











## Coordinated Traffic Management in the Amsterdam region

Towards network traffic control
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City of Amsterdam















#### ► 743.000 inhabitants

- ► 423.000 jobs
  - Business services 101.000
  - Financials 46.500
  - Health service 54.000
  - Government & social insurances 27.500
- Schiphol Airport
  - Jobs 62.000
  - 46 million passengers
- Floraholland flower auction















## There are currently two major projects on Coordinated Traffic Mangement in the Amsterdam region:

- Improving the traffic flow on the A10 ring road
- National Pilot Coordinated Traffic Mangement











## **Traffic Jam Proof**

Short term traffic jam approach by the Minister of Transport, Public Works and Water Management

- inventory of ideas within the entire ministry
- assessment by experts
- realisation in 2008 and 2009

## Proposal for a Plan of Approach

 Implement Traffic Jam Proof to achieve part of the Noord-Holland Network Vision

## Goal of the Amsterdam Traffic Jam Proof project

 'Improving the traffic flow on the A10 ring road' as part of realising the Noord-Holland Network Vision









## **Policy goals**

Local policy goals 'Noord-Holland' Network Vision











- National policy goalsTraffic Management 2020
  - city ring
  - city network
  - corridors













## Goal

Keep the ring road A10 flowing

## Regulation tactics

- Increase the outflow to the S roads
- Control the influx from the S roads
- Control the influx to the A10 (A1, A2, A4, A8)

## In broad terms there are four types of 'measures'

- Installing or re-adjusting traffic lights
- Adaptation from traffic lanes and markers
- Installing traffic filtering lights (TDIs)
- Installing dynamic route information panels (DRIPS)









## **Project**

This project consists of three phases:

- 1. Base of support for the programming of the measures
- Drawing up specifications, evaluation plan and regulation scenarios
- 3. Realising and evaluating measures

#### Elaboration of phase 1:

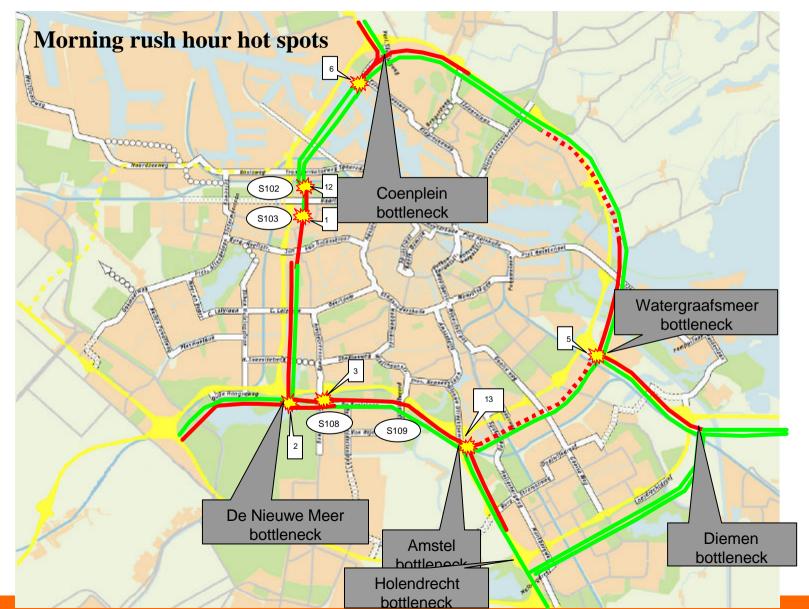
- 0. Exploration
- 1. Start of the project
- 2. Work session per sub-area
- 3. Standard approach per connection
- 4. Determining effects for the selected measures package
- 5. Drawing up work plan for phase 2 and 3



















## **Preconditions**

- No increase in the use of urban roads
- Prevent blockades
- No obstruction Specific Target Groups (Public Transport, Emergency Services, bicycles)
- Traffic safety









## Cooperation

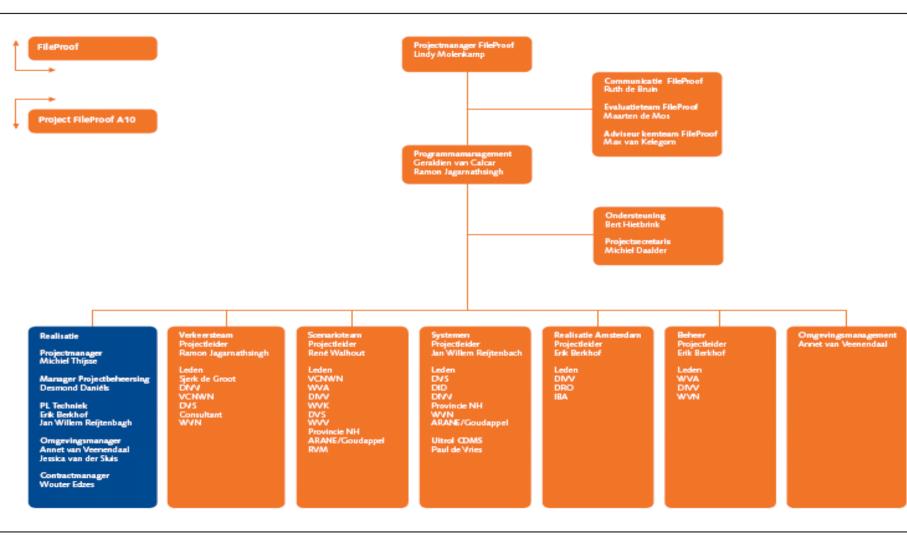
- Project is managed by the Noord Holland Network Vision steering group
- Project team: City region of Amsterdam, Province of Noord-Holland, Municipality of Amsterdam and Directorate-General for Public Works and Water Management Noord-Holland
- From the beginning, every road manager is involved in the project













existing loops

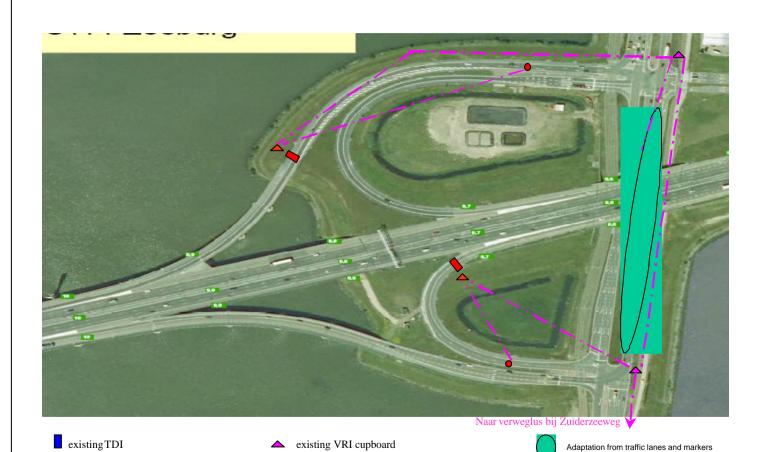
new TDI

• new loops









existing TDI cupboard

new TDI cupboard

S114

Cables











# Regulation through traffic filtering lights (TDI)









## Traffic control system (VRI)











## **Implementation of measures ... in short**

Traffic handling on the A10 is becoming worse  $\rightarrow$  desire to regulate  $\rightarrow$  ON

No heavy blockade on urban roads → regulate heavier →

#### REGULATE BETWEEN MAX-MIN

Blockades on urban roads are increasing  $\rightarrow$  OFF











## Dynamic route information panels by the roadside









## Network status en Scenario's

- Traffic statue automatic give the status of the network by the colours (red, yellow, green)
- Computer suggest a head scenario
- Employee road traffic control centre makes decision about scenario
  - ► The employee can be anyone from the cooperation
- Computer decide the details for the scenario and suggest traffic measures









#### **Evaluation**

#### measuring

- On all connections of the ring road by
  - visual counting
- Counting loops
- Intensities on:
  - ► the A10
  - Slip roads
  - On VRI- control cross-roads in Amsterdam
- Travel time on the A10 and main roads in Amsterdam
- Study road users









## **Planning**

December 2008	December 2008	Begin 2009	March 2009	2010
Install1 <sup>e</sup> series bermDRIP's and TDI's.	Scenario's available on paper	Adjust systems.	Scenario's working	Start experience proof









## Challenges

- Operational Traffic Management (Traffic Management Centres)
- Cooperation
- Translate effects Traffic Management towards decision makers









## Thank you for your attention

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