Integrated network management



Problem description

Integrated Network Management or INM (Dutch: Gecoordineerd Netwerkbreed Verkeersmanagement, or GNV) is a traffic control approach in which traffic management measures are deployed and work autonomously and coordinated on predetermined problem situations at intersections, routes and networks.

Currently, a limited number of road authorities use the INM approach. An important reason of other road authorities for not using INM are the (initial and maintenance) costs of setting up a system are relatively high. A study has already been carried out for the municipality of Utrecht (project: INM-light) to see where the approach can be made cheaper, without having to make too many concessions to the functionality. We would like to take this research a few steps further, with also looking into possibilities to apply the approach on other traffic modes (bike, bus, tram, ...).

Assignment

This project is a joint project between Transport & Planning (civil engineering) and Arane Adviseurs (<u>www.arane.nl</u>). The following are possible research questions:

- In what directions can the ideas of INM-light be further implemented? Or is a different set-up of INM possible that can lead to similar results with less investments?
- Are there possibilities to 'enrich' existing control approaches (for example a green wave or a network controller) with components from the INM approach?
- What adjustments can we make to the control approach to make it applicable to cycling and public transport problems?

There is a possibility that this assignment can be carried out together with a road authority. Affinity with control tactics/techniques is useful.

Information:

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