What if traffic regulates traffic?

How the Dutch government and business community join forces to enhance everyday traffic
What if traffic regulates traffic?

What if traffic automatically uses the right lanes and traffic lights start communicating? What if heavy traffic is recognised and various types of traffic can be distinguished? What if roads are able to report their condition and provide a speed advice accordingly? What if parking spaces are able to indicate availability? And ask you whether you would like to reserve and automatically pay for it?

Worldwide, and certainly in a small and densely populated country such as the Netherlands, urbanisation continues and there is an increasing lack of space. At the same time, we see a huge increase in the use of mobile devices and the rise of the Internet of Things. This offers unprecedented opportunities for organising mobility in a smarter way and making better use of limited space. New technologies enable people, devices and systems to share information and communicate.

“The Talking Traffic Partnership showcases the Netherlands’ strengths: government and businesses are jointly taking responsibility to improve the flow of traffic in urban areas using smart new technologies.”

Minister Melanie Schultz van Haegen
Ministry of Infrastructure and the Environment
The number of traffic jams will increase by 38% in 2021 and even double in cities.

The economic loss as a result of traffic jams will amount to more than €1.7 billion in 2021 (at present €840 million).

Urbanisation

70% of the Dutch population lived in urban areas in 1990. Today, this has increased to 83% and is expected to rise to over 90% in 2050.
Connecting users and systems
bringing new intelligent solutions to road users and cities

A huge amount of data is available about speed, driving behaviour and location. By being continuously ‘connected’, we can share this data. Various public and private parties work together in the Partnership Talking Traffic to not only make data and knowledge available, but also to share it with road users real-time and cater to road users’ personal needs with tailor-made applications. Together, these parties develop innovative services to enable road users to ‘look beyond their windscreen’.

Traffic and vehicles are becoming increasingly smarter. We are already using information technology to make better use of road space and, for example, to improve traffic flows and thus, limit travel times.

In the near future, every driver will be able to make use of real-time travel information and driving support via a dashboard screen, navigation system or simply via a smartphone.

86% of the Dutch population has a smartphone

There are more internet connections on earth than people
Concrete types of data that are becoming available to road users

- In-vehicle signage and speed advice
- Individual real-time data on potentially dangerous situations and road works warnings
- Prioritising (conditioned and general) of groups of road users at traffic lights
- Provide road users with real-time data from traffic lights (first 20% of all Dutch TLIs)
- Optimising traffic flows through traffic lights
- In-car parking data

All these developments will make it possible to not only improve traffic flow, but also to improve traffic safety. Road users will be able to anticipate changing conditions during their trip. Travelling times will be reduced. Emissions will be lowered. In short, mobility, accessibility and livability will improve and the number of traffic accidents will be strongly reduced.
The Partnership
Talking Traffic

The Partnership Talking Traffic is a collaboration between the Dutch Ministry of Infrastructure and the Environment, 60 regional and local authorities and national and international private companies.

These partners are working together to accelerate development and deployment with regard to retrieving and organising traffic light data (cluster 1), to process, enrich and distribution of a wide variety of data and convert this into real-time and made-to-measure data sets and information (cluster 2) and to provide this information to a wide variety of road users (cluster 3) though their smart phones, PNDs and in-car systems. This joint co-investment program seeks to enhance the availability of intelligent data for a wide group of road users (cars, trucks, public transport, emergency services, cyclists). This way, the safety and sustainability of traffic and transport can be enhanced resulting in the reduction of travel times and, eventually, lower public expenditure.

Private parties not only cover these three clusters with their knowledge, they are also a good reflection of today’s technological information society. From the knowledge and authority of, for example, one of the largest suppliers of telecommunication and ICT services, to start-ups that disrupt the market with daring ideas and fast time to market.

Mixing global and local players in this Partnership speeds up development and deployment of new driver assistance services and lays the ground work for the next levels in connected and automated driving while delivering new services by the end of 2017.
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Clusters and expertise

1. availability of data
   Working towards a new standard for traffic light components

2. cloud services
   Providing information services to as many end-users as possible

3. information services
   Data and cloud services that transport, enrich, merge and combine the data with data from other sources (public or private)