ABSTRACT (ENGLISH)

REASON
For cyclists no measures are known in the field of ITS (i.e. in Dutch 'DVM' or 'Dynamisch verkeersmanagement' i.e. Dynamic Traffic Management). There is for example not a standard for a dynamic travel information display for cyclists (in Dutch a 'Fiets-DRIP'). Neither do we have any insight in the cyclist's needs for actual travel information.

AIM is more comfort, ease and speed for cyclists through the application of the techniques and resources from ITS. Research whether ITS-measures for cyclists can be applicated in city streets and correspond with the cyclist's needs.

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inno-V Consultants examined which ITS-measures are applicable for cyclists. Cyclists have simple questions such as: Do I have to hurry myself to catch the ferry or train? Do I cycle rapidly enough so that the next traffic light shows green or can I better do quietly? Does a downpour come or should I better wait? Will there be free spots in the parking lots for cyclists at the stations?

The following measures have been researched and did result in a system requirement for two feasible solutions (1+2) and a note regarding still to be sought out questions (3):
1. Dynamic travel information displays for cyclists (in Dutch 'Fiets-DRIPS'), can help cyclists in their route choice on their way between the North of Amsterdam and Central Station. Between the two points cyclists can choose between several ferries. Dynamic travel information displays can be placed along the cycle routes, near the last decision point; these displays with route advices will shorten waiting times for the ferry, especially during off-peak hours.
2. Green light announcement or Waiting time prediction, so that cyclists know about hundred meters in advance of a traffic light if they should hurry up or slow down their speed.
3. Techniques for better detection of cyclists. Nowadays the first cyclist coming at a traffic light presents himself by pressing a button or by passing a detection loop. The first solution is not cyclists-friendly and the second solution doesn't apply to modern bikes with carbon-frames. RFID maybe a solution to solve these two problems. Thanks to RFID it maybe also possible to give cyclists selective prioritisation at traffic lights, so groups of cyclists get quicker green than an individual cyclist.

EFFECTS for cyclists are a more comfortable journey, less insecurity about travelling times and less waiting times for traffic lights. Over all the use of cycles will increase as a result of ITS. Thanks to modern detection techniques tactical information can be obtained about the numbers of cyclists on main routes and about route choices.