

*intelligent transport systems,  
Public-Private Partnership (PPP)*

Kazimierz BARTCZAK<sup>1</sup>

## **INSTITUTIONAL CHALLENGES TO THE DEVELOPMENT AND DEPLOYMENT OF ITS TECHNOLOGIES AND SERVICES IN POLAND**

The development and deployment of ITS technologies and services in Poland may be considered as an early stage of that as compared to those in the USA, Japan and the EU countries. It is necessary to learn from experiences of other ITS-advanced countries when they were at the same stage many years ago. One of the key problems is to identify institutional challenges to ITS development and deployment, however, taking into consideration the present situation in Poland.

In this article some institutional challenges to the development and deployment of ITS technologies and telematics services are presented. The article gives a "preliminary overview" of the problem as seen by an expert to be discussed before forming a programme on ITS in the future.

## **INSTYTUCJONALNE PROBLEMY ROZWOJU I UPOWSZECHNIANIA TECHNOLOGII I USŁUG TELEMATYCZNYCH W POLSCE**

W artykule przedstawia się instytucjonalne problemy rozwoju i upowszechniania technologii i usług telematycznych (ITS) w Polsce. Podkreśla się niezbędność rozwiązania tych problemów, aby stworzyć warunki rozwoju i upowszechniania innowacji technologicznych w dziedzinie ITS. Podstawowym wyzwaniem jest zapewnienie odpowiedniej współpracy w dziedzinie ITS pomiędzy organizacjami sektora publicznego, prywatnego oraz polskiej nauki.

### **1. INTRODUCTION**

The situation in the field of development and deployment of ITS systems and telematics (ITS) services in Poland has been presented many times in the literature, at a few seminars and others venues. Generally speaking, Poland is at the very early stage of ITS development and deployment as compared to the EU countries, and behind a few accession countries.

The institutional issues of ITS development and deployment are part of overall issues of introducing ITS in the Polish transport sector to improve the performance of the Polish transport system. The issues belong to the category of non-technical challenges.

<sup>1</sup> Ministry of Infrastructure, Krucza 38/42, 00-928 Warsaw, kbartczak@mi.gov.pl

There are some limitations to this study. As such, some focus is on the public administration, responsible for the present state of ITS development and deployment in Poland. The use of several general categories of "institutional world" such as public sector, private sectors, universities, is preferred. It gives a possibility to model institutional relations between them.

## 2. GENERAL SITUATION IN POLAND

The key institutional issues are connected with transport policy issues. First of all, the present state transport policy in the road transport sector focuses on the constructing of new motorways and maintaining of the existing road net. The application of ITS technologies is being considered as a matter of far future. It seems that the state will not be a champion of ITS development and deployment in the field, however, some public agendas may be stakeholders in a kind of ITS undertakings. The present situation at the self-governmental level is quite similar.

Currently the involvement of the governmental administration in the development of ITS in the road transport sector in Poland is extremely limited. The focus is on the constructing of new stretches of motorways without road telematics solutions. That can be seen in a draft document "*e-Polska*" (version of June 2003) where ITS applications in transport are not taken into consideration at all. The previous document "*e-Polska*" of 2001 contained a chapter, devoted to "Intelligent transport", with a plan of action in the area. It is expected that a new initiative that has been recently taken to introduce telematics solutions on main Polish roads within the CONNECT euro-project will change the situation.

More and more private sector organisations are to some extent involved in development and deployment ITS technologies and service, especially in the area of freight transport services and services for the public in transport. Some of them produces elements of ITS products and supply some telematics services to their customers, especially using wireless telecommunication, for example, GPS, GSM, and Internet.

Several universities in Poland, especially technical universities, are conducting permanent studies in selected research areas of ITS applications. The research collaboration on ITS between the universities is rather limited.

## 3. PUBLIC, PRIVATE AND UNIVERSITIES COLLABORATION

The prospects of common collaboration of public, private sectors and universities in Poland are limited, especially both public and private sector are not willing to enter into partnership, often called Public-Private Partnership (PPP). The idea of PPP is commonly known in Poland, however, there are no legal regulations, especially a law on PPP in general. The present psychological atmosphere about corruption among some civil officers hampers any collaboration in general. The collaboration of universities with public sector agendas and organisations is well established, however, not always pleasing the sides fully. Nearly the same can be said about collaboration with private sector organisations.

The main problem is to create comprehensive institutional frames for PPP between public administration and private firms.

ITS services may be divided into three categories, namely: services supplied by (a) public sector organisations only; (b) private sector organisations only; and (c) both of them. Generally speaking the investment in ITS seems to be risky. The private sector organisations are market oriented, market pull, expect return of investment, distrust of government, and prefer acting in short time frames. The public sector organisations are public goal oriented, technology push, expect public acceptance, distrust of profit motive, and intrusion of politics.

For the proper collaboration of public agendas and private firms, the basic matter is a law of public procurement. Many of ITS firms want to live to some extent on public investments.

The main key of PPP is building a “coalition” of stakeholders for ITS systems involving the appropriate actors. The actors can be divided into: interest groups, general public, and users/markets. The most visible groups of interest are likely to be environmental groups with their environmental priorities. At the level of general public acceptance, especially taxpayers, the full understanding of potential users, e.g. commuters, the elderly, is crucial. ITS application are introduced to make access to some areas easier, cheaper, and safer. They may reduce some negative impacts of transport on the natural environment.

#### 4. CONCLUSION

ITS technologies and services are not developed and deployed simply for the sake of developing and deploying. There exist many transport needs in the Polish transport system, and they should be met. The needs are usually expressed in the form of group interest, quite often contradicting. Any collaboration will be needed. At the first stage of ITS development and widely deployment it is possible to form isolated “islands” of technological innovations. But in a near future, when joining the EU, the present situation will change dramatically.

Institutional acceptance and users acceptance are widely viewed as being vital to the success of any project or programme if introducing technological innovation in improving transport by ITS. It is crucial to build up such a model for future collaboration of all stakeholders to be successful in ITS development and deployment. Numerous lessons learned from other experiences in many ITS-advanced countries show that it is possible not only to be successful but also reduce the time and cost when developing and deploying ITS.

There is a need for an applied research policy in Poland not only in the arena of technological studies but also economic, legal, social and institutional studies in the field of ITS, at the same time.

## BIBLIOGRAPHY

- [1] BARTCZAK K.: Inteligentny transport w poszerzonej UE, Przegląd komunikacyjny, nr 7-8 /2003.
- [2] BARTCZAK K.: CONNECT – szansą rozwoju ITS w Polsce, Przegląd komunikacyjny, nr 10/2003.
- [3] BARTCZAK K.: Scenarios for ITS services deployment in Poland, Transport Systems Telematics II International Conference, 7-9 November 2002, Katowice-Ustroń, Poland.
- [4] HORAN Th., HEMPEL L., BOWERS M.: Institutional Challenges to the Development and Deployment of ITS/ATS Systems in California, California PATH Research Report UCB-ITS-PRR-95-17, May 1995.
- [5] TSAO H.: A Decision-Oriented Framework for Evaluating Deployment Strategies for Intelligent Transportation Systems, California PATH Research Report, UCB-ITS-PRR-99-4.

Reviewer: Ph. D. Kornel B. Wydro