



2 stages * Hackathon by HERE * Graduation Awards * Network Lounge* Food Trucks* workshops * speeddating with employers * and more!



Scan the program



Tuesday June 4th @ TU/e Campus









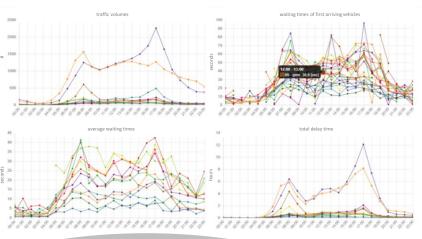
Verkeer. A services platform that fosters cooperation in traffic management



A road administrator is responsible for a wide range of tasks. Traffic control settings have to be frequently adapted in response to current *and* anticipated traffic conditions. At the same time the road user expects to be proactively informed about these conditions. All of this requires reliable traffic monitoring and control assets that have to be monitored and regularly maintained. These tasks are just of few of a road administrator's responsibilities.

A coherent network-wide view of all parts of the transportation system facilitates these tasks. verkeer.nu offers a central environment that enables different task-oriented divisions of the road administrator to carry out effective and efficient traffic management in a uniform, and flexible manner.







"Creating intelligent infrastructure" is the motto that defines us. For over 100 years we've been delivering technology and services to our clients.

Safety, sustainability and accessibility: those are the challenges our clients face and that we are committed to.

We are a solution provider and we deliver dedicated and integrated solutions to our clients. We both deliver and maintain the instruments used to monitor and control traffic.

Furthermore we provide a services platform that enables a road administrator to monitor its assets remotely and it assists in the deployment of traffic management strategies at the network level.





Enabling chip technology for automotive: Truck Platooning











NXP is the world leader in enabling chip technology for automotive.

In the Dutch ecosystem several innovation projects have received worldwide recognition, e.g truck platooning, shock wave traffic jam reductions, grand cooperative driving challenge, all applying NXP technology

Secure V2X technologies, ITS-G5

Flowtack: the smart traffic solution

Creating cleaner, safer & more accessible cities

Creating liveable cities

Traffic volume in our cities is ever increasing and roads are already reaching capacity.

Yet the sustainable cities of tomorrow must increasingly be more accessible and be clean, safe places to live.

Proven results

Deventer is the first municipality in the Netherlands to adopt Flowtack, and it's already reaping the benefits:

- 40% reduction in vehicles stopping at junctions
- 7-13% reduction in CO2 emissions
- > 10% reduction in nitrogen oxide

Analytics = Control

By optimising traffic signals, Flowtack keeps cities moving and cuts pollution.

Our cloud-based solution collates and analyses multiple sources of traffic data in real time.

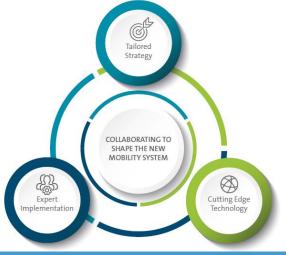
Sophisticated forecasting and instant calculations adapt traffic light controls at network level.





As an independent, international engineering and project management consultancy, we are leading the way in sustainable development and innovation.

By connecting strategy with technology, we enable our clients to implement innovative & human-centred solutions to shape the new mobility system.



Accelerating the benefits of smart vehicles

An integrated, safe system approach using human-centred technology

Safe deployment

Cooperative & automated vehicles can help make traffic safer, more efficient & sustainable.

Our challenge is to leverage their benefits, while managing the risks.

Integrated system approach

To fulfil its potential, we have developed an integrated safe system approach based on:

- Trust & acceptance
- Network and road design
- **Control and information systems**

to embed smart vehicles in current and future traffic systems.

Driving a revolution

Short-term action for long-term gain

Through our collaborative approach, we are enabling clients to take action today with a perspective for their long-term vision. We can accelerate the adoption of smart vehicles today and help our clients harness the benefits for the future.





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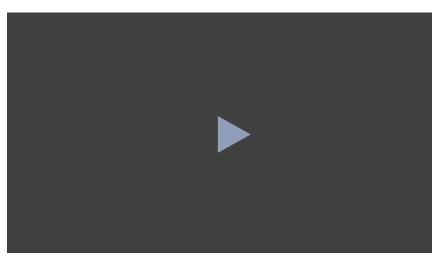
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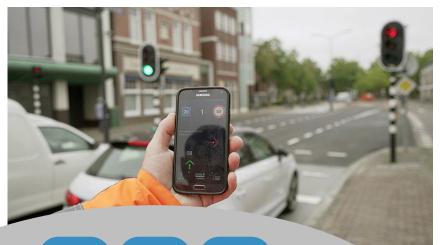
THE POWER OF PREDICTION WITH SMART TRAFFIC







Smart Traffic optimizes traffic flow today while preparing the city for a driverless tomorrow!



Sweco plans and designs the cities and communities of the future. We use modern technology to contribute to sustainable, clean and safe mobility. By applying smart techniques and processes we make travel cleaner, more efficient and safer for everyone.

Smart C-ITS solutions for a safe, sustainable and efficient traffic system

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From Hilversum to

dφnniq

energising mobility

Increasingly congested cities are leading to a strong need for solutions that contribute both to economic interests and the quality of life. It is necessary to create new platforms that can better facilitate the mobility needs of the future, especially by taking into account the needs and properties of individual participants in the mobility system. The GreenFlow service from Dynniq is a C-ITS application that provides smart support to road users when driving through the city. We offer several GreenFlow priority solutions for various road users; e.g. truck drivers, cyclists, pedestrians, users of public transport and emergency vehicles.



Dynniq, a pioneer in the field of mobility and energy solutions, enables safe, sustainable and efficient movement of people, data and goods through advanced technology.

Northern Netherlands: The largest "living lab" in Europe for the development of autonomous transport



In an area of 11,000 km2 with 2 million inhabitants we have been turning ideas and concepts into reality for over 3 years now. The North of The Netherlands currently is the *only* region in Europe with autonomous transport pilots in *all four modalities*.

The three provinces offer the *space*, *good infrastructure* (physical and with 5G also digital) and opportunities for specific pilots. In this they are a *flexible and reliable partner* and facilitate innovative projects.

The region offers a *calm and safe environment* for the development and testing of smart mobility concepts in both urban and rural areas. After a successful pilot in the North of The Netherlands projects can be rolled out in other areas in The Netherlands and Europe.



RAIL, ROAD, AIR and WATER







The provinces of Groningen, Fryslân, and Drenthe see autonomous transport as a means of maintaining and improving the *attainability and liveability* in regions with a decreasing population.

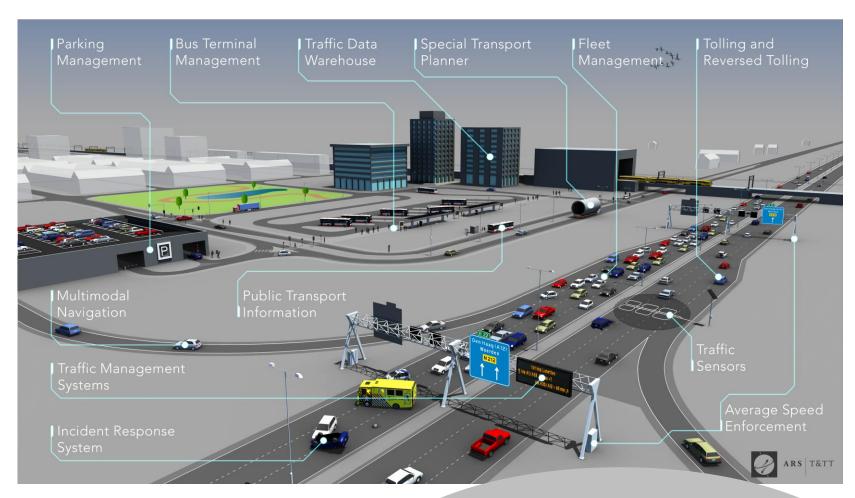
The provinces are collaborating with ProRail, Arriva, Dronehub GAE, Groningen Seaports, 5Groningen and Robotuner to become the main pilot region for autonomous transport by road, rail, water and air. They *call on* (public) transport companies, manufacturers and knowledge institutions to come up with affordable, smart, flexible and sustainable concepts regarding autonomous transport.





providing traffic and transport technology solutions





As an international market leader, ARS Traffic & Transport Technology (ARS T&TT) is providing traffic and transport technology solutions to private and public organizations for 20 years. Our solutions are implemented in Europe, Asia and North America.

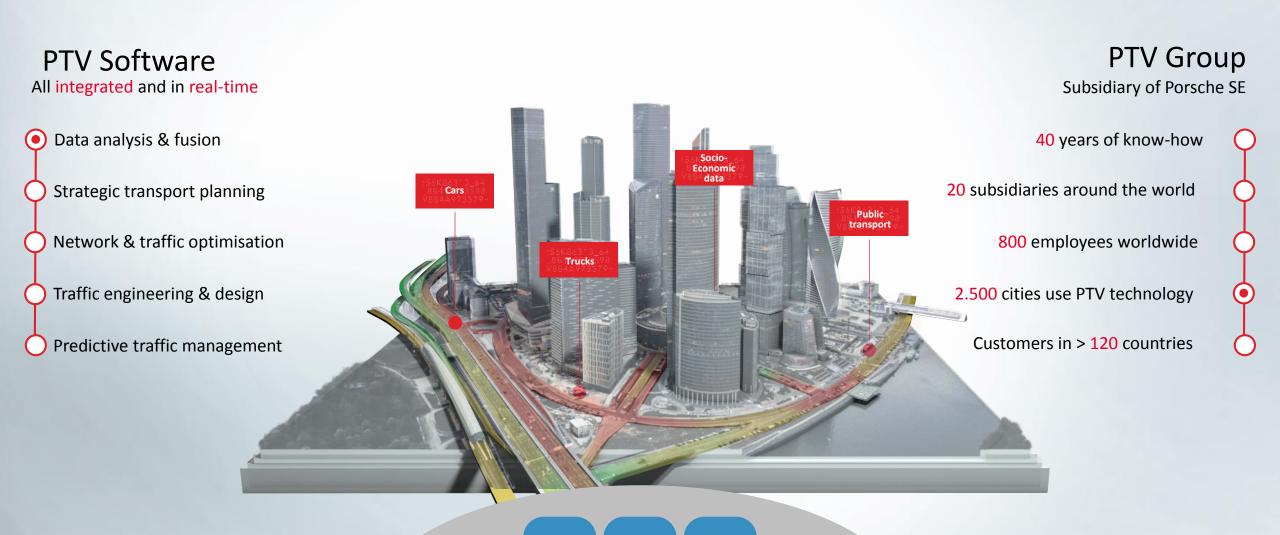
It is our mission to provide our clients with cost-effective technology products that optimize the utilization, operational costs and safety of existing and new infrastructure in the world-wide trend of urbanization and increasing mobility.

We are a partner to our clients and take full responsibility from the design, implementation and integration stage of our customized products to the operations stage. Our international team of experts cover the required disciplines in this domain, from consultants and traffic engineers to project managers and service managers to software architects and developers.





Smart software for the future of mobility



ALWAYS **ACCESS** TO RELEVANT DECISION MAKING **MOBILITY DATA**

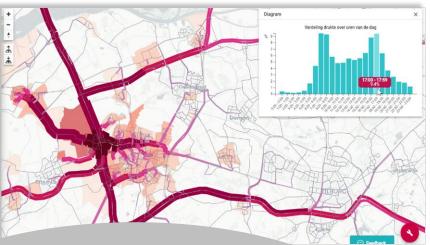


OmniTRANS next offers the possibility to achieve more effective mobility objectives by offering better and faster insights in mobility data with its software. **Available on any device**.











Goudappel Coffeng is committed to improving the quality of life by deploying our mobility expertise and so to contributing to a healthy, sustainable and attractive society.

We believe (smart) mobility to be a key driver for liveability and economic vitality; when userfriendly technology is combined with the city's heartbeat.

Goudappel Coffeng therefore is your purpose driven, integrated and evidence-based Smart Mobility partner.



Towards a Dutch Admittance Procedure for Experimental Automated Vehicles

Legal Basis EU Type Approval VSSF VDLF Monitoring

Combining existing building blocks:

- Legal Basis: law granting exemptions and Experimentation law
- European Type Approval: robustness mechanics
- ➤ Vehicle Safety & Security Framework (VSSF): robustness software
- ➤ Vehicle Driving License Framework (VDLF): robustness automated driving
- ➤ Monitoring: automated driving behavior







on the road, safely and reliably

As a Dutch government body, dedicated to safe and reliable vehicles, RDW facilitates the Netherlands as the frontrunner in Smart Mobility. Our primary task is to monitor the safety and environmental aspects of current and future vehicles. Therefore RDW cooperates with a diverse range of public, private and knowledge based stakeholders. Based on 'learning by doing', we continuously thrive to improve the overall safety of the vehicle ecosystem.

WORLD'S FIRST

in total admittance procedure and autonomous vehicle readiness (KPMG 2019)



More information about connected automatic vehicles? Visit our website!

metropolitan regionamsterdam

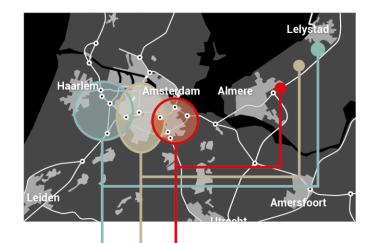


Hotspot for smart mobility

In Metropolitan Region Amsterdam (MRA), we are working together closely on Smart Mobility solutions in operational traffic, in public-private partnerships with the industry and knowledge institutions.

Because of this, MRA has developed into one of the leading regions for Connected and Automated Driving, Interactive Traffic Management, Mobility-as-a-Service, and Smart Logistics. We have the digital and road infrastructure in place for you to test and deploy innovations that contribute to our mission. Also, we created a single point of contact for you to get in touch with us easily.

Curious? Meet us at stand 3.20, where we can discuss our ideas and experiences.









TRAFFIC FLOWS DURING MAJOR EVENTS





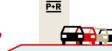










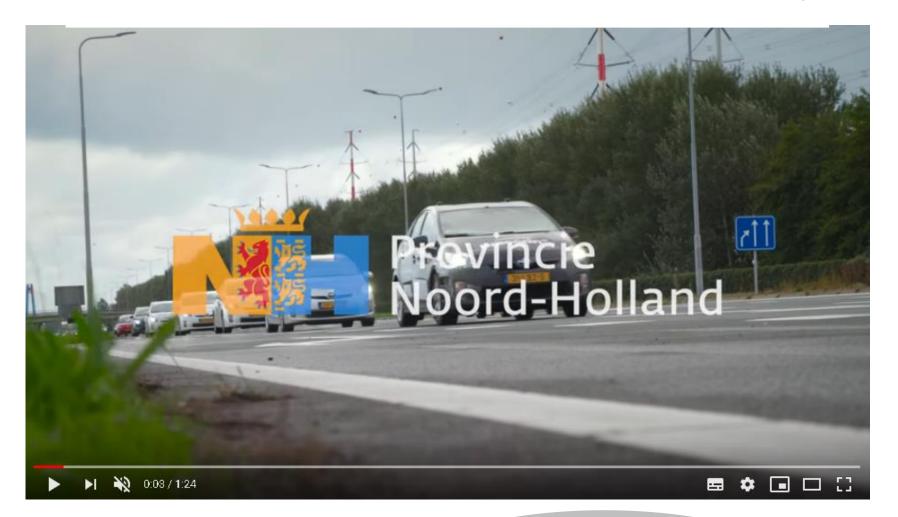






Province Noord-Holland: Testbed Smart Mobility



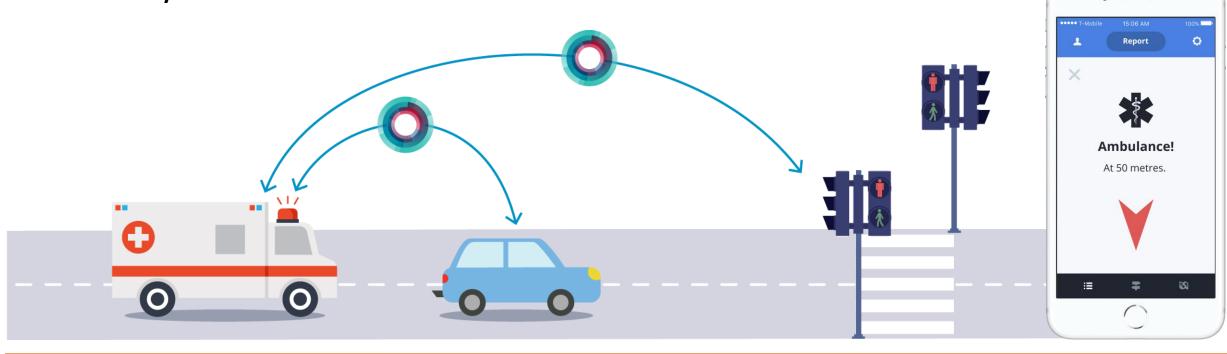


With our partners we do operational field tests in the vicinity of Schiphol Airport. Especially on Connected and Automated Driving (e.g. CACC)



Be-Mobile goes full speed to **revolutionize traffic** and help road operators, the logistics sector & car industry to **grab control over their mobility**.





Our traffic brands Flitsmeister & V-Traffic bring real-time traffic information and safety warnings into the vehicle via smartphone apps and in OEM navigation systems.







Smart Mobility IS SMART COLLABORATION

Rijkswaterstaat manages the main road and waterway networks in the Netherlands on behalf of the Ministry of Infrastructure and Water Management. To make our road and waterway networks future-proof, we work and innovate in collaboration with market parties, knowledge institutes and other road and waterway operators in the areas of smart mobility, intelligent transport systems and data sharing and application. Together we make use of the opportunities offered by new information and communication technologies in relation to traffic safety, accessibility and quality of life in numerous projects. We offer companies and knowledge institutes space to experiment and support practical testing on public roads and waterways.

This smart collaboration enables us to keep the Netherlands accessible, safe and liveable, both now and in the future.



DATA

Collaborating by sharing and releasing more and new data to get a better digital picture of what is happening on our roads and waterways



USER BEHAVIOUR

Road and waterway users make optimal use of information services and technology in vehicles and vessels



INFRASTRUCTURE

Future-proof infrastructure designed for new generations of vessels and vehicles



VESSELS AND VEHICLES

Controlled introduction of new generations of vessels and vehicles





Talking Traffic: C-ITS connecting road users and road side through 4G/LTE

Intelligent solutions for road users and cities

- Based on cellular technology
- No special equipment required
- Large number of users
- Public-private investment
- International standards and interoperability
- About 40 use cases commercially deployed
- Vehicle to vehicle, vehicle to infrastructure
- Deployment, not just pilots
- Scalable
- In vehicle signage
- Individual real-time warnings and speed advice on potentially hazardous situations and road works
- Prioritisation (absolute and conditional) at traffic lights
- Real-time information at traffic lights (TTG, TTR, GLOSA)
- Traffic flow optimisation through intelligent traffic lights
- In-car parking data, both static and dynamic





Talking Traffic is a collaboration between the Dutch Ministry of Infrastructure and Water Management, 60 regional and local authorities and some twenty national and international service providers, automotive parties, and private companies from the traffic and telecommunications industries to enhance the availability of intelligent data for a wide group of road users.

This improves road safety, traffic flow and sustainability of transport, resulting in the reduction of travel times and, eventually, lower public expenditure.

Connected Transport Corridors



Digitisation: the answer to logistical challenges

A collaboration between more than 40 partners, including the State, Rijkswaterstaat, regional authorities, market participants, transport providers, and industry associations.

Our ambition for 2030 on the Connected Transport Corridors:

- 10-15% improvement of traffic flows
- Reducing the amount of accidents with 50%
- 2000€ savings per lorry per year
- Savings of 30 million km driven and 50.000 tons of CO2 per year.



In the Netherlands, we have an advanced new-generation infrastructure, smart traffic control systems and a tremendous amount of data at our disposal. If we combine all of this and are willing to share data, we can get a much firmer grip on our traffic and improve traffic flow. As part of the Talking Logistics partnership, Connected Transport Corridors is bringing together road managers, regional hubs, shippers and transport providers to take on this challenge. Frontrunners that are translating tomorrow's trends into their day-to-day practice. We've selected the three busiest routes for this purpose: the corridors of Amsterdam West Side, Greater Rotterdam and South Netherlands.

www.talking-logistics.com

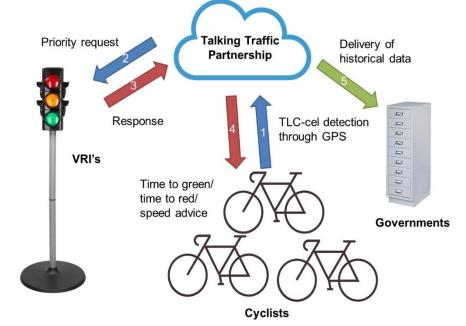
Access to bicycle data through smart TLC solutions



Traffic light use cases for bicycles:

Collaboration between more than 40 partners, including the State, Rijkswaterstaat, regional authorities, market participants, transport providers, shippers and industry associations.

- Conditional priority
- Time to green
- Time to red
- Speed advice
- Optimisation of intersection flows
- Parking route guidance





Talking Bikes is a data procurement project stimulating bicycle app providers to connect to the Talking Traffic Partnership, thus enabling them to offer innovative services to cyclists. Thanks to the connection to traffic light controllers, cyclists can receive conditional priority at intersections, receive information on time to green and time to red and follow an optimal speed advice to smoothly pass by busy crossroads. Data that is produced can then be purchased by authorities to enable policy analyses and improve bicycle infrastructure and facilities. Cycling in the Netherlands is second nature, but there is always room for improvement: this government has set itself the goal to convince 200,000 commuters to move to cycling, alleviating growing congestion on roads.

www.talking-traffic.com



The Ministry of Infrastructure and Water Management and seven regions have developed seven MaaS pilots together, which can be scaled up to a national level.

In 2019, 24 market participants will compete for the execution of these pilots.

They will be facilitated as much as possible, for example through standardisation and cooperation between transport providers. One of the objects of these large-scale pilots is to test what works and what doesn't in terms of behaviour, business cases and policy impact.

These market participants are going to share data. With this GDPR-compliant data the Ministry, regional authorities, market participants and transport providers will all learn how to optimise the overall mobility system.



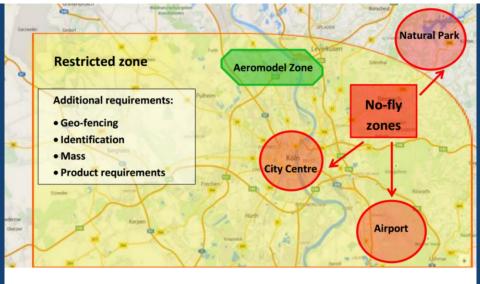
Europe open to drones:opportunities for the Netherlands



The use of drones can contribute to achieving climate targets, for example in precision agriculture. In passenger and freight transport, drones create new, direct connections and prevent congestion. Yet the emergence of these systems also calls for new privacy and safety & security legislation.

Social challenges are decisive in the ongoing technical development of drones. Therefore, use cases are set up in four areas of application to gain experience and share knowledge in the market:

- Inspection & Infrastructure
- Smart Logistics
- Safety & Security
- Agriculture & Nature



OPEN CATEGORY



New EU drones regulation

Principal objectives:

- to establish and maintain a high uniform level of civil aviation safety in the Union
- to facilitate the free movement of goods, persons, services and capital in the fields covered by this Regulation
- providing a level playing field for all actors in the internal aviation market
- to improve the competitiveness of the Union's aviation industry.

Smart asset management using data from vehicles



talking maps



The vehicles of road inspectors of the province of Noord-Brabant provide data on, among other things, road markings and traffic signs, which are used to enrich high-definition (HD) maps. These maps can be used directly by road managers for smart asset management, while in the future such detailed maps will probably be necessary for self-driving cars and lorries.



Provincie Noord-Brabant









connection systems

NUMBER PLATE REGISTRATION

Using high-end infrared and color ANPR cameras we deliver results that meets the highest requirements of our customers.

MOBILE MAPPING AND PARKMANAGEMENT

We offer Parkmanagement and Assetmanagement services with high-end 360° Mobile Mapping and ANPR technology.

BICYCLE COUNTING AND TRACKING

By combining and integrating multiple techniques like video, Bluetooth and Wi-Fi Connection Systems can collect data on bikes for further analysis.

TRAFFIC STUDIES

Using a variety of identification techniques (ANPR, Bluetooth and Wi-Fi) different types of traffic researches are possible.

TRAFFIC MEASUREMENT

We offer techniques and systems for data and image delivery for a wide range of traffic purposes like researches, monitoring, counting and classification.

ADR REGISTRATION (DANGEROUS GOODS)

Connection Systems is specialized in extensive ADR registration, where we use ADR tuned infrared and colour cameras.

LAW ENFORCEMENT

Connection Systems uses their ANPR camera experience in safety and law enforcement solutions.

CROWD MANAGEMENT

Connection Systems has developed various techniques and technologies to support Crowd management.

VIDEO SURVEILLANCE

Connection Systems delivers safety agencies such as Police and event-organisers the use of camera surveillance on temporary and mid-long term basis.

Connection Systems is an experienced, innovative high-tech organization that is specialized in collecting, processing, reporting and presenting of guaranteed high quality data and images for multiple purposes in the field of (temporary) ITS and high-level security, surveillance and law enforcement.

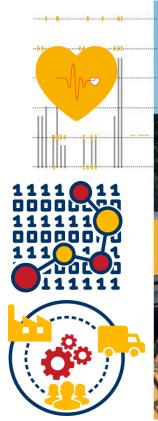




Heijmans Bits & Beats

We give infrastructure a heartbeat







Heijmans' ambition is to contribute to a healthy living environment in public spaces. We believe smart use of data helps to create safer, cleaner, healthier and happier cities.

We are the Smart City Operator for cities who increasingly add sensors to public assets. With our Infra Healthcare Platform, Heijmans installs, maintains, monitors and manages these assets. We convert collected data into vital information and thus keep a finger on the pulse of a healthy infrastructure and contribute to Smart Mobility.



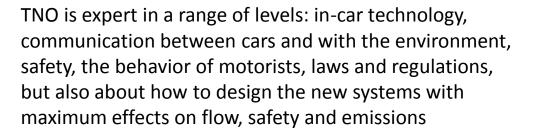
ACCELERATING SMART, SAFE & SUSTAINABLE MOBILITY



TNO connects people and knowledge to create innovations that boost the competitive strength of industry and the wellbeing of society in a sustainable way.

As a knowledge institute, TNO makes an important contribution to the development, realization and effectiveness of new mobility systems and the social impact.

'INNOVATION FOR LIFE'





Connected-automated transport

TNO has high-quality facilities to predict the impact of connected-automated transport on highways and in cities, ranging from simulations environments to testing in controlled conditions and testing between normal traffic.

















Metropolitan Region Rotterdam The Hague Province of Zuid-Holland

Public and private stakeholders in our region work closely together on innovative mobility concepts. Enterprises, SMEs and researchers can experiment on a small scale to test new concepts and roll out successful innovations through pilots and field labs. By investing in innovation, share knowledge and good cooperation, the most successful pilots can easily be rolled out on a large scale.



TEST

We have an innovative environment and facilities to experiment with the latest technologies, such as automated vehicles, autonomous ships and 5G communication technologies.

ROLL

We invest in real-world pilots, we share knowledge and collaborate in real-world pilots through public-private partnerships.

LAUNCH

We scale up projects with the highest potential, such as the first self-driving shuttle in the world, driving with up to 3 trucks using Adaptive Cruise Controle and 200+ intelligent traffic lights.









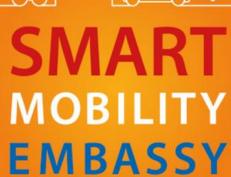


twitter.com/MobilityEmbassy









ACCESS TO THE **NETHERLANDS**



TRUSTED

COMMUNITY

Be connected & move smarter with CGI – Ready?



Experience the commitment®

- With 77,000 members in 400 offices in 40 countries, CGI offers high-end consultancy and service integration.
- CGI provides E2E consultancy on design, implementation & maintenance of ITS solutions, helping customers achieving their business objectives in the most innovative and efficient manner.





- Transportation & logistics move our world. And the evolution of ITS is drastically transforming the operation of such systems.
- This brings along demands on a higher level of transport-driven life quality, with sustainable, safe, efficient and comfortable driving experience hitting top of the list.

We as CGI, are at the forefront, using cutting-edge sensing, information and communication technologies to drive innovation in a wide range of ITS domains.





A nationwide portal for traffic information







Processing a vast amount of traffic data and making it available is our daily business. NDW facilitates the partners by assuming responsibilities for them:

- Purchasing data
- Quality monitoring
- Purchase, maintenance and management of ICT systems
- A shared data portal
- Standardisation and transition management
- Shared Services



National Data Warehouse for Traffic Information

In the Netherlands, the National Data Warehouse for Traffic Information (NDW) is an organisation best known for the product that gives it its name: its enormous database of both real-time and historic traffic data. Yet NDW is more than its database. NDW has 19 public authorities working together on collecting, storing and distributing traffic data. This data is used to provide traffic information, to ensure effective traffic management, and to conduct accurate traffic analyses. The objective of all this is better accessibility and traffic flow.

The partners in NDW are: the central government, all the provinces, all the urban regions, and the municipalities of Amsterdam, Rotterdam, The Hague and Utrecht.



Helmond: city of Smart Mobility

Gemeente Helmond









Helmond is one of the two host cities of the ITS European Congress 2019 and part of the Brainport Eindhoven region; an innovative top technology region.

The city of Helmond is a smart mobility living lab. The Automotive Campus in Helmond is the national and international hotspot, meeting place and business location for automotive and smart mobility business.

We are partners in EU smart mobility projects and initiatives such as EIT Urban Mobility, C-Mobile, AUTOPILOT and MAVEN, member of EUROCITIES Mobility Forum and member of the board of Polis.



SmartwayZ.NL is the innovative mobility programme to improve traffic flow in the Southern Netherlands...

Working on the smoothest, safest, smartest and most robust mobility network possible in the Netherlands. Together with the Ministry of Infrastructure and Water Management, Rijkswaterstaat, the provinces Noord-Brabant and Limburg, various cities such as Eindhoven and Helmond, companies and knowledge institutions. Working together on smart solutions. For today's trip and tomorrow's world, that is what SmartwayZ.NL is all about.

Our ambition is to use Smart Mobility to realise **optimum accessibility** and the **smartest road network in Europe**, with the **traveller** in the role of **key player** in a network of mobility systems and consumer of smart solutions and services.

















Brainport Eindhoven is part of Europe's technological backbone and enjoys global recognition as a centre for innovation and automotive solutions

Brainport Eindhoven is a world-class top technology

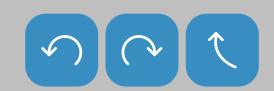
region. High tech and design are combined with an advanced high-end manufacturing industry and entrepreneurship. Close collaboration and sharing knowledge are part of our DNA and characterise the open innovation culture which makes Brainport smart and strong.

The highly developed and dense traffic network, perfect traffic management and the 4G penetration rate make the region a living lab suited for developing, testing and implementing smart and green mobility applications.

ecosystem of world class suppliers, knowledge institutes and service providers in the automotive industry. From design, architecture, car and equipment manufacture to innovative new technologies and green, smart mobility solutions.



Technology and networks are clustered on **campuses**. Each campuses houses an ideal mix of companies, talents and knowledge institutes with a specific expertise





SMART CITY ON THE MOVE













At the heart of the Brainport Region, the city of Eindhoven operates at the forefront of smart mobility applications and solutions.

We are proud initiators and members of projects such as MaaS Pilot, ITS Corridor, EIT Urban Mobility, C-Mobile.