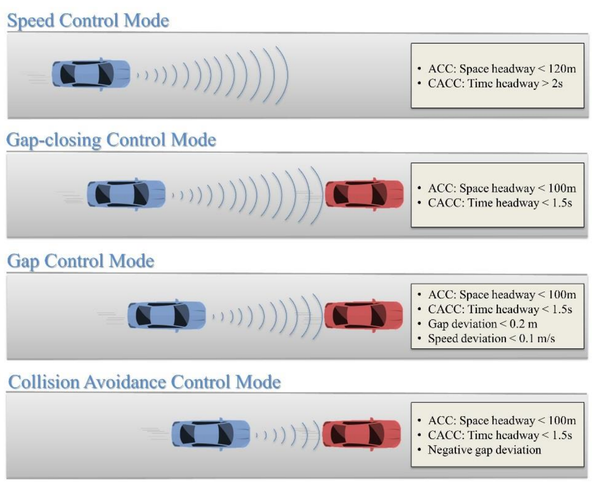
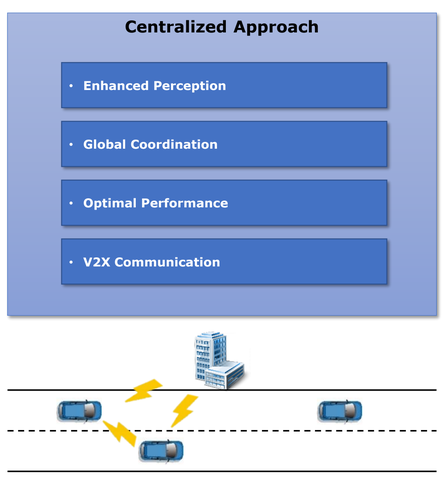
Modelling Automated Driving

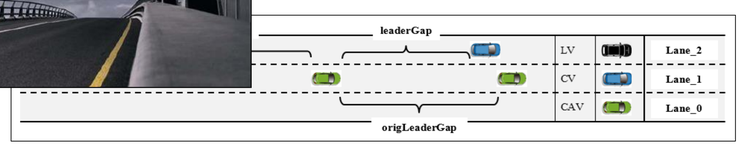
Cooperative Manoeuvring

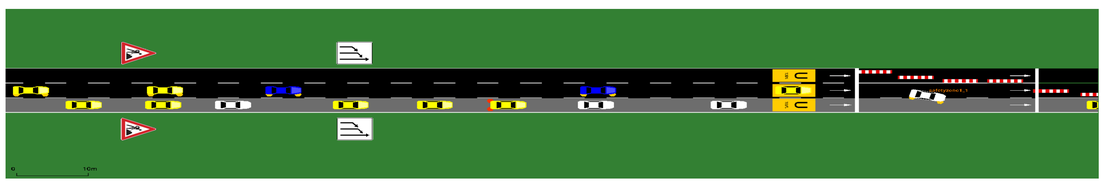




Simulation Toolchain

SUMO
Simulation of Urban MObility





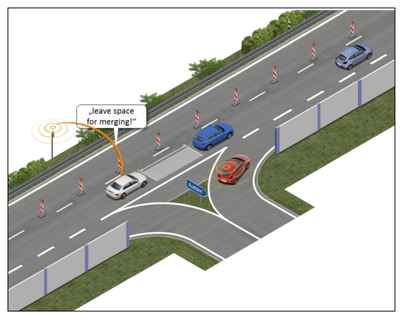
Increasing Realism and Applicability

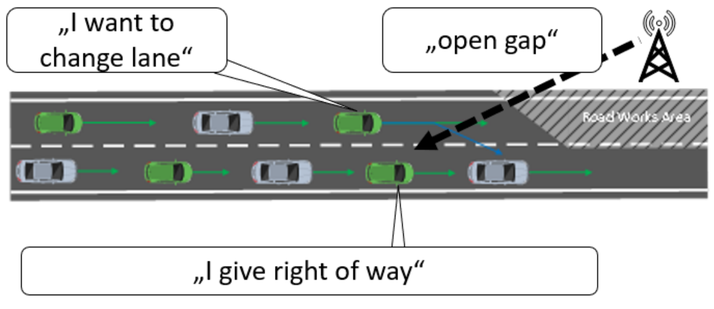
	LOS A	LOS B	LOS C
Urban (50km/h) – 1500 veh/h/l	525	825	1155
Rural (80 km/h) – 1900 veh/h/l	665	1045	1463
Motorway (120 km/h) – 2100 veh/h/l	735	1155	1617
Intensity / Capacity (IC) ratio	0.35	0.55	0.77

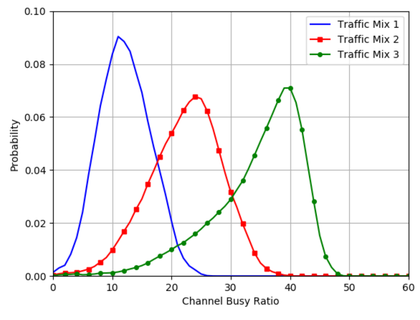
Vehicle Mix	Class 1	Class 1 (Conn.)	Class 2	Class 2 (Conn.)	Class 3	Class 3 (Conn.)	Class 4	Class 4 (Conn.)
1	60%	10%	-	15%	-	10%	-	5%
2	40%	10%	-	25%	-	15%	-	10%
3	10%	10%	-	40%	-	25%	-	15%

Class Name	Class Type	Vehicle Capabilities
Class 1	Manual Driving	– Legacy Vehicles – (C)AVs/CVs (any level of driving automation) – Driving Automation: Off
Class 2	Partial Automation	– AVs/CVs equipped with Level 1/2 driving automation systems – Driving Automation: On – Instant ToC (driver responsible for monitoring road environment) – Emergency braking in case of distracted driving
Class 3	Conditional Automation	– (C)AVs equipped with Level 3 driving automation systems – Driving Automation: On – Basic ToC (normal duration)/MRM capability (ego lane)
Class 4	High Automation	– (C)AVs equipped with Level 4 driving automation systems – Driving Automation: On – Proactive ToC (prolonged duration)/MRM capability (right-most lane)

V2X Communication







Social media:

- www.transaid.eu
- @transaid_h2020
- www.linkedin.com/groups/13562830/
- www.facebook.com/transaidh2020/

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 723390.