

# Centrico BRIEFING NOTE

Using ITS to manage Europe's busiest roads



## CENTRICO – TMS: Traffic Management Services

### SUMMARY

The objective of the Deployment Activity „Traffic Management Services“ is to improve traffic conditions and safety on the TERN especially on the most heavily charged parts of the network. By 2013 all critical sections shall be equipped with ITS on an appropriate level.

### Proven Measures

During MIP 2001 – 2006 numerous traffic control and management tools were trialled, tested and implemented on a large scale.

In the next 7 years implementation will be continued. Systems will be extended or upgraded in the CENTRICO area according to the principle of harmonisation and based on the Euro-regional experience and knowledge-exchange. Applications include:

- Hard shoulder running
- Ramp metering
- Signalling/Lane control
- Dynamic lane marking
- Decision support systems
- Road works management
- Incident management
- High occupancy vehicle lanes

All applications are constantly monitored, evaluated and adjusted to optimise the cost/benefits ratio.

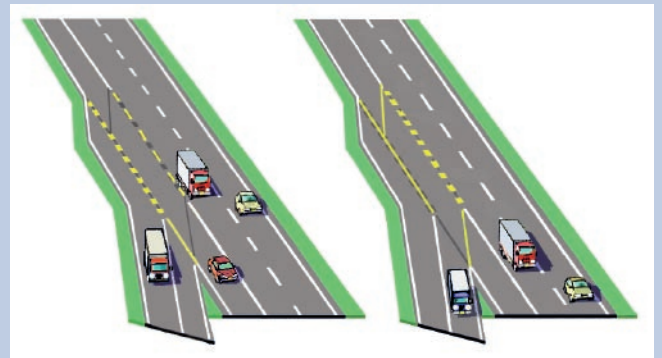


Ramp metering

### Short Term Approach

In France and the Netherlands [[www.vanAanarBeter.nl](http://www.vanAanarBeter.nl)] some short term or unconventional traffic management solutions were defined or will be defined to solve traffic flow problems in congested urban areas.

Example: Development of a system to merge in batches, which improves traffic flow significantly.



Buffering during peak hours

### Future Developments

In the coming years several known techniques will be improved and prepared for larger implementation:

**In car technology (FCD/tracking and tracing/traffic management)**

Increased bandwidth for communication, more efficient human-machine interfaces and better accuracy of satellite navigation allow innovative solutions for traffic management and control. In Belgium, France

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and the Netherlands projects will be done to find new ways to make use of this in-car technology.

Example: Walloon has equipped salting vehicles with sensors (to know the quantity of salt left, fuel, ...) and GPRS on-board system. In wintertime in case of snow the control centre will be able to follow the vehicles on the Internet in real time and provide accurate road condition information to the road user.



Car as sensor

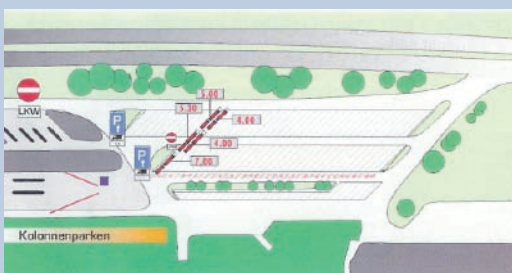
*In car traffic management*

## Dynamic traffic management

In the Netherlands and France programmes to implement dynamic traffic management measures are scheduled; these include co-ordinated usage of existing techniques like ramp metering, lane control and dynamic lane marking.

## Freight oriented measures

Improving management of HGV parking, rest and service areas will continue mainly in France and Germany.



*Telematics controlled parking in Rheinland-Pfalz*

## Tolling

Some partners in the CENTRICO area will explore the possibilities of new techniques for tolling; either to start implementation or to improve existing systems. A different approach for tolling can be seen in the Netherlands – see also the Briefing Note „The Effect of Rewards – Spitsmijden“.

## Cross Border Management/TMPs

In the first MIP period eleven cross border projects were implemented. For the next period extensions of many of the cross border corridors and improvements of the software and tools used are planned.

Extensions/new TMPs:

- Champagne Ardennes, Loraine, Nord-Pas-de-Calais, Belgium and Luxembourg.
- Cologne, Düsseldorf, Rhein-Ruhr, Rhein-Main.
- Co-ordinated Strategy Management extension to international partners.

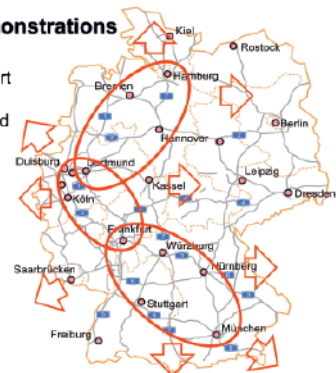
### Corridors for the Pilot Demonstrations

1. South  
♦ Munich / Nuremberg – Frankfurt
2. West  
♦ Frankfurt – Cologne / Dortmund
3. North  
♦ Dortmund – Hamburg

### Potential Followers

- ♦ Austria (ASFINAG)  
Corridor Germany – Austria
- ♦ Switzerland (>2008)  
Tunnel Gotthard  
Tunnel San Bernadino

Option for extension to underline the European dimension



*CSM pilots and extension possibilities*

The Netherlands will start a large scale quantitative and qualitative evaluation on its cross border management projects. Germany and Belgium will participate in the evaluation.

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For further information on other CENTRICO activities visit:

[www.centrico.org](http://www.centrico.org)