

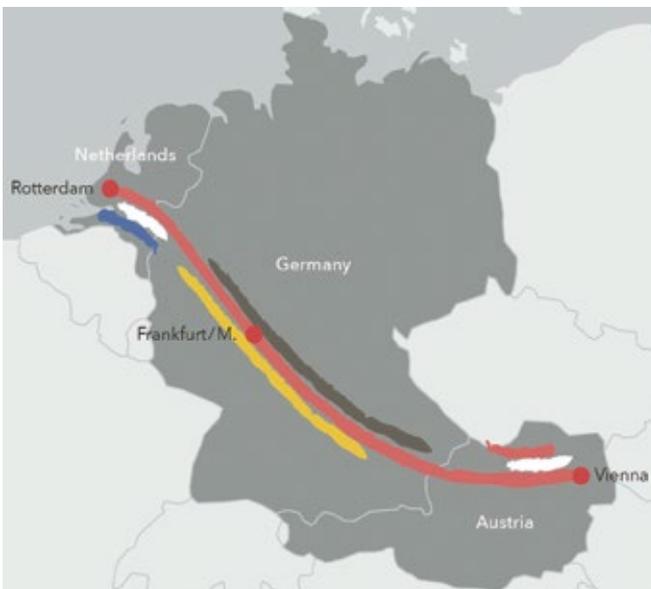


Rijkswaterstaat  
Ministry of Infrastructure and the  
Environment

# Cooperative ITS Corridor

Cross-border intelligent mobility

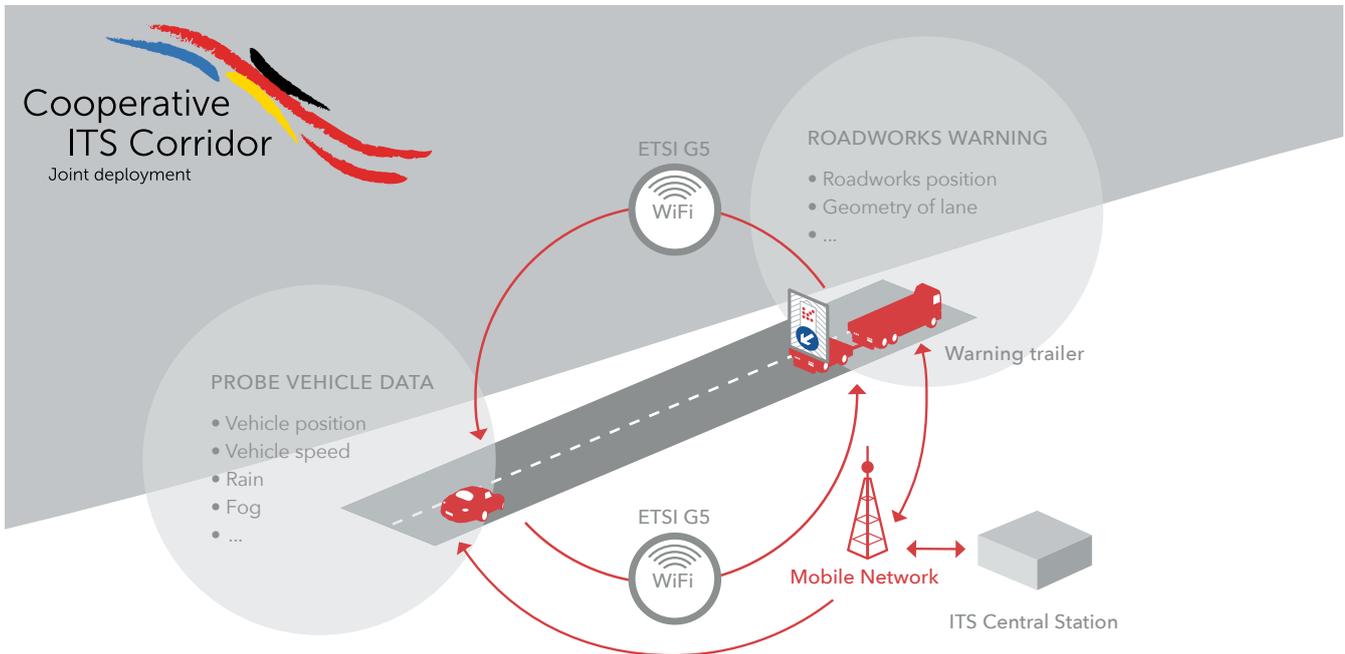
Every day, Rijkswaterstaat works on safe mobility in the Netherlands. We do that not only by building new roads and waterways, but also by using the existing infrastructure more efficiently. Smart technology helps us to realise that. The development of Intelligent Systems (ITS) will continue over the coming years and offer opportunities to road users, road operators and Dutch businesses. Rijkswaterstaat is currently working on the introduction of three cooperative ITS services as part of the Cooperative ITS Corridor project.



Cooperative ITS services provide wireless links between vehicles and the road infrastructure. This enables them to cooperate and provide an efficient and safe traffic system. ITS services will become more and more important in future. The Cooperative ITS Corridor project will provide three cooperative ITS services on the Rotterdam – Frankfurt – Vienna corridor. In the Netherlands this includes the route between Rotterdam and Germany, via Breda, Tilburg, Eindhoven and Venlo (motorways A16, A58, A2 and A67). The busy and highly developed road network in the Netherlands provides an excellent setting to develop and implement large-scale intelligent mobility in Europe.

## Three services, many advantages

The Road Works Warning service uses a secure and dedicated WiFi connection to provide drivers with detailed and timely information about road works. The Probe Vehicle Data service enables vehicles fitted with new in-car equipment to provide traffic information centres with anonymised information about road and journey conditions. The Collision Risk Warning service warns road users about stationary vehicles used by road inspectors. These services contribute to greater safety, fewer incidents and traffic jams and more efficient use of the road network, and therefore help to reduce CO<sub>2</sub> emissions. The project does not only focus on the introduction of these three services. It primarily aims to provide a basis for a range of other cooperative services which will appear in a few years.



### Roadside hardware

To provide these services, Rijkswaterstaat will install beacons along the route. These beacons communicate with the on-board units of approaching vehicles using WiFi. In the future, car manufacturers will equip their vehicles with On Board Units as standard. The beacons also communicate with the traffic information centre. Beacons may be mobile or fixed. For example, mobile beacons will be fitted to information display vehicles used by road operators during road works. Fixed beacons will be linked to existing roadside systems.

### International agreements

The project is based on a cooperation agreement (Memorandum of Understanding) between the Netherlands, Germany and Austria. Technology for cooperative services has been developed in several countries in recent years, based on a number of research and development projects. With the Cooperative ITS Corridor project, Austria, Germany and the Netherlands are taking the first step towards the international implementation of cooperative services. This demands close cooperation among all stakeholders and continuous liaison between the countries. The roll out of the services will make a major contribution to the development of Smart Mobility in Europe. This project will bring the future closer.

### Working together with suppliers

The Netherlands wants innovative systems for travel information and traffic management to become available on a large scale - both in the Netherlands and elsewhere. This will not only benefit road users and road operators, but also suppliers and therefore the Dutch economy. In the Netherlands, Rijkswaterstaat will undertake the project in cooperation with suppliers who will provide roadside equipment and after-market devices to deliver the services.

### What is the current status?

In 2015, the Rijkswaterstaat project team published the initial specifications for the Cooperative ITS Corridor project, in consultation with interested suppliers. These specifications have now been refined and extended. The basic aspects of the technology were successfully tested in practice during several demonstration projects. Through to mid-2017 there will be four large-scale tests on different stretches of the Dutch section of the international ITS Corridor. These tests will provide the project team with input to finalise the technical specifications of the services. The tests should also provide information about the feasibility, constraints and costs associated with the large-scale roll out of the technology.

### Time frame

2015	Research stage
2016 / 2017	Pre-deployment: refinement of the specifications and extensive testing
2017	Start of the tender proces
2018	Operational services

### For more information

Do you want to learn more about the project or contribute to the development of these three cooperative services as a supplier? Then visit [www.its-corridor.nl](http://www.its-corridor.nl) or contact the Rijkswaterstaat project team: [c-its-corridor@rws.nl](mailto:c-its-corridor@rws.nl).

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