



ARS | Traffic & Transport Technology



smartmicro
SMART MICROWAVE SENSORS GMBH

ARS T&TT & smartmicro Traffic Radars

RADAR SERVICE



Comprehensive traffic image

High quality traffic information measured by radars: intensity, queues, speed, fractions.



Connected system

Connection to and from the radar allows for remote collection and monitoring of radar detection of the traffic.



Non intrusive system

Installed on light poles, the radars are non intrusive and easily accessible for maintenance.



Reliable system

Radars have proven to be more reliable than other detection systems looking at robustness, availability, performance degradation

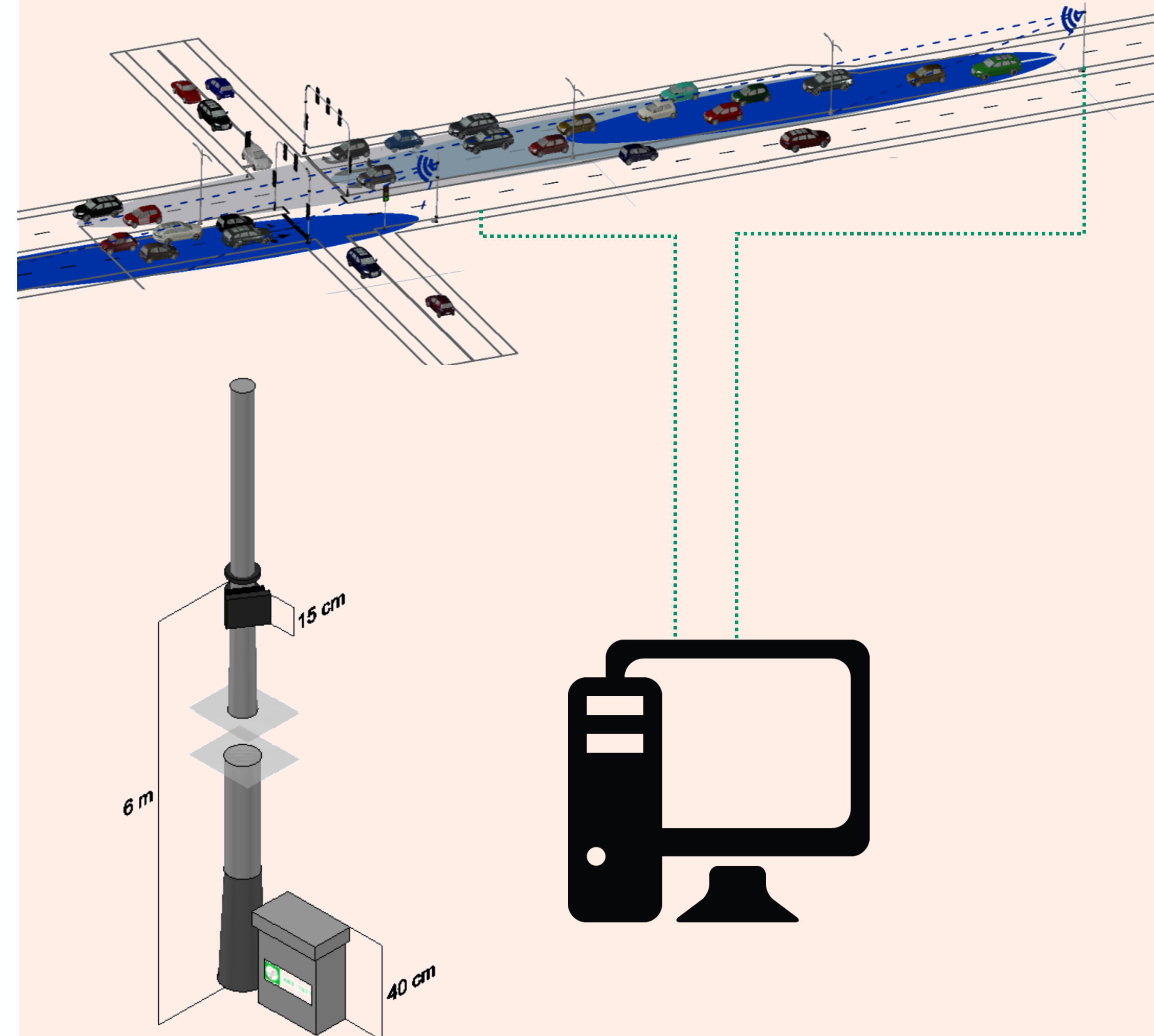
Roadside system

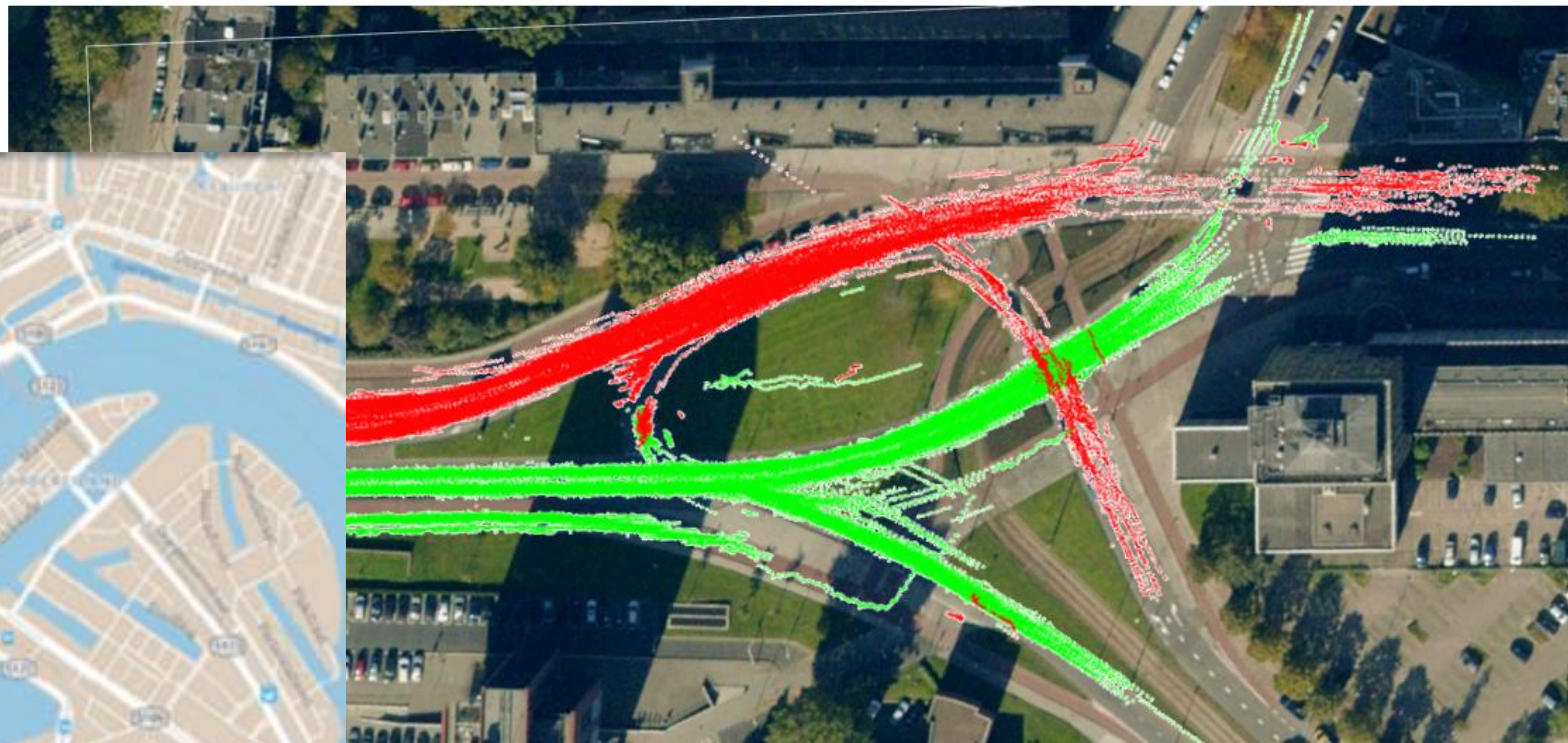
ALL IN ONE

The Roadside System enables installed radars to operate as an independent unit. It allows to remotely customize the radar detection with location-specific information.

It provides a flexible system for data collection and data processing. It offers the possibility to monitor 24/7 the systems of the full network and coordinate a reactive maintenance.

Independent unit to detect, collect,
and process radar data





AFM Rotterdam

CASE STUDY

AFM Rotterdam is the latest development in radar technology using smartmicro radar systems in combination with the ARS T&TT Roadside System. The goal is to have no negative impact on the network performance (livability, safety, flow).

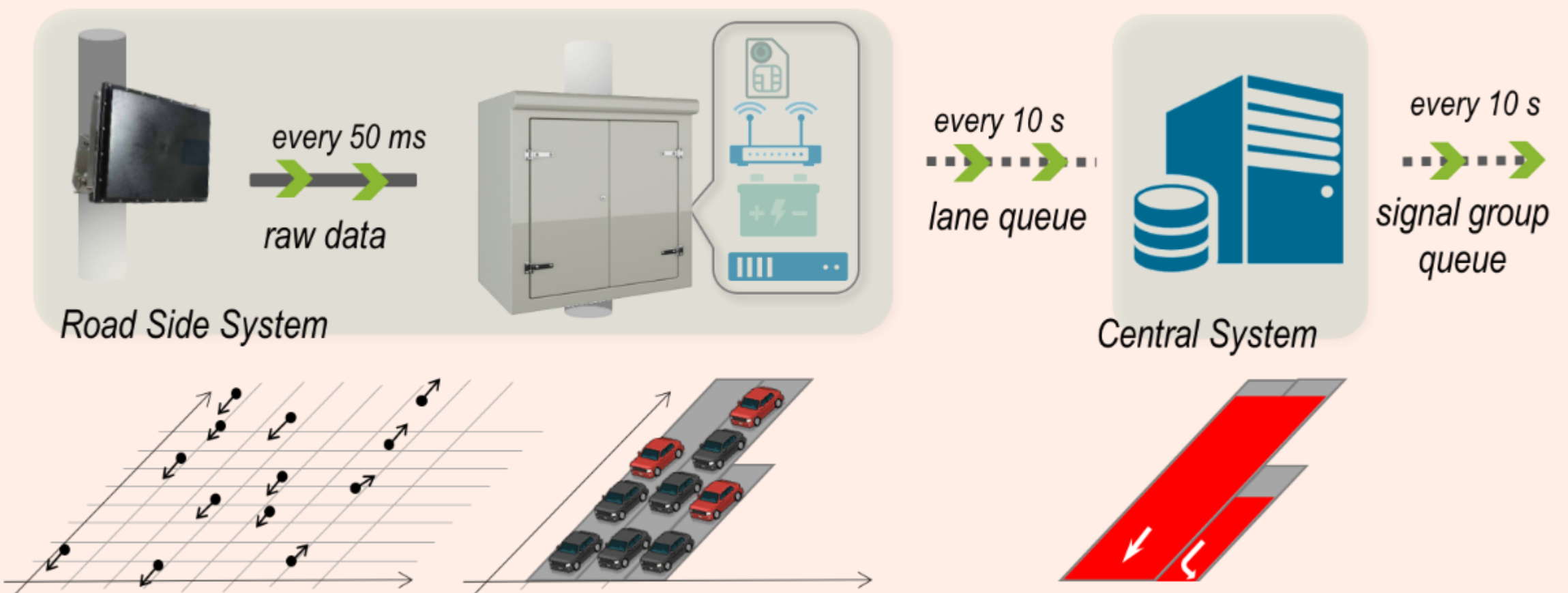
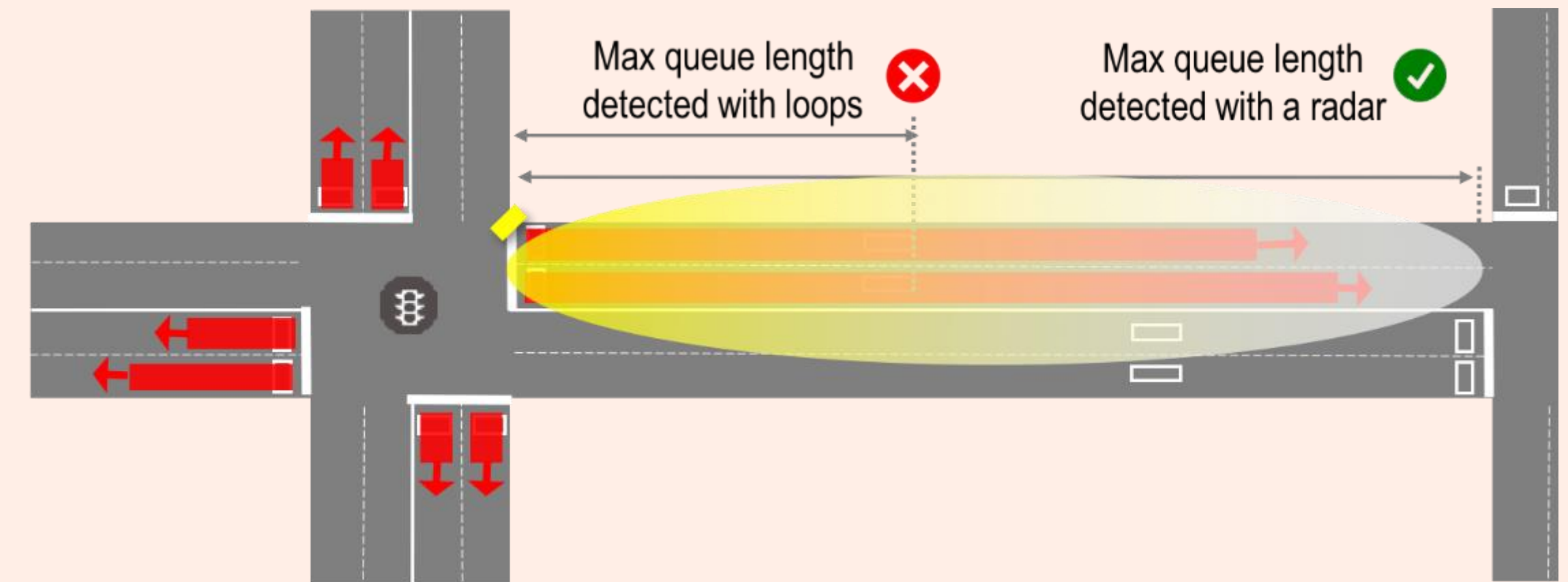
Queue estimation

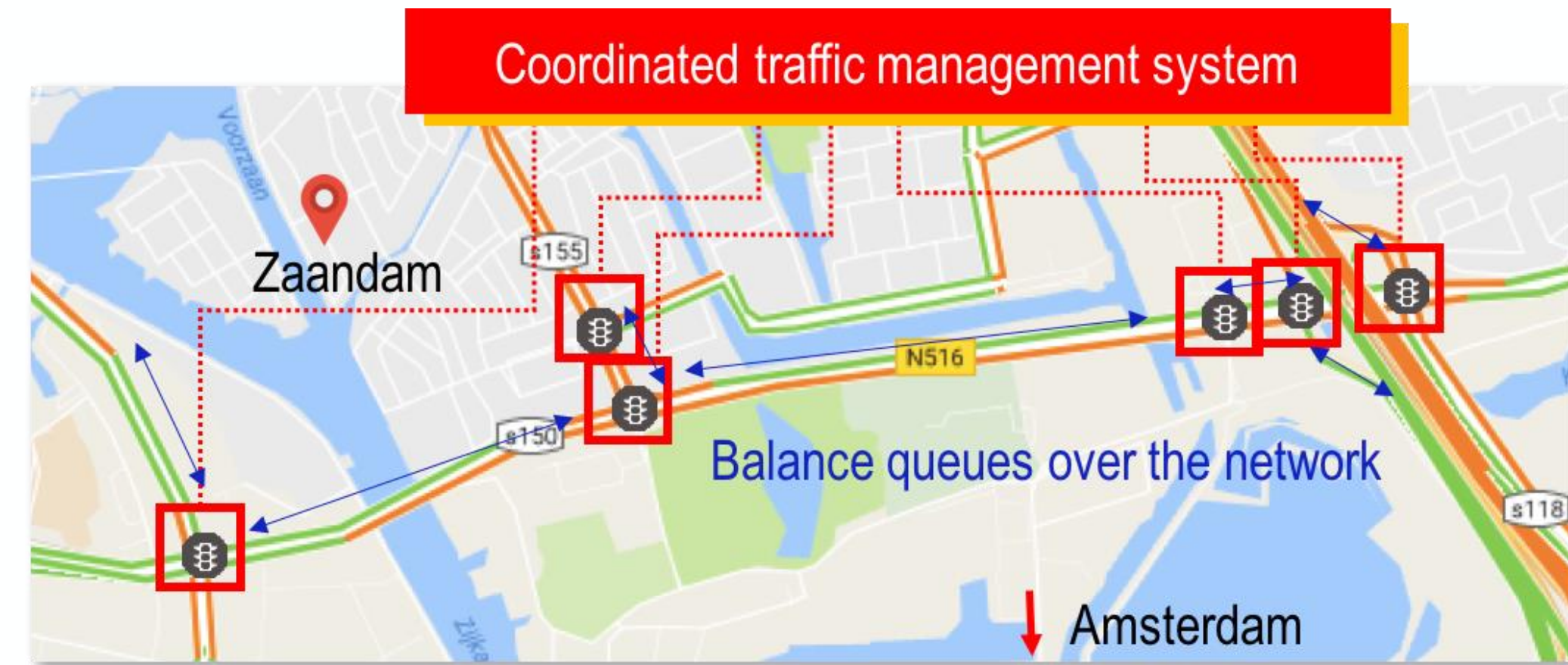
SMART INTERSECTIONS

Radar detection of traffic enables to estimate queues more accurately than standard sensors such as inductive loops. Queue length is estimated by interpreting and filtering radar data.

It measures dynamics of queues by aggregating data in appropriate time intervals. It provides input to traffic management controllers with a reliable and robust data stream of traffic queues.

For an effective and cost-savings traffic management strategy

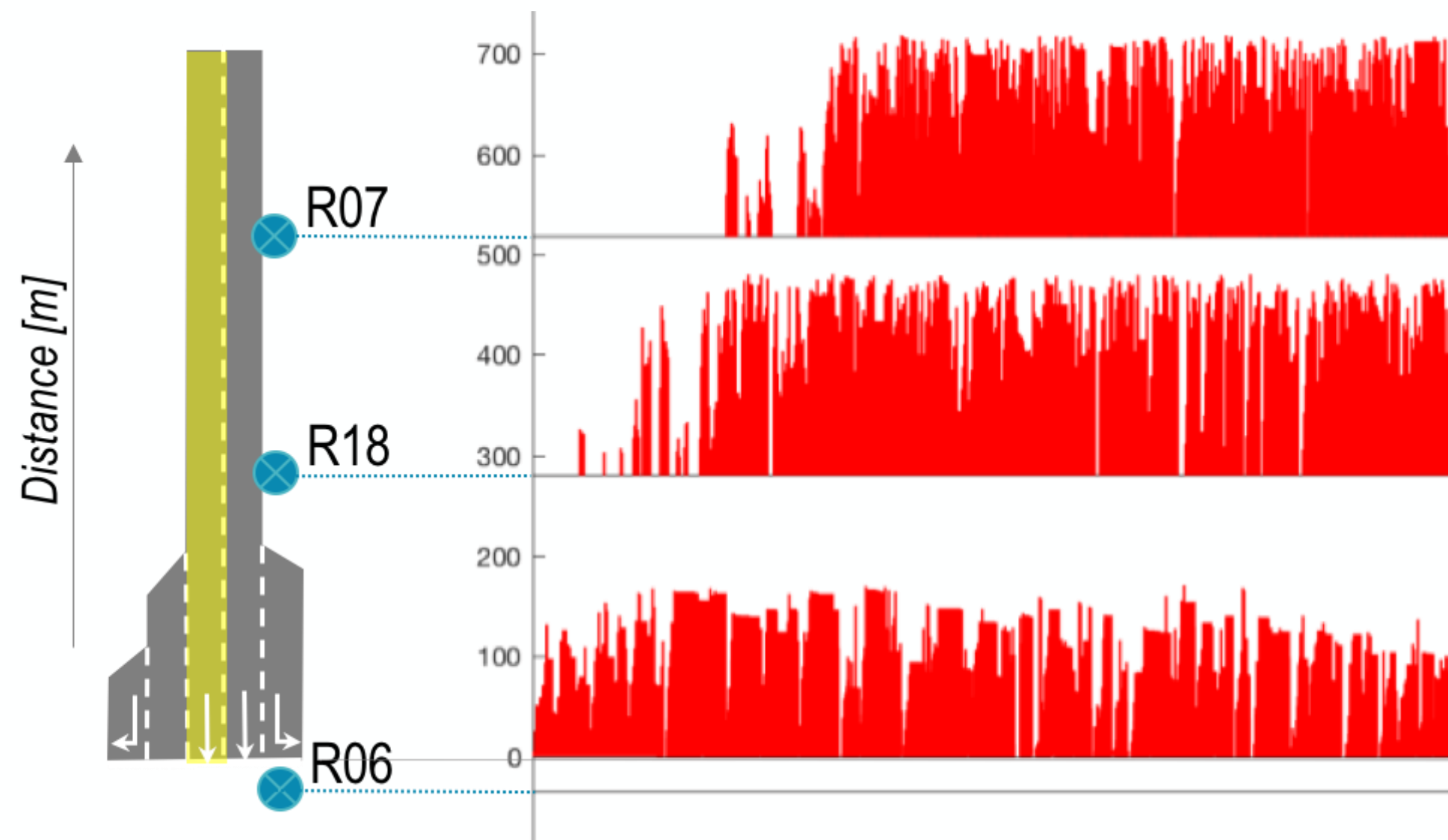




PPA Noord

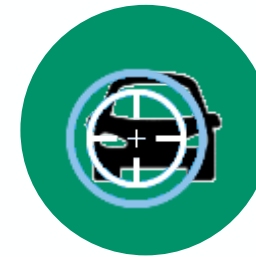
CASE STUDY

The pilot Amsterdam Project had the intention to verify the use of Queues at traffic lights detected with radar and loops to identify if they can optimize buffer space use with the goal to prevent gridlocks for commuters traveling between Zaandam and Amsterdam.



ARS T&TT & smartmicro Traffic Radars

RADAR SERVICE FOR TRAFFIC MANAGEMENT



Accurate detection

Real traffic situation (intensity, queues, speed) measured by radars.



State-of-the-art control strategy

Detection and estimation of diverse traffic information offer the opportunity to develop advance network control solutions.



Vehicle-hours saving

Implementation of radar detection system in the traffic control strategy can lead to save 20% of vehicle hours compared to standard solutions.



Cost-efficient

Detection of traffic along long stretch of roads with an efficient number of radar sensors with easy maintenance.

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