our existing and future transport infrastructure.
- 2. In November last year, we and ITEK at Dansk Industri brought together professionals in this area at a conference in Copenhagen. The aim was to address the increasing need for planning, managing and integrating innovative ICT solutions in future transport planning, to get across the UK's particular experience in this area, and to encourage relationships between UK transport researchers and companies and the main Danish stakeholders. Your predecessor was kind enough to open it. The conference attracted quite a bit of attention, and proved an effective way to spur increased dialogue and focus on the area of traffic management.
- 3. The UK has been at the forefront of the development of ITS for many years, and is now a leading force in this area, not least because ITS represents a significant part of the UK Government's future transport vision and strategy, helping to improve safety, reduce congestion and to bring environmental, economic and social benefits. Many knowledge-driven and innovative ITS initiatives, projects and strategies are currently taking off in the UK.
- 4. We believe this is highly relevant to Denmark's own future plans. The issue of ITS came up both in the preparation of, and in the subsequent discussion of, the launch of the report by the Danish Infrastructure Commission, "Danish Transport Infrastructure 2030" on 10 January this year. We can see that creating a national framework for the deployment of ITS in Denmark is a complex task. It requires involvement from many stakeholders who can jointly make well-informed decisions based on technical knowledge, good information, and examples of best practice.
- 5. In this context, the particular suggestion that we (ITEK at Dansk Industri and this Embassy) want to make is to recommend the establishment of a working group under your Ministry in order to address and plan ITS initiatives in private and collective transportation on a strategic level. This could cover issues such as the overall development of an ITS Strategy (we enclose a suggested position paper on an ITS



British Embassy Copenhagen - strengthening and extending the strong ties between Denmark and the ${\sf UK}$

Den Britiske Ambassade København - vi vil styrke og udbygge de allerede stærke relationer mellem Danmark og Storbritannien framework), identification of showcase projects elsewhere, including in the UK (for example, Serco Traffic Surveillance and Management System in Stockholm and Active Traffic Management and Reading UTMC project in the UK); and developing stakeholder relationships, both within the UK, Denmark, and beyond.

6. We would be happy for the opportunity to discuss this further with your staff.

Meanwhile, we both remain at your disposal for any further information you might need.

With best wishes

David Frost

British Ambassador to Denmark

Tom Togsverd Managing Director

ITEK

Confederation of Danish Industries

Encl: ITS Position Paper

cc: Flemming Damgaard Larsen, Chairman of Folketing's Transport Committee

Jesper Thinghuus, Secretary of Folketing's Transport Committee



British Embassy Copenhagen - strengthening and extending the strong ties between Denmark and the ${\sf UK}$

Den Britiske Ambassade København - vi vil styrke og udbygge de allerede stærke relationer mellem Danmark og Storbritannien

Background

Denmark has a road network infrastructure and a transport system of high international standard. Its industry needs good access to suppliers and markets and its citizens need to get to work, shops, leisure facilities and public services like in all modern economies. Mobility is seen as key.

In 2006, the Danish government appointed the Infrastructure Commission to come up with proposals to develop Denmark's position as one of the leading countries in the world with the best transport systems. The focus areas were infrastructure and traffic investment until 2030.

Denmark relies on private vehicles, buses and rail for the movement of people and goods respectively. However, Denmark is feeling the impacts of economic growth similar to other major economies – greater demand for travel accompanied by increasing congestion, accidents and a rail network operating close to capacity.

It is estimated (2004 figures) that 120.000 hours are spent in congestion in the Greater Copenhagen area alone, costing society some DKK 6 billion each year. According to EC estimates, congestion costs the EU roughly 0.5% of GDP or €50 billion per year and this cost could rise to 1% by 2010 if nothing is done.

The vision and central theme of the Danish road safety strategy is "Every Accident is One too Many." Although the vision is to prevent all road accidents, the road safety policy objective for 2012 is to reduce the number of fatalities and seriously injured by at least 40% in 2012 which means under 200 casualties

New technology, in the form of Intelligent Transport System (ITS) and services have been shown to improve traffic safety and congestion in a number of European countries and worldwide, and it is certain that Denmark will benefit significantly from the implementation of ITS targeted at specific problem areas. The magnitude of likely benefits is quoted below under "Benefits from ITS".

ITS offers an additional set of tools which need to form an important part in the delivery plans of Denmark's current and future transport policy objectives. By helping road user to travel more safely, on less congested roads, and on better public transport with improved information services, ITS brings economic, environmental and social benefits in many ways.

However, ITS implemented in an ad-hoc and uncoordinated manner is not the most effective approach to delivering seamless, efficient transport services across Denmark.

A structured approach will require that ITS is formally recognised as being a complement to road building, traffic engineering and traffic management in Denmark's plans for transport provision now and in the future. To do that will require:

- The role of ITS to be acknowledged in meeting transport policy objectives
- The development of a national ITS Framework and Strategy
- An ITS Deployment Plan

What is ITS?

Intelligent Transport Systems (ITS) are systems that apply information, communication technologies and management control strategies to improve the operation and safety of transport networks and provide operators and travellers with information that help them make better and co-ordinated decisions. The collection, processing, integration and exchange of information are at the heart of ITS.

ITS is not an end in itself, but a means to achieve transport policy objectives

Examples of ITS applications on the road network include:

- Adaptive Traffic Control system
- Variable Speed Limits system as seen on the M25 Orbital in the UK
- Public Transport signalised junction priority
- Real Time Passenger Information systems
- Traffic Monitoring and Incident Detection systems
- Traffic regulations and violation enforcement systems
- Speed detection and display electronic systems
- Car Park Management and Guidance systems
- Traveller Information using Variable Message Signs and other media such as websites,
 PCs, mobile phones, car radio and Personal Digital assistants (PDAs)
- Demand management systems such as the use of hard shoulders during peak times supported by monitoring and lane control as seen in the UK, Germany and the Netherlands
- Road User Charging systems

Benefits from ITS

ITS applications can play role in:

- Improving road network management
- · Improving road safety
- Providing better travel and traveller information
- Providing more reliable public transport services on the roads
- · Supporting the efficiency of the road freight industry
- Reducing negative environmental impacts
- Supporting security, crime reduction and emergency planning measures.

Whilst quantitative benefits reported in the literature refer to specific projects and localities and therefore are only necessarily transferable to other parts of the world, they nevertheless provide a good indication of the likely impact of ITS applications.

- Typical benefits achieved from the use of ITS include:
 - A drop of 6% in vehicle speeds and fall of some 90% in the number of vehicles speeding excessively (i.e., 24 kph more than the speed limit)
 - Reduction of some 32% of fatalities following the introduction of safety cameras (speed and red light)
 - Reductions in delay of between 10 and 40% following the introduction of adaptive traffic control systems.
 - A reduction in delays for buses of between 20 and 30% from public transport priority systems
 - A reduction in the time drivers spend looking for a parking space of around 30% from parking guidance and information systems
 - Reduction in congestion by some 30%, traffic levels reduced by some 18% and 20% increase in movement by buses, coaches and taxis following the introduction of London Road User Charging scheme

What next for Denmark?

In order to facilitate, encourage and lead a co-ordinated approach to deploying ITS, the Government needs to:

- Review the role of ITS in meeting central, regional and local transport objectives
- Review the progress of ITS deployment in Denmark and the lessons learnt
- Develop an ITS policy and strategy that firmly acknowledges ITS as an additional tool the government has at its disposal to meet transport objectives
- Develop an ITS Framework that specifies the technical standards and communication protocols that will lead to interoperability of systems that allows for data and information exchange across national, regional and local jurisdictional boundaries
- Develop a funded ITS Deployment Plan for the short, medium and long term to meet the transport needs of Denmark currently and 5 and 10 years respectively from now

The development and management of a strong ITS strategy requires efficient and flexible communication and collaboration that intersects a substantial number of systems, authorities and administrative units. As the current Danish transportation system comprises many independent and individually managed entities (e.g. S-train system, bus network and national, regional and municipal road networks), we recommend that a future-oriented ITS strategy should integrate and incorporate these sub-systems across public authorities and other organisations.

