

C-ITS for Trucks (CITRUS)

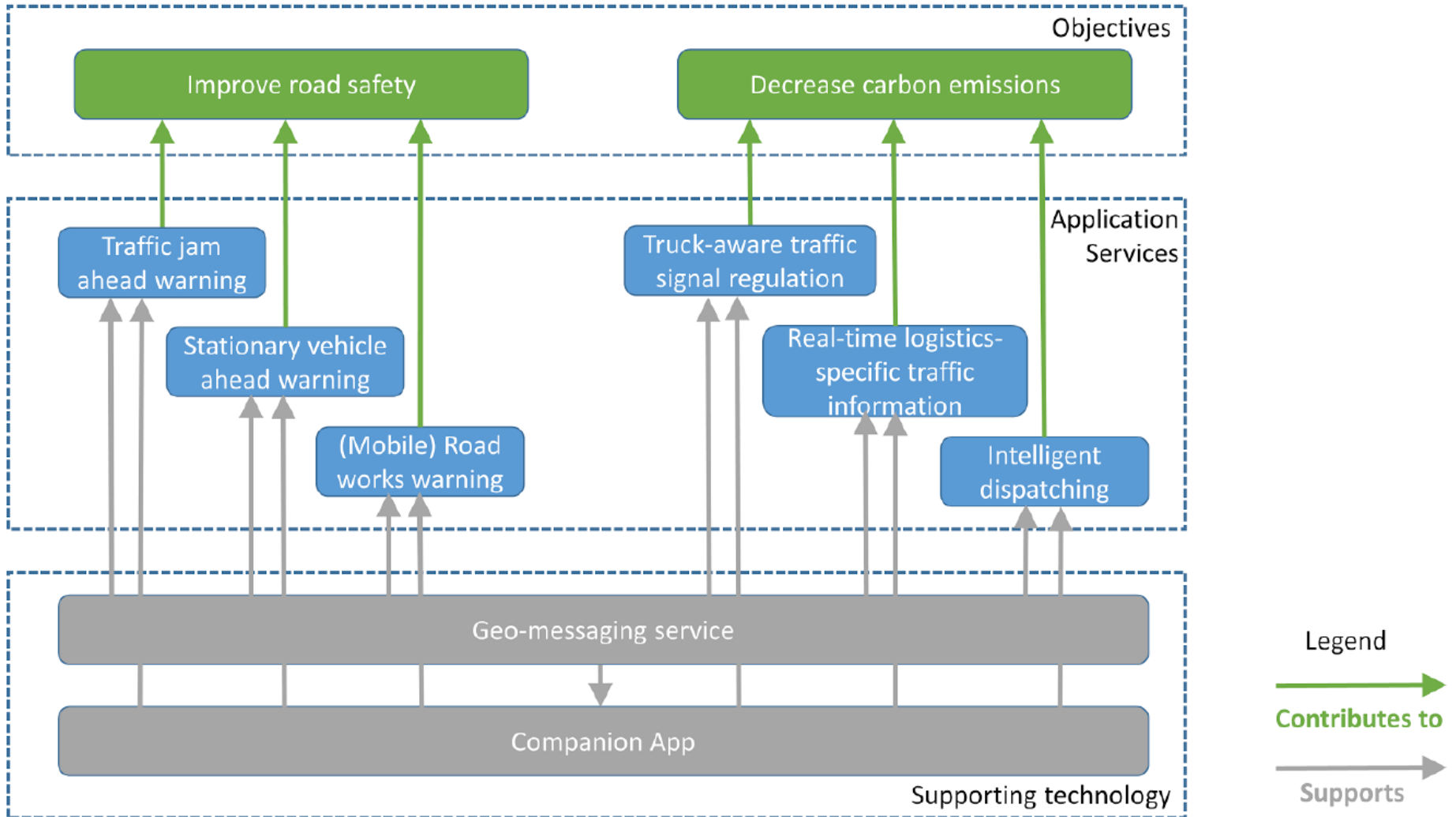
Sven Maerivoet



Project background

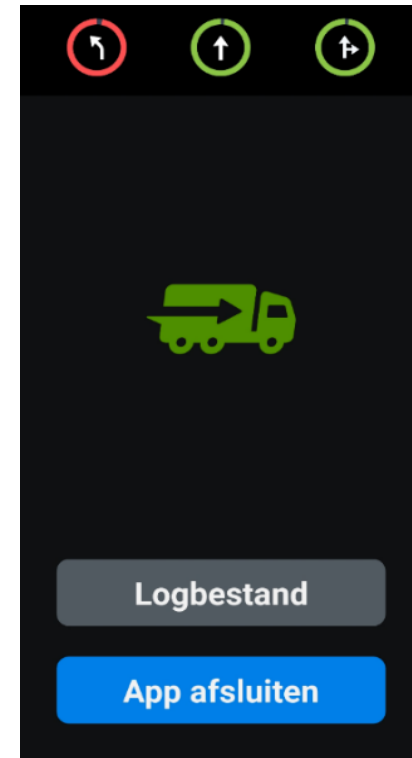
- Develop a 'companion app' for truck drivers
 - Increase traffic safety
 - Lower emissions
- CEF call (2015) grant 26824831
 - Duration: 2016–2020
 - Partners: Be-Mobile (coordinator), Colruyt, TML, Flemish government (MOW and AWW), Ports of Antwerp and Zeebrugge
- Services tested:
 - 3G/4G cellular V2I communication
 - HMI research
 - RWW, IVS, GLOSA+prio, emerg. veh., intelligent dispatching, ...

Methodology



Front-end development

- CITRUS Meister (based on Flitsmeister)



Experimental setup



- Deployed for 120 truck drivers
- Specific experimental protocol:
 1. Profiling survey
 - 2. First testing phase**
 1. Acceptability survey
 2. Baseline measurement ⇔ first rollout
 3. Acceptance survey
 - 3. Second phase**
 1. Acceptability survey
 2. Baseline measurement ⇔ second rollout
 3. Acceptance survey
- Corrected for bias, external conditions, ...

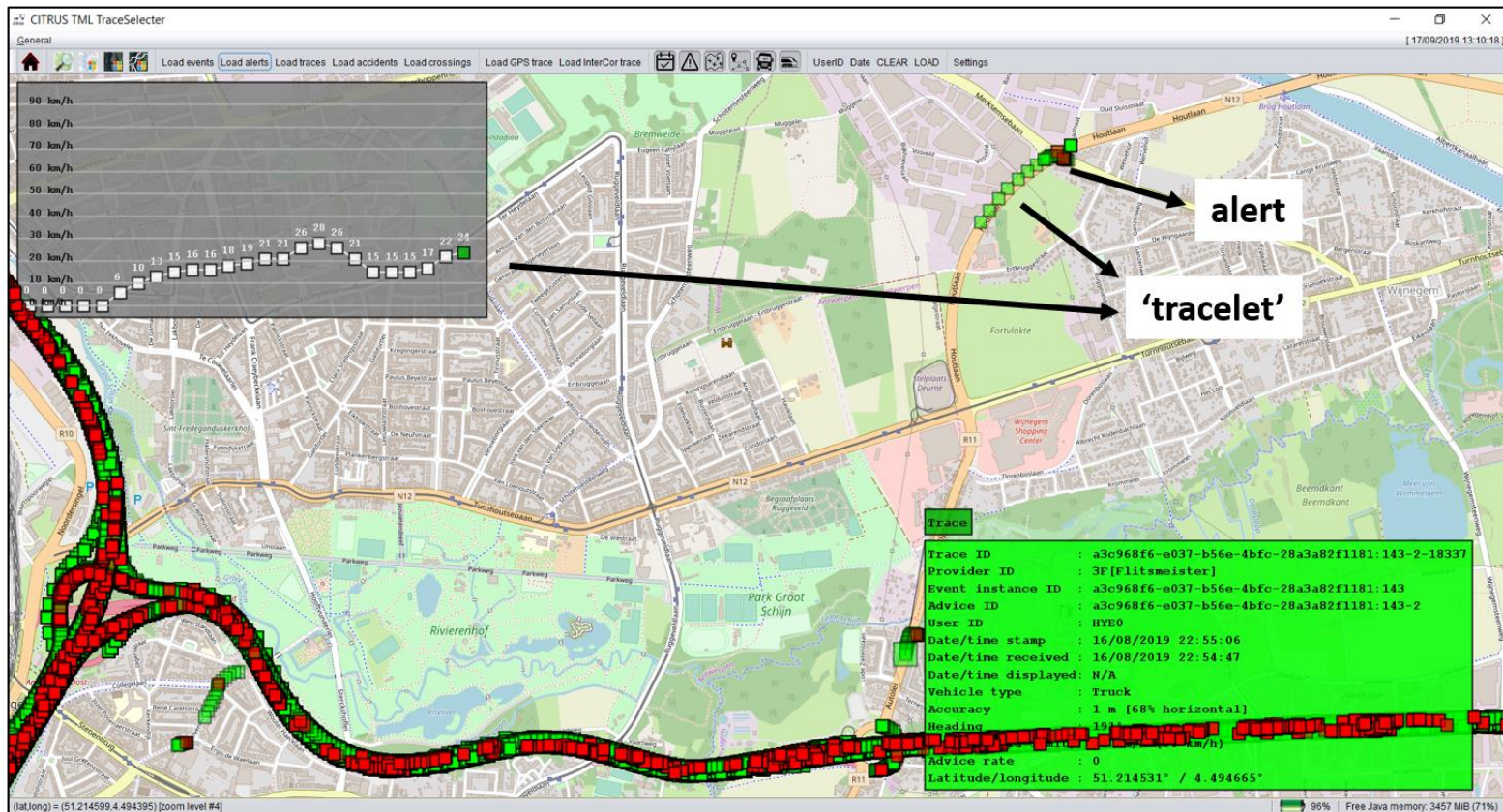
Impact analyses

Robust measure

Δ min/avg/med speed,
 ΔT or ΔX in % of speed drop, ...

Per driver, alert type/group, phase

- Experiments are still ongoing
- Analysing speed patterns in light of events and alerts



Profiling, acceptability, and acceptance

- **Profiling** (education, gender, age, driving habits, ...)
- User acceptance:
 - **Acceptability**: *I would feel more save with a warning service in my truck...*
 - **Acceptance**: *I felt more save thanks to the warning service in my truck...*
- Surveys are currently ongoing:
 - **First phase**: warning service (road works, traffic jam, and incidents)
 - Second phase: time-to-green, time-to-red
- Harmonise surveys across other C-ITS projects

More information

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