

ISA for serious speed-offenders: two systems tested

Speedlock

Limits the car continuously to the local speed limit (plus a margin)

Speedmonitor

Combination of a Speedlock and SpeedAlert

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Gives visual and auditory feedback when exceeding the speedlimit

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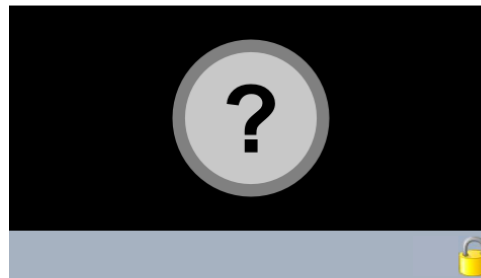
Based on the magnitude of speeding it will autonomous proceed in a temporary Speedlock



a) Defold display of speedlock



b) Display when speeding (speedlock)



c) Display when speedlimit unknown



d) Display when using the emergency button

The field operational test

51 serious speedoffenders

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The participants own cars

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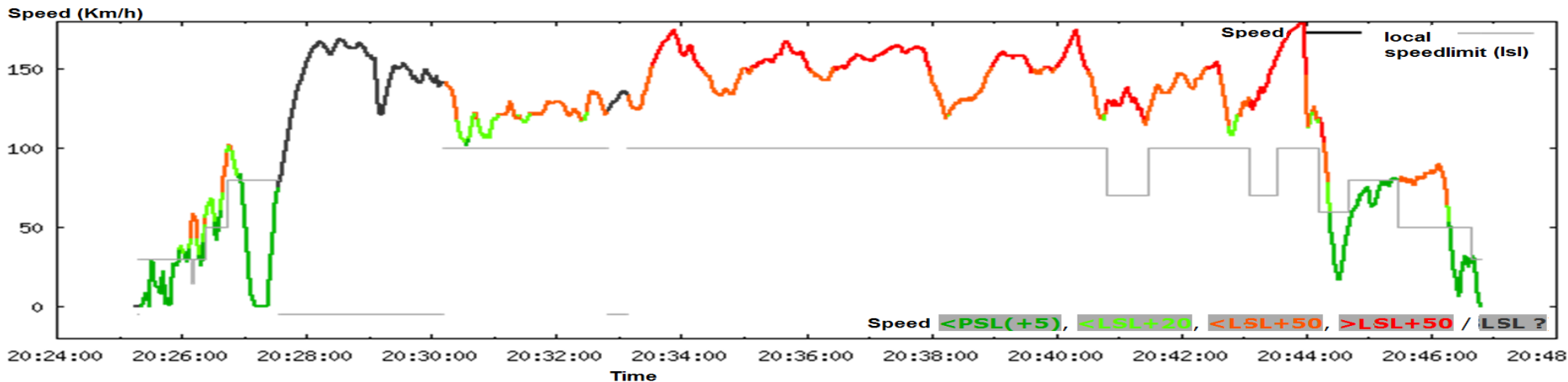
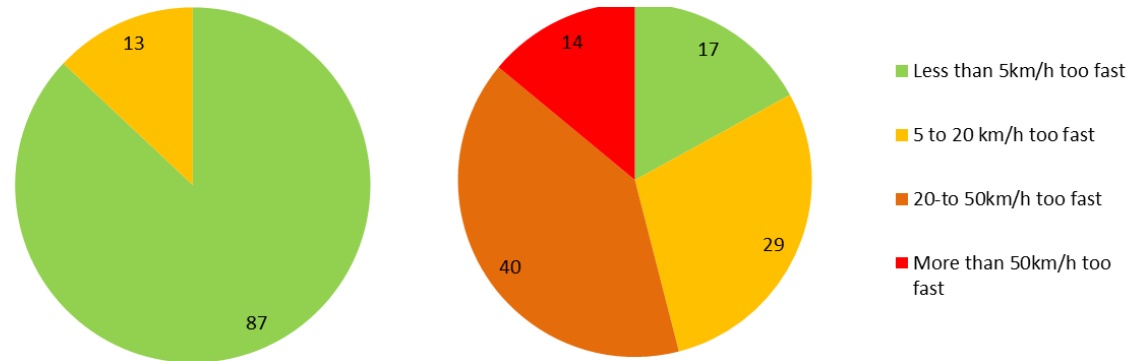
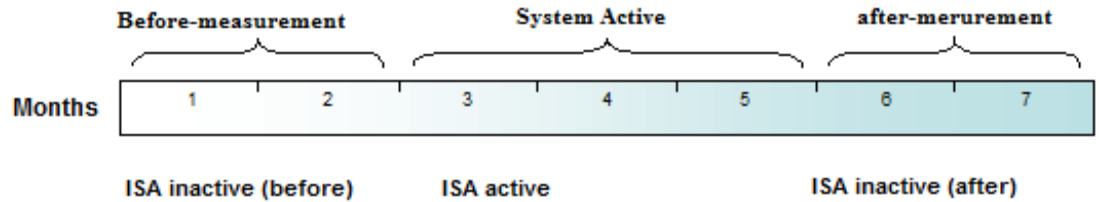
Province Noord- and zuid-Holland

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Before-measurement, System active, after-measurement

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Measuring quantitative and qualitative (questionnaires)



Results

Severity and the number of exceeding speed limits is drastically reduced

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All indicators (average speed, V85, V95) show a decrease

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The participants mostly returned to their old driving behaviour

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The serious speed offenders found more excuses to use the emergency button

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Experts prefer the speedlock

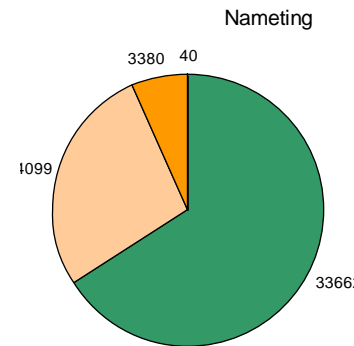
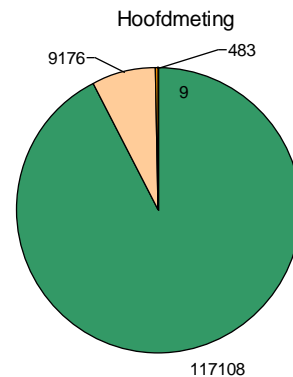
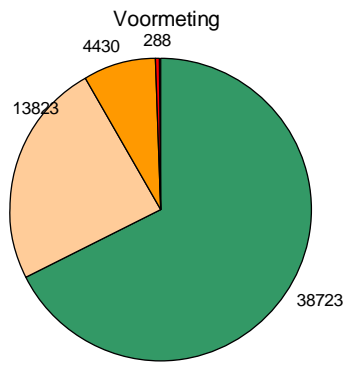
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Results show a positive effect on traffic safety

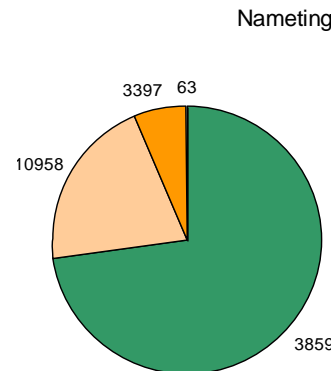
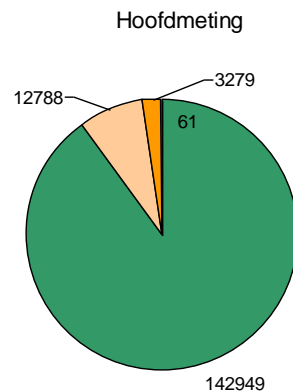
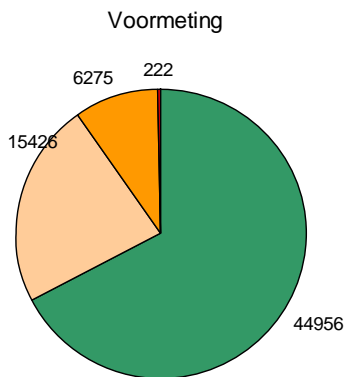
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Not yet ready for implementation as measurement

Speedlock



Speedmonitor



Technical barriers of the tested systems as a penalty measure

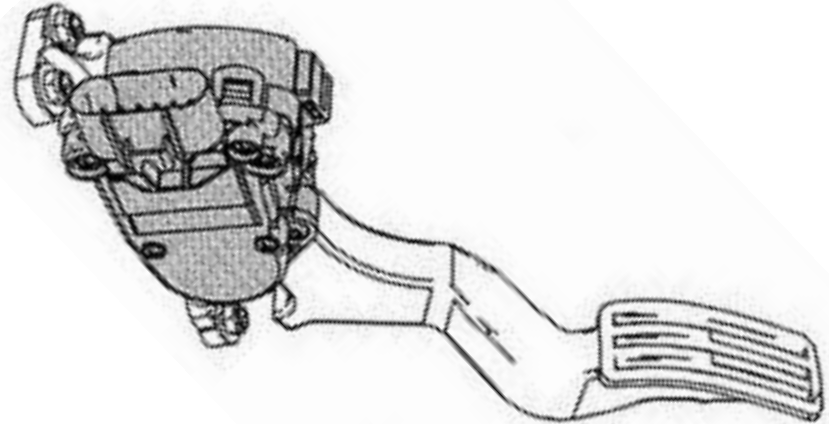
Only cars with an electronic
throttle can be equipped
with the system

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Could be overridden using the
cruise control

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Not yet fraud-proof



Other concerns when implementing an ISA system as a penalty measure

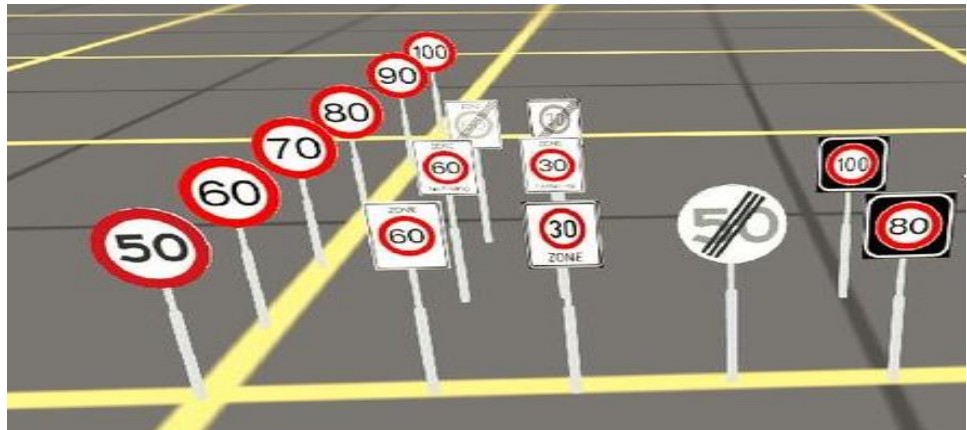
Back-office important

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A correct digital speedmap
including dynamic speed
limits

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Liability issue



Questions?

Speedmap within the project

Navteq speedmap

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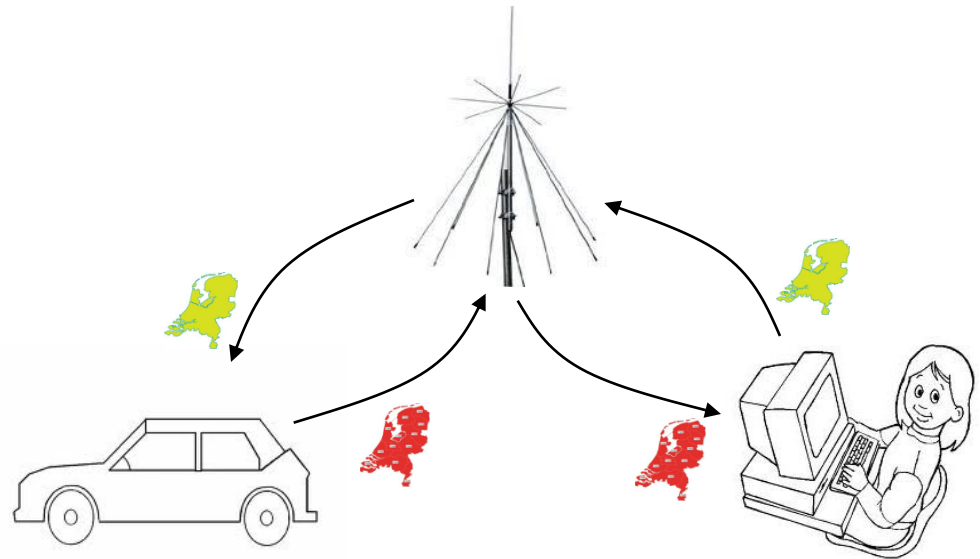
Updated in the beginning by checking the most frequently used roads

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If emergencybutton was used, the participants had to enter the reason. One alternative was "incorrect speedlimit". These signals were directly checked and adjusted in the map.

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According to the participants 94% of the limits in the map were correct in the end of the test



Waarom drukte u de Xe keer op de knop? (XX:XX)

- Verkeerde limiet
- Noodsituatie
- Storing in apparatuur
- Anders

Ok