

Signal Phase and Timing (SPaT) and Red Light Violation Warning (RLVW) to Vehicle

Waiting at the red light is not only time consuming, but idling, braking and accelerating release more pollutants. The communication between the traffic signal and vehicle is important to improve traffic flow, thus increasing road safety by preventing accidents.

During the demo drive, a BMW Group vehicle equipped with a Qualcomm onboard unit running the SAVARI ITS software stack and the V2X use cases, communicates with a SWARCO traffic signal, showing C-V2X readiness across multiple vendors.

The use case enables the driver to monitor the upcoming traffic light. The center display of the vehicle shows the current signal phase and how long it will remain. In the Red Light Violation Warning (RLVW) use case, the application in the vehicle uses its speed and acceleration profile, along with the signal timing and geometry information from the traffic light. If the driver is likely to run a red light he/she receives a warning in the vehicle.

