SIP-adus Workshop 2020

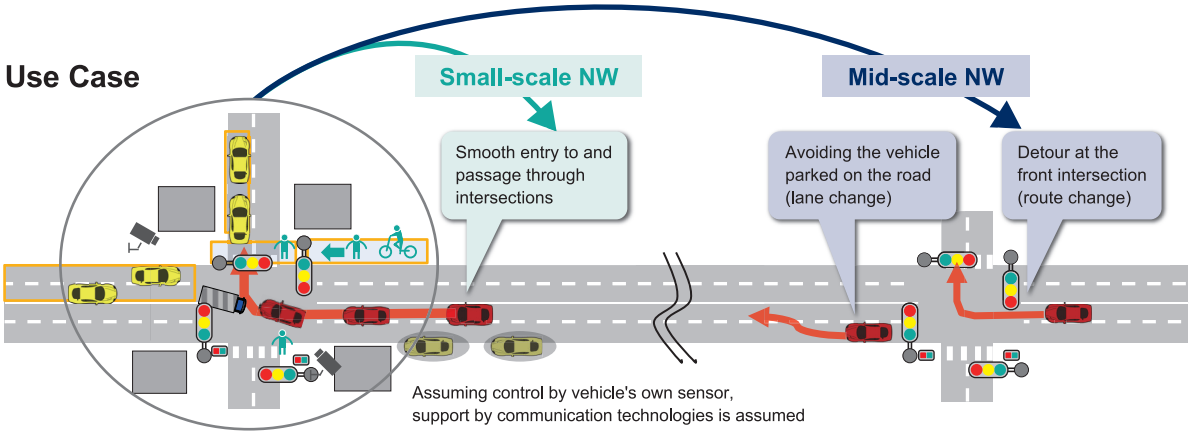
Optimized Processing for Dynamic Road Information by V2X with Multi-Scale Architecture

Optimizing the information process with multi-scaled network through the combination of V2X technology and roadside sensing technologies

Introduction

Recognition of non-line-of-sight (NLOS) and out-of-range road situation is highly in demand for automated driving system. V2X technology combined with roadside sensing technologies enables vehicles to behave more safely, smoothly and intelligently.

Use Case



Abstract

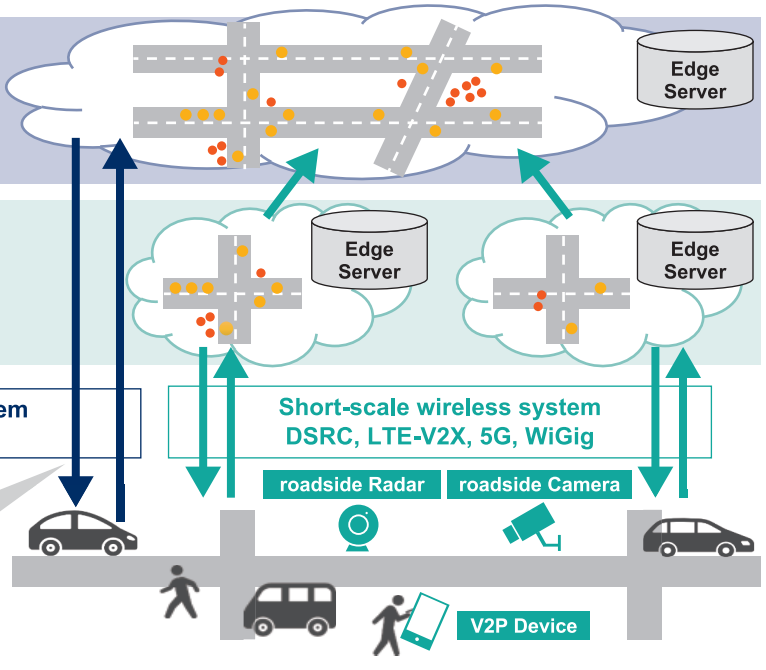
Optimization of processing methods (Collection, Integration and Distribution) for dynamic road information by introducing multi-scale network architecture (Mid-/Small-scale NW)

Mid-scale NW

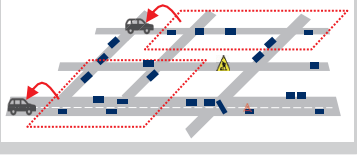
Optimization of distribution method over multiple Small-scale NWs with high consistency

Small-scale NW

Optimization of collection and integration methods of sensor data for dynamic road information with different wireless systems



Distribute only the necessary information according to the position and speed of each vehicles



docomo OKI SUMITOMO ELECTRIC Panasonic