ID: 0003

Finnish ITS Future Scenarios

K. Ylisiurunen [1]

[1] ITS Finland, Unioninkatu 20, FIN-00130 Helsinki, FINLAND

Corresponding author's E-mail: firstname.lastname@its-finland.fi

ABSTRACT

Finland has actively been deleoping a new era of safer, cleaner and smarter transport system – based on intelligent systems. The pioneering work of the Finnish Ministry of Transport and Communications to build up a national ITS strategy, first in Europe, has enabled concrete actions at national level – also as an European forerunner. Well focused strategy work has built a backbone for ITS innovation and implementation – over the years to come. We have a good opportunity to joint a new way of thinking of transport system and a forthcoming European ITS event in 2014 in Helsinki to show what we have achieved. Widely agreed - the Finnish way for ITS - is taking us towards the next generation of transport systems utilizing sustainable ITS solutions. The road to future is paved with well balanced public-private partnerships serving the various markets.

Keywords: ITS, Strategy, Future transport system, Public-Private Partnership, ITS Europe 2014 Congress

1 INTRODUCTION

Increasing objectives in environmental impacts, productivity and infrastructure management are causing enormous challenges for transport and traffic. The costs of mobility are a considerable expense both in public and private budgets. Information and communication technology can help in aiming at a safe, fluent and green traffic – to tackle the challenges of this decade´s transport system. Intelligent transport services in Finland are built on co-operation, open policy and innovation – transparently between public and private organisations.

Finland has actively been deleoping a new era of safer, cleaner and smarter transport system – based on intelligent systems. Well focused strategy work has built a backbone for ITS innovation and implementation – over the years to come. We have a good opportunity to joint a new way of thinking of transport system and a forthcoming European ITS event in 2014 in Helsinki to show what we have achieved. Widely agreed - the Finnish way for ITS - is taking us towards the next generation of transport systems utilizing sustainable ITS solutions. The road to future is paved with well balanced public-private partnerships serving the various markets.

2 THE FINNISH NETWORK OF THE INTELLIGENT TRANSPORT – ITS FINLAND

Traffic and the development of intelligent transport systems and services are teamwork and the smoothness of co-operation determines the results. Intelligent transport services are built on co-operation. ITS Finland brings together experts representing research, administrative and commercial organisations in order to build systems and services based on information and communications technology to improve fluency, safety and environmental impact of traffic.

The aim of ITS Finland is to initialize the results of research as functional services. The challenges in traffic and the needs of travellers are the basis. The network wants to raise awareness about the possibilities of information and communications technology for solving the problems of traffic and transport.

ITS Finland is an open forum for the cooperation of Finnish companies and public administrations as well as a network for telematics developers representing different transport modes. Its main task is to promote the deployment of concrete ITS services for private and corporate users. Information must be mobilised to serve the travellers and the transporters of goods. This calls for unprejudiced exploitation of information and communication technologies in collecting, processing and distribution of traffic information.

ITS Finland was launched as a three-year project several years ago, bringing together the different parties and establishing forms for cooperation at both national and international levels. Since 2007 ITS Finland has worked as a non-profit association. Nowadays, ITS Finland – networking with more than 60 organisations - promotes the development and deployment of transport and logistics telematics services and products, and improves the awareness of Finnish ITS expertise.

3 SUCCESS OF PUBLIC AND PRIVATE CO-OPERATION

The production and distribution of traffic information requires functional and transparent public-private partnerships. The development of telematics applications and information services requires active participation of the entire value chain. The information, applications and terminals provided for travellers must be reliable and safe to use.

The Finnish national ITS strategy [1], launched in 2009 by the Finnish Ministry of Transport and Communications, creates a vision for intelligent transport in 2020. It defines the principles under which intelligent transport should be developed. It also affirms the transport policy objectives that intelligent transport should help to attain in as concrete terms as possible. In addition to that it defines clear points of emphasis for the strategy, outlines the key projects in different domains and roles of various stakeholders are described. Additionally it creates co-operation models for the sector and presents an action plan for intelligent transport allowing the strategy's objectives to be reached. ITS Finland – one of the close partners of the Ministry – is highly involved with the strategy's objectives and implementation.

Following the eSafety awarded ITS Strategy of Finland, intelligent transport systems will be based on adherence to the following principles, in order to shift the focus in transport policy from constructing and maintaining transport infrastructure to smooth travel and transports:

1. Intelligent transport constitutes sustainable development.
2. Intelligent transport systems treat all citizens, businesses and regions equally.
3. Intelligent transport is easy and inexpensive to use.
4. Intelligent transport systems respect the privacy of citizens.
5. Intelligent transport systems are founded on solutions familiar to consumers.
6. Intelligent transport services are nationwide and internationally compatible.
7. Intelligent transport systems are created in a cooperative network consisting of public and private sectors as well as service users.

4 NEXT GENERATION PARTNERSHIP – FOR ITS INNOVATIONS

Following the national ITS strategy, set of actions have been taken for the next steps towards new ITS deployments. Together with the high level research and development in the field they will gain success in the next generation partnership for ITS innovations.

Active network operation, ensuring safe mobility, promoting public transport, pedestrian and bicycle traffic and providing high-quality real-time data on the transport system will ensure predictability and reliability of travel and transport, safety and security in all kinds of conditions, seamlessly between urban and un-urban environment.

By regulating and supervising the transport system, actively improving its safety and promoting environmentally friendly traffic the safety and environmental standards of the Finnish transport system will be raised to the highest international level.

The ITS research and development activities in Finland have systematically focused on the most essential parts of the ITS building blocks in Finland. Thus the blocks built from the bottom to the top have set up the ground for the ITS breakthrough to be made now.

The strong co-operation relationship between ITS research, development and traffic agencies & research centers, up to big enterprises and private SMEs, opens many opportunities to build a next generation partnership for ITS innovations. The management for different goals of stakeholders in the service supply chain helps to achieve total value at the end which meets the 'end-users' needs.

5 THE FUTURE ITS IS A SUCCESSFUL MIX OF OPEN POLICY AND INNOVATION – THE FINNISH WAY

The Finnish way of doing ITS is leading Finland to the next generation's transport system with sustainable ITS solutions based on a well-balanced public-private partnership in the market.

ITS is about to have a remarkable role in everyday life. The new ITS era is relaying on the mixed success of high level education, research and development, partnership and vision. The pioneering work of the Finnish Ministry of Transport and Communications to build up a national ITS strategy, first in Europe, has enabled concrete actions at national level – as well as a European forerunner. Several actions have already been made following the strategy. The Finnish way for ITS is built on the backbone elements of the next generation's ITS services and systems. The main cornerstones highlighted for the Finnish way for ITS are as follows. All these elements are also new elements for future of road weather industry and services – already observed in Finnish innovation projects.

5.1 Open public data

Public data related to transport operations, services and systems is already available and will be opened more to enable innovation in the market. The ITS sector will benefit from business opportunities as well as public productivity.

5.2 Service oriented business model

A decade ago it was prevailing for public authorities to invest into systems and services and to manage those by their own personnel. In the new service oriented business model, the public sector won't use their resources to own systems and services - they will buy the results as a service specified by themselves. Thus it will result in e.g. services to meet their needs and data available to the industrial partners to serve travellers and logistics. The public sector will publish interfaces to their tax paid data for complete productivity.

5.3 Innovation in public procurement

The procurement processes which have been used have not taken into account all the possibilities of industrial cooperation and available innovations in markets. With the help of preprocurement processes, more innovation can gain ground in procurements. Therefore innovations can be utilized when available instead of waiting for the next procurement round - which will take several years in some cases.

5.4 Open policy

Instead of heavy and prolonged processes for infrastructure investments – especially since limited budget is available - all alternative and complementary solutions in transport system development should look after a high productivity of the transport system. ITS has a big role to introduce new solutions with high cost-effectiveness.

5.5 Public-private link

Wide experience in PPP, as explained earlier, will provide the best practices to take the full advantage out of the way Finnish will do the ITS.

6 HELSINKI TO BE THE SHOP WINDOW FOR ITS IN 2014

ITS Finland, together with its partners, will have a good opportunity to show highlights of Finnish ITS in European markets when hosting the European ITS congress in Helsinki in June 2014.

The City of Helsinki, Finland was selected by Ertico to host European ITS Congress in 2014. The pioneering work for national ITS strategies and a new Finnish Way for ITS will give good background to build succesful event in Helsinki in 2014. European congress sets the goal for well planned, on going actions toward a smart, safe and clean cooperative mobility.

Forthcoming two and a half year will show how the Finnish Way of ITS will lead us to the future of ITS based transport system. Transport system located in north will also lead us to deal strongly with demanding weather conditions. The presentation proposed will highlight the plans and ideas towards the future of transport system from ITS point of view.

The Finnish stakeholders – from private and public sectors – are strongly looking forward to introduce the Finnish Way for ITS in summer of 2014 in Helsinki.

7 REFERENCES

[1] Finnish National ITS Strategy. 2009. http://www.lvm.fi/web/en/publication/-/view/1094643