

Use Case car	Possible applications for bikes	Advantages
Hazardous Location Notification		
Weather Condition Warning (HLN – WCW)	Warnings for slipperiness, warnings for extreme wind, warnings for approaching bad weather (rain, lightning).	HLN messages are aimed at preventing accidents. Warnings can be given location-specifically.
Temporarily slippery road (HLN – TSR)	Warnings for slipperiness due to frost, wet leaves, gravel on the road, etc.	
Animal or person on the road (HLN – APR)	Warnings for a large animal on the road/cycle path.	
Obstacle on the road (HLN – OR)	Warnings for an obstacle on the road, such as a fallen tree, cargo, ...	
Emergency or Prioritised Vehicle Approaching (HLN – EPVA)	Warnings for a vehicle with flashing lights.	
Railway Level Crossing (HLN – RLX)	Warnings for a railway crossing.	
Unsecured Blockage of a Road (HLN – UBR)	Warnings for subsided cycle paths, loose manhole covers, stones on the cycle path, flooding, etc.	
Public Transport Vehicle Crossing (HLN – PTVC)	Warnings for intersections with trams, bus lanes, etc.	
Public Transport Vehicle at a Stop (HLN – PTVS)	Warnings for public transport stops (and disembarking passengers).	Provides the opportunity to choose another route. Moreover, safer for cyclists and road workers.
Road Closure (RWW – RC)	Relevant for cyclists, e.g., a bridge that is out of service, or a road that is completely blocked, also for cyclists.	
Road Works – Mobile (RWW – RM)	The same as for cars, to warn cyclists of roadworks, such as mowing, sweeping, line marking, etc.	Safer for cyclists and road workers.
In-Vehicle Signage		
Traffic Signs (IVS – TS)	For example, prohibited for cyclists.	Messages can be given exactly at the location where they apply, in the language of the cyclist, can be repeated, and can cover a larger area than just physical DRIPS.
Free Text (IVS – FT)	Instructions for cyclists at festivals, in the city centre, regarding e.g., parking, prohibited for cyclists between 09:00-18:00, etc.	
Smart Routing (IVS – SR)	Detours for cyclists, e.g., bridge out of service, crowded cycle path, ...	
Probe Vehicle Data		
Vehicle Data Collection (PVD – VDC)	Cyclist automatically transmits information about position, speed, direction, etc.	Information about waiting times, speed differences, road surface quality, etc. can be used by policymakers for better cycling policies.
Event Data Collection (PVD – EDC)	Cyclist automatically transmits information about acceleration/deceleration, lights on/off, road surface quality, particulate matter, etc.	
Signalised intersections		
Signal Phase and Timing Information (SI – SPTI)	Cyclist can adjust speed to pass through green more easily.	If cyclists pass through green faster, there is less waiting at traffic lights.
Green Light Optimal Speed Advisory (SI – GLOSA)	Cyclist receives advice on the correct speed to pass through green.	
Traffic Light Prioritisation (SI – TLP)	Prioritising cyclists in general or only bicycle couriers over other traffic.	
Imminent Signal Violation Warning (SI – ISVV)	Warning for 'cycling through red' based on speed and distance to the traffic light.	Could be possible for cyclists, but the question is whether cyclists would pay attention to this...
Points of Interest		
Parking Availability (POI-PA)	For example: cyclist receives information about available parking facilities or parking bans for shared bikes when approaching the city centre.	Convenience for the cyclist.
Collective Perception		
Collective Perception on Urban/Interurban Intersections (CP-UI)	This use case is aimed at warning motorists about vulnerable road users but could in principle also be used to warn cyclists about cars or trucks.	This can increase traffic safety for cyclists.