



CENTRICO

**Traveller Information
Services
Positioning Paper**

Date: September 2002



Supported by
the European Commission DG TREN - TEN-T

Centrico – TIS Positioning paper

A Euro-Regional Deployment Plan for Road ITS between Belgium, France, Germany, Luxembourg, The Netherlands and the England.

Partners involved:



Belgium:

- Brussels
- Wallonia
- Flanders



France:

- METL/DSCR
- SANEF
- SAPN



Germany:

- NRW
- Hessen
- RP
- SL
- Federal Ministry



Luxembourg



The Netherlands



England



Project co-funded by the European Commission (DG TREN)
Multi-annual Indicative Programme for the Trans-European networks (2001-2006)
Intelligent Transport Systems – Sub-programme TEMPO

TIS Positioning Paper

Document version:	Issue 2
Status:	Final
Dissemination level:	Open
Date of preparation:	September 2002
Document number:	
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Document History

Version	Date	Description	Action
1	29/04/02	First draft positioning traffic centres	Distributed at the Liège TIS workshop 16-17/05/2002
2	11/09/02	Results of Liège workshop added	Distributed to the CENTRICO Steering Committee 10-11/09/2002

Abstract: This document identifies the need to facilitate the delivery of traveller information to service providers and described the related CENTRICO traffic centres positioning

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1. Executive summary

- Traffic management centres originally developed to collect and collate traffic data have also a key role in supporting travel information services;
- These services can take many forms and can be provided by both the public and private sector. An important point is that they can contribute to the key pan European objectives of increasing efficiency, safety and making the best use of existing networks;
- Private sector traffic information services are currently developing on a national basis, as data is not easily accessible on a wider scale;
- Private sector traffic information services require high quality content that may, or may not, be available from traffic centres;
- There is great variety across CENTRICO in the way data is collected and information produced, yet there is still a common core of content able to support pan European services;
- There is a great variety across CENTRICO concerning the role of the TIC as end-user service provider – a common view on the positioning of the TIC for cross border services in relation to the private sector service provider has not yet been reached;
- Despite this variety a key principle to promote the generation of these services is agreed within CENTRICO. The principle is that “all (public sector) traffic information centres should make available all the traffic data and information that all (end-user) service providers ask for”;
- Implementing this principle does not imply that the data supply should be free or with onerous contracts, simply that data collected by traffic centres should be disseminated to support end user services. A complementary paper proposes a technical approach to this problem;
- There is a need to promote and inform potential service providers about our views and our need to understand their exact requirements for traffic information availabilities;
- Similarly, the operators of traffic centres providing these data feeds have a very strong interest in TIS;
- The ITS marketplace is now at long last moving quickly and service providers, car makers and telecom companies are all hungry for information content of the right quality. We have no time to lose, therefore CENTRICO intends to build a demonstrator.
- There is the general feeling that there is no need for a new European directive on TTI services. It is better to get agreement within a ‘European TIS community’; the CENTRICO TIS demonstrator can contribute to this process.

2. Introduction

2.1. Background

Within CENTRICO there are clear agreements between the partners for traffic information exchange to support cross border traffic management. A DATEX – based information exchange network is being implemented according to the DATEX standard, bilateral agreements and CENTRICO implementation profiles.

In the long-distance corridor project the traffic management requirements for international transport are being investigated.

It means that CENTRICO works well on seamless cross-border and international traffic **management** services. Although traffic management and traffic information are very closely related – and traffic information can have a key role to play as part of traffic management – there are no agreements or guidelines on the development of seamless cross-border and international traffic **information** services.

There are many different players concerned with traffic information services, including broadcasters, motoring clubs, road administrators, motorway police and more and more private organisations. The role and responsibility of traffic centres continues to develop and evolve as different demands are identified. This varies widely between different countries and different policies are being followed, but there is still enough core commonality to support the commitment to seamless services.

2.2. The need for Private Services

In July 2001 the European Commission issued a Recommendation on the development of a legal and business framework for the participation of the private sector in deploying telematics-based Traffic and Travel Information (TTI) services in Europe. This is to encourage the commercial deployment of value added services offered to travellers, along with the improvement of existing and planned public travel information sources such as broadcast and internet travel news and telephone enquiry lines.

2.3. The need for this paper

The CENTRICO partners have expressed the will to promote private traffic information services. They would like to collaborate and discuss with their partners in the other euro-regional projects and with the private sector. CENTRICO has developed this positioning paper to:

- Clarify what we mean by travel information services and how they differ from traffic management;
- Understand how these services currently work and to find out the future plans of the traffic information centres through examining the results of a questionnaire;
- Examine the issues surrounding the development of cross-border and pan European Services – more specifically the positioning of the traffic information centres in relation to the private service providers;
- Define a first concept for easy access to traffic data and information available from traffic centres;



- The final goals of the positioning paper are:
 - Clearly express the importance for the CENTRICO members that EU-TIS services will be developed and will become available;
 - Clearly identify how CENTRICO can and will facilitate those developments (elaborating the open TIS access points);
 - Clearly indicate the role that the CENTRICO members intend to play and which roles they think the private sector will play.

3. Travel Information Services – What do we mean?

3.1. A common Terminology

Throughout the traffic community, the terms “data”, “information”, “service provider”, “content” and so on are freely used but are often mixed and are also often used without real understanding of what they mean. CENTRICO needs a consistent view on this and so we suggest that the following definitions should be taken into account by reading this document. The definitions are taken from the DATEX Data Dictionary version 3.1.

- Traffic data: by traffic data is meant status data. A typical example is traffic flow. Also level of services can be considered as traffic data;
- Traffic information: by traffic information is meant event information. It is defined as disturbances to a ‘normal’ status. Typical examples include accidents and road works;
- Traffic situation: From traffic data and traffic information a traffic situation can be described (eg: a accident during road works; all lanes black, 2 km congestion). A traffic situation is described by traffic information elements

We have considered three levels within the information chain:

- Content provider: an organisation that makes available to any other organisations traffic data or traffic information. They may have an original focus on traffic management. An example could be the motorway police;
- Publisher: an organisation that brings together traffic data and/or traffic information from one or several content providers. This is done in order to create a clear view of the traffic situation. They may undertake traffic management. They provide the information to end user service provider;
- End user service provider: an organisation that passes on traffic information to end-users especially the public. These are increasingly becoming private sector services offering a broad range of service delivery channels (internet, SMS, GSM, TV, Radio, RDS-TMC, beacon) as well as established public sector services.

Organisations do not often fall into one single category. All broadcasters are end users service providers. They broadcast traffic information but most of them also gather traffic data and information from different sources in order to have a clear view on the traffic situation.

3.2. Traffic Management - Traffic Information

A traffic management centre takes all measures to assure the safety on the road and to optimise traffic flow. Often the term TCC (Traffic Control Centre) is used as synonym. The TCC gathers traffic data and traffic information and takes measures by e.g. setting VMS with variable speed limits, rerouting advice... A TCC is in most cases linked to a TIC (Traffic Information Centre). In some countries several TCC's are linked to one TIC (e.g. The Netherlands). Often the TCC and the TIC are integrated into one centre (e.g. Flanders and Wallonia). The TIC is responsible for all exchange of traffic data and information in both directions. Therefore the information exchange for cross border management happens between the TICs of the neighbouring region.

The TIC brings together traffic data and information from different sources in order to have a clear view on the traffic situation for traffic management purposes. By doing so, they add value to content

that is interesting and potentially valuable for end user service providers. In this case we consider the traffic centre as service provider.

In some cases, for example in the situation being developed in England, the TIC and TCC will be totally integrated and will also be responsible for some data collection. Hence there is a wide variety of roles across Europe but still a core message – there is information available that could be used to support end user services.

3.3. The traffic information services

It is possible to split up the services in different classes:

- Regional service: the service only concerns a specific region e.g. Flanders
- National service: the service concerns the whole country e.g. the Netherlands
- Cross border service: the service concerns the own region and traffic situations in the neighbouring regions, but only traffic situations on a relative small distance from the border (say up to 50 km)
- International service: the service concerns the traffic situation in several regions not all belonging to the same country or even wider.
- Individualised service: the service respond to individual needs of the end-user.

4. The current status

4.1. Overview

Today, the situation in end user services for traffic information is still rather focused on national markets and national targets, as the main end user service providers are heavily language dependant (broadcasters) or developed from national organisations (automobile clubs etc).

During 2001, the EC recognised the need to improve this through a European Network of Traffic Centres defined in the priority actions of the TEMPO Programme and the work plans of the Euro-Regional projects. This activity has had a serious lack of progress in recent years as data exchange is currently rarely used in an operational sense.

As already indicated before, for traffic management the situation seems to be much more clear and stable than for Travel Information Services. There are information exchange standards, agreed implementation profiles and a network architecture. Before setting up a new link a bilateral agreement is signed to agree on the last details.

For the TIS domain, there seems to be a completely different starting point. For end user Service Providers, especially for those on a pan-European scale, it is difficult to work out a network architecture and it is not acceptable to start with a variety of different bilateral negotiation processes whose outcome, resourcing and time requirements cannot be pre-determined.

The work of the CENTRICO partners in the TIS domain should therefore contribute to more and better cross-border and international traffic information services by supporting the establishment of these services and overcoming these barriers. Most of the CENTRICO partners believe that they should not themselves offer full-scale end-user services (particularly those with a high degree of tailoring and added value) and this is in accord with the Commission's wish to extend private sector services. However, the partners do wish that a high level of service is provided to all their users. The positioning of the TIC should leave sufficient opportunities for the private sector to support a business case.

The role and the positioning of the traffic centre are often different between regions and are not always transparent for a possible private partner developing (pan European) services. Even when the situation is clear today, there are many question marks for the future.

4.2. The questionnaire

Therefore CENTRICO has carried out an inventory on the current and the future positioning of traffic information to point out differences and commonalities and to find the common core needed to stimulate the dissemination of cross-border services.

This was undertaken through a questionnaire that concerns:

- the role of the traffic centre (today and the medium term view);
- the links between the traffic centre and the other links in the provision of ITS services; and
- the conditions related to these links.

From the answers on the questionnaire the following synthesis can be developed:

In general:

- The situation in the Netherlands and England differs totally from the other regions.

- The TIC of the Netherlands is only acting as a content provider. No end-user service is offered by the TIC and there are no plans for doing so.
- In England there is currently no "TIC" – police control offices act as traffic management centres and pass information to many service providers directly. The new "TCC" Initiative will provide an integrated traffic data collection, information and management service next year. The Highways Agency also has a range of end user services.
- All other TICs in the CENTRICO area act as content provider, service provider and end-user service provider. All will reinforce the role of the TIC as end user services (regional, cross border and national services).

More specifically:

- Most TICs are prepared to pass traffic data and traffic information to private organisations.
- Some TICs expect to receive (buy) traffic data and information from private organisations.
- Often the broadcaster has a privileged relation with the TIC. In Wallonia the broadcaster is even present in the TIC. The task of the broadcaster is there integrated in the functioning of the centre.
- Contracts between the different parties exist, but often there is no contract. In most cases exchange of information is free of charge.

A more detailed report on the results of the questionnaire is added in annex..

As conclusion, there is a willingness to put information available to the private sector in order to promote new private end user traffic information services. But most TICs want to extend their offer of regional end users traffic information services. This means that for each region separately the private service provider should find out to which extent there is competition between his service and the service offered by the local TIC.

5. The key principle proposed

Within CENTRICO there was an agreement on following principle:

“all traffic information centres should make available all the traffic data and information that all (end-user) service providers ask for”.

The principle was worked out within a CENTRICO workshop and is endorsed by the CENTRICO Steering Committee.

Some explanation is needed to define this principle.

All traffic information centres:	as the CENTRICO partners are all public sector organisations this principle is valid for the traffic centres operated by the partners whether for traffic management, information or both
should make available:	this does not imply or exclude any specific charging, contracts or technology. It is simply that the data can be accessed in principle.
their traffic data and information:	the traffic centres should make available as much traffic data and traffic information they possibly can, subject to costs, ownership and existing contract. Some information from other content providers may not be available for wide distribution.
that all (end-user) service providers:	all end-user service providers can get information and there will be no discrimination between regional and foreign service providers; private and public broadcasters etc. ...
ask for :	it is also clear that those service and end user service providers using this content need to be known as users by the traffic centre.

6. The Liège workshop

6.1. Issues

The issues listed below have been explored during the Euro-regional workshop on TIS on 16-17 May:

- If service providers are indeed keen to explore pan European services and the business models that support them – what do travellers want?
- If the principle proposed is acceptable and the barriers they currently perceive to development of these services;
- What needs to be done to ease the deployment of these services, at organisational, legal, technical (data exchange) and market levels;
- How the accompanying framework and guidelines need to be defined - in one extreme as a Directive, moving through commercial contracts to loose bilateral arrangements;
- Their needs for information quality and assurance of that quality – contracts, service levels, auditing;
- Their needs as clear specification on access points and information availability;

Operators of traffic centres were also invited to discuss the principle as well as private service providers.

- The agreement to the proposed principle and their role as end user services;
- Issues of commercial value of data – liability, ownership, non exclusivity, etc;
- Their ability in practice to provide the additional services and quality that may be required by end user service providers;
- What can be provided to the private sector and equally importantly, what cannot be provided as it is seen as a public sector service – hence how public and private sector services can sit alongside one another and where the “line” can be drawn;
- How to support pan European services;
- Equal treating between all service providers.

6.2. Results

From these discussion targets, we can conclude that the road operators have a very strong interest in Traveller Information Services (TIS). There is a wide agreement that the road operators must be active in publishing accurate and reliable traffic and travel information. There is a strong public service element, especially in crisis situations.

There is also a perception that Pan-European as well as individualised services should be offered by organisations other than the regional TICs. Those best placed are the broadcasters and private sector Service Providers (SPs).

On the methods of information exchange for regional and cross border information services there is no clear positioning but harmonisation of the methods of location referencing is an important technical issue to be addressed.



Data quality is a general issue, especially for private SPs who need to deliver accurate information to their clients. A high level of reliability is needed for the information services to retain credibility. The business models for both public and private sector need to recognise this. Developing the language and terminology to label important quality attributes of the data and information that is to be exchanged between the actors is a must.

On the role of the TICs, opinions range from 'all regional end user services (except in-car navigation) should be offered by TIC', via 'TICs should take control of TIS in crisis situations due to safety reasons', to 'TIC should take care of content and not act as end user service provider'.

All ministries support the CENTRICO positioning document and accept the key principle. There are some doubts about making available raw data to SPs because of the possibilities of mis-interpretation.

The private sector is ready to collaborate with the TICs and they do welcome the positioning document. They prefer that the TICs take care of quality assurance and offer clear contracts to SPs instead of investing in end user services for themselves. Also the regional traffic management strategy (route hierarchies) should be passed to the private sector in order to integrate in their services. Easier access, as via internet could also help to create better opportunities for business cases.

With regard to European legislation, opinions are very mixed. One view is that the Recommendation of the EC of July 2001 is not strong enough, and should be followed by a stronger document, perhaps a Directive. Another view is that it is better to form an international TIS community including the private sector, and try for model contracts, codes of practice and other voluntary agreements, through consensus. Harmonisation and easier negotiations seem to be threshold-reducing requirements for better deployment of TIS.

These results were presented and confirmed on the Rome traffic and travel information exchange forum of 6 – 7 June 2002. On the same forum a paper was presented on the requirements for easy access to TTI. This paper is developed in parallel with this positioning document and gives already a concept for the exchange system. This paper is added as annex 2 to this document.



7. Further steps

CENTRICO will take up these remarks and work out an action plan (business plan). This plan will be a small business case including special focus on contractual aspects and quality aspects. The other Euro regional regions will be invited to take part in this exercise.