

TRAVELER INFORMATION SERVICES IN EUROPE

Y.LOYAERTS

Walloon Ministry of Equipment and Transport, Belgium

yloyaerts@met.wallonie.be

ABSTRACT

Information on travel conditions undoubtedly is the aspect of road network operation that received the most media coverage up till now. Nevertheless, among the various commercial or public initiatives undertaken at the beginning of the nineties, only few were crowned with success and the market did not really respond. There are several reasons for this, among which poor information quality and geographically restricted data collection. In this context, several recent European initiatives allowed a very striking dynamisation of the sector. So we may point out the European Commission Recommendation of 4 July 2001 on the development of a legal and business framework for participation of the private sector in deploying telematics-based Traffic and Travel Information services in Europe. The setting up of Euroregional projects is another important factor in the implementation of this policy. As a result, several concrete initiatives were developed both to improve information quality (collection and dissemination) and to integrate this information beyond the managers' sphere of competence. In this sense, the present trends in this field fully contribute to the deployment of new operating policies with a special focus on the services to the user.

KEY WORDS

INFORMATION / INTELLIGENT TRANSPORT SERVICES / OPERATION / PARTNERSHIP/ SERVICE TO THE USERS / STANDARDS

1. INTRODUCTION

Of all the fields of activities covered by road network operation – such as described in the C16 Committee report – information on travel conditions certainly is the one that received the most media coverage.

Indeed there is no conference or exhibition on Intelligent Transport Systems where the ideal world of road user information is not mentioned by means of a vast number of video presentations and projections.

In all the presentations, an average user is informed about the best way of getting to work as soon as he wakes up. Of course, it is understood that the system knows his schedule and that, during his trip, he receives real-time information about the incidents on his route and about the alternative routes making use of public transport. The same applies to businessmen and women, whose trips are longer, are subjected to greater economic interests and necessitate the crossing of many borders, especially in Europe.

We all know that the real situation is far away from this ideal world. Even if technology is not an impediment anymore, organisational and financial difficulties still cause important delays in the large-scale implementation of pilot-projects.

In this context, several initiatives were developed in Europe thanks to public authorities or private firms, as well as European actions, in order to foster the development of better financial, technical and organisational conditions liable to enable the generalisation of high-performance services to the user.

This contribution reviews the present situation in Europe.

2. THE FIRST INITIATIVES

Since the nineties, several commercial or public initiatives have been undertaken in the field of transport information.

Without being exhaustive, we can mention various projects such as VISIONAUTE in the greater Paris area or the products supported by TEGARON in Germany or TRAFFICMASTER in the United Kingdom. From then on, the use of standardised techniques such as RDS-TMC based on ALERT-C was also considered as being promising for the large-scale development of in-vehicle services provided to drivers.

However, it very soon appeared that the delivery of these services would be trickier than expected and that the cost-effectiveness of these processes is far from guaranteed, even in a priori favourable operating conditions.

So important problems arose as to information quality (relevance, localisation, updating, precision, ...) and made the acquisition of a system or the subscription to a service all the more uninteresting for the user since public service radios provided free information of a quality deemed sufficient and road operators themselves started to develop general public applications.

Services thus were often limited to areas where information of quality was abundant and traffic problems were such that a potential market existed (e.g. : VISIONAUTE based among others on data from SIRIUS covering the Ile-de-France area).

It is an egg-and-chicken problem : the market waited for quality data before developing while the road authorities awaited a clearer demand before developing their data gathering systems providing good information in quality and quantity.

However, some national situations evolved thanks to modifications of the legal framework and improved data collection, among which may be mentioned :

- i) the possibility for private companies to gather themselves the needed data by placing sensors on the German motorways
- ii) the creation of a Dutch traffic information centre where private companies can get public data for free during five years
- iii) the setting up in England of a network of traffic centres whose operators are assigned - via government contracts - the collection and marketing of traffic data

or else

iv) the GIE (Groupement d'Intérêt Economique –Economic Interest Grouping) set up by a number of French motorway companies in order to give structure to their road information services and to enhance their value.

Yet, it is always difficult to launch large-scale (e.g. transregional or cross border) projects because of the independence of the markets and of the responsible authorities and despite the promotion attempts of standards such as RDS-TMC (Radio Data System – Traffic Message Channel) or DATEX (DATa EXchange format) for information definition and exchange between traffic centres.

3. EUROPEAN INITIATIVES

The European Union Commission has been showing an interest in road information products for a long time. ALERT-C and DATEX (principles and basic application) were thus developed thanks to projects included in framework programmes for research and development (DRIVE and subsequent programmes). Likewise, specific dissemination tools were developed and pilot applications were implemented. The European Union has also taken several complementary initiatives intended to further and consolidate the use of DATEX or TMC (setting up of user forums, official memorandums of understanding, etc.).

However, this was not deemed sufficient to make the considerable investments of the European Union profitable and to really foster the development of private added value services of quality in favour of the users.

Therefore, the European Commission published on 4.7.2001 a recommendation on the development of a legal and business framework for participation of the private sector in deploying telematics-based travel information services in the Union, thus furthering the large-scale development of this type of services.

This recommendation officially invites the Member States to develop a legal and business framework that encourages both the commercial deployment of added value services offered to travellers and the improvement of public travel information sources.

In concrete terms, several measures are suggested such as, among others, preparing standard contracts, making public data available on equal terms to all the service providers or publishing traffic management strategies based on road infrastructure classification.

On the whole, the recommendation lies within the framework of the establishment of a Common European Economic Area and the abolition of the frontiers between countries and the resulting regulatory barriers.

4. NEW TRENDS

In line with its strategic initiatives, such as the publication of the recommendation of 4.7.2001, the European Union encourages the implementation of several ITS projects on the TERN (TransEuropean Road Network). This support expresses itself –

financially, among others - through 6 Euroregional projects aiming at the development and the improvement of various fields of activity, among which the management and control of traffic, the creation of links between traffic centres or the development of travel information systems. This support takes shape within the framework of a multi-annual action plan (2001-06), updated each year and subject to a global reassessment in 2004. The areas covered by each of the projects are indicated in figure 1 below.

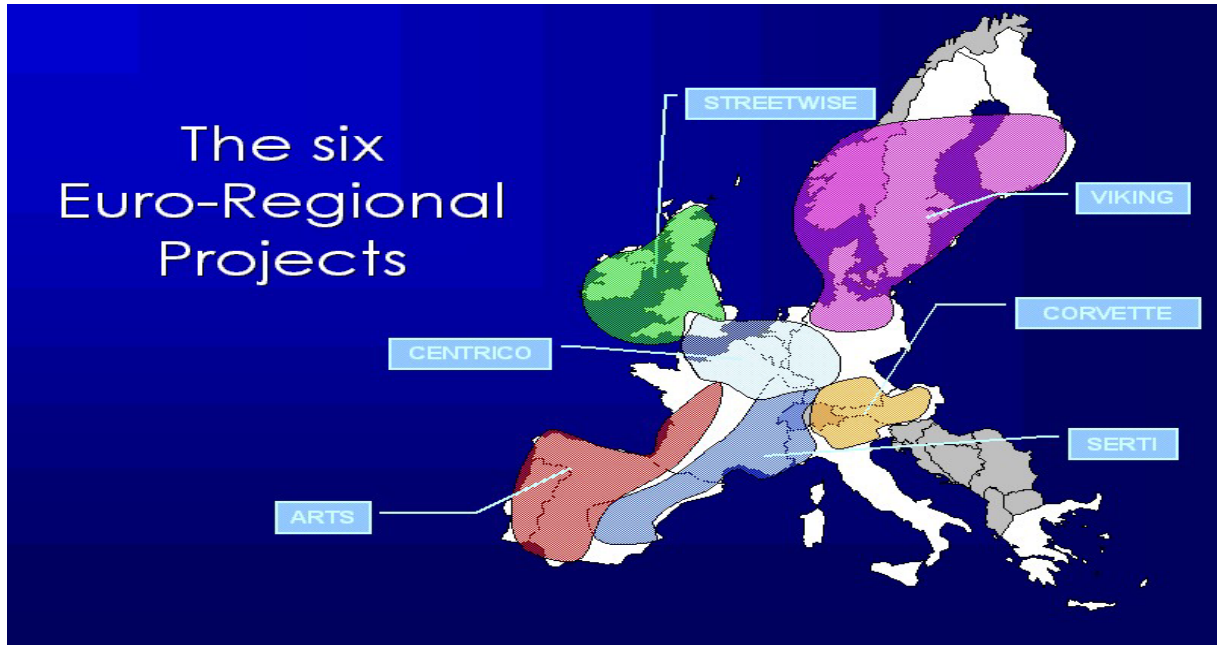


Figure 1 – Map of the Euroregional projects

Each project concerning one geographical area of the Union thus comprises several actions for information service integration beyond regional or national frontiers. These actions include :

- the setting up of a co-ordinated RDS-TMC service on the corridor going from South-eastern Germany to Catalonia and Western Italy, passing through the Rhone valley in France (SERTI project)
- a French-English common service for multimodal information (harbour, road information : service and traffic) pertaining to the freight traffic on both sides of the Channel, using Internet technology (CENTRICO project)
- the integration of road information, including data concerning ferries, between Scandinavia and North Germany (VIKING project)
- the extension to other European countries of the Internet service provided by the French G.I.E.

Although these initiatives are important for the improvement of the services to the user in their respective areas as well as for the example they set, they are only initiatives that do not aim at a complete coverage of the TERN and hence the European Union.

In this context, the CENTRICO project, which brings together the road authorities from Germany, Belgium, France, Great Britain, Luxembourg and the Netherlands, has undertaken the creation of an open platform intended to facilitate the exchanges between traffic centres and service providers of whatever type.

The partners defined and accepted the platform principle in autumn 2002, after having investigated the matter with their traffic centres and service providers. This inquiry showed that the sole EU recommendation would not suffice to solve the supplementary problems stemming from the national or regional aspect of the markets, processes or organisations.

The concrete project started at the beginning of the year 2003 and is known under the acronym OTAP (Open Traveller information services Access Points). Its objective is to give a single common access (via Internet) to all the traffic centres and service providers. This way, the interface between centres and providers is rendered easier than with any other more traditional method, based or not on the standards applying in this field (cf. figure 2).

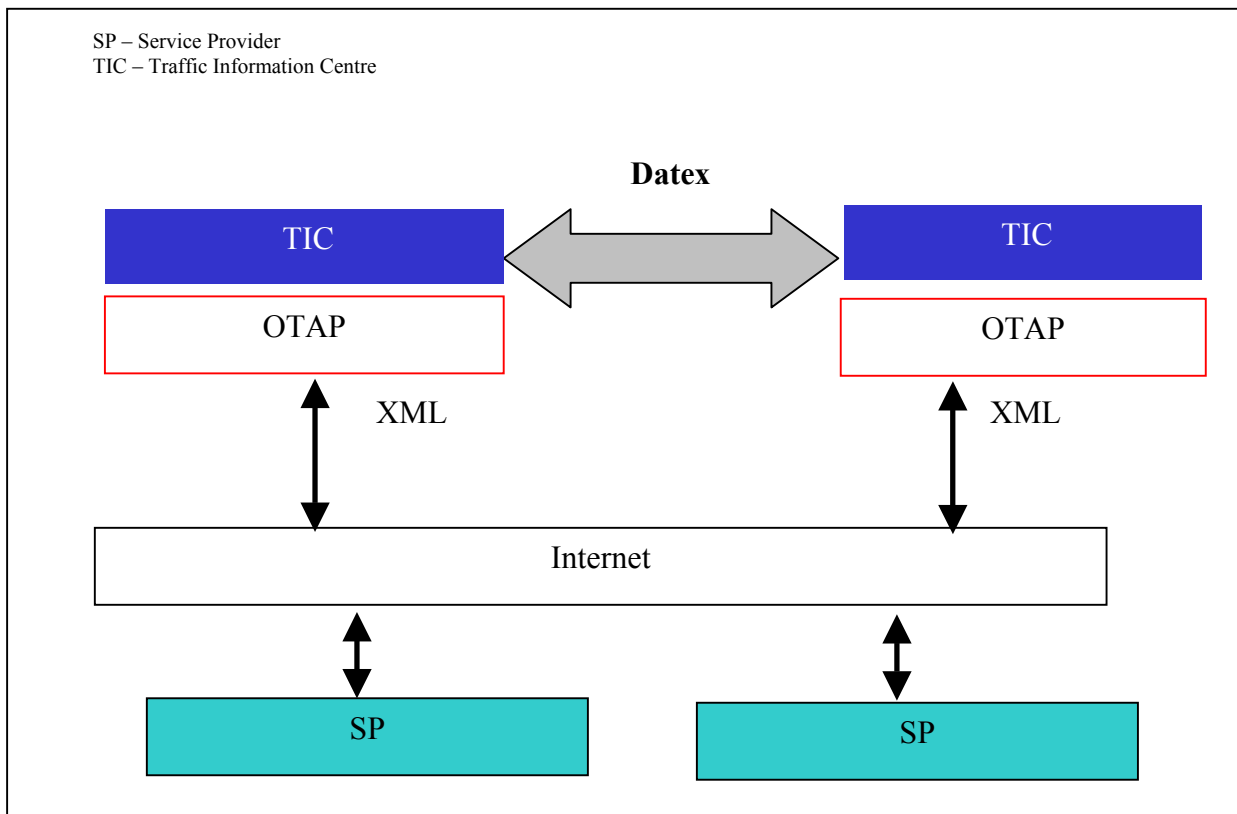


Figure 2 – OTAP flowchart

All the same, each public traffic centre will be responsible for making the data falling within its geographical competence available and will keep the absolute propriety of this information. Besides, the private and public partners formally commit themselves to respecting their conditions for participating in the project development (until the end of 2003) and the test-only period (mid-2004).

All these initiatives, as well as the functional and technological evolutions pertaining to them, urged the European Union to launch the actualisation of the DATEX pre-standards. The project, which runs until 2004, provides for the updating of the DATEX data dictionary as well as the taking account of new needs and new data transmission and distribution techniques. Besides, it is obvious that this new project will integrate the results and trends from the OTAP project and the experience acquired within the framework of other projects, such as the extension of the French G.I.E.

However, the primary aim of these new trends consists in improving the quality of the service to the user. Such an improvement being only possible insofar as data collection and distribution are improved in quality and quantity, we may say that this evolution can only strengthen the integration of road information in a modern traffic management and control policy.

In this sense, the current trends in the field of user information in Europe fully contribute towards the development of the new road operation policies that road managers are implementing from now on.

5. CONCLUSION

Though sometimes of rather good quality, road information in Europe has been experiencing for years various negative effects essentially due to the lack of quality of the collected data, the independence of the responsible authorities or else the technical problems related to constantly evolving pre-standards.

Yet, new integrating initiatives have been launched since a while, mainly through the impetus of the European Union and the existence of dynamic Euroregional projects.

The massive efforts made, equal to the hope for positive consequences, sufficiently demonstrate the importance of these processes in the development of new services to the user and the increasing attention paid to road network operation by public or private officials.

