

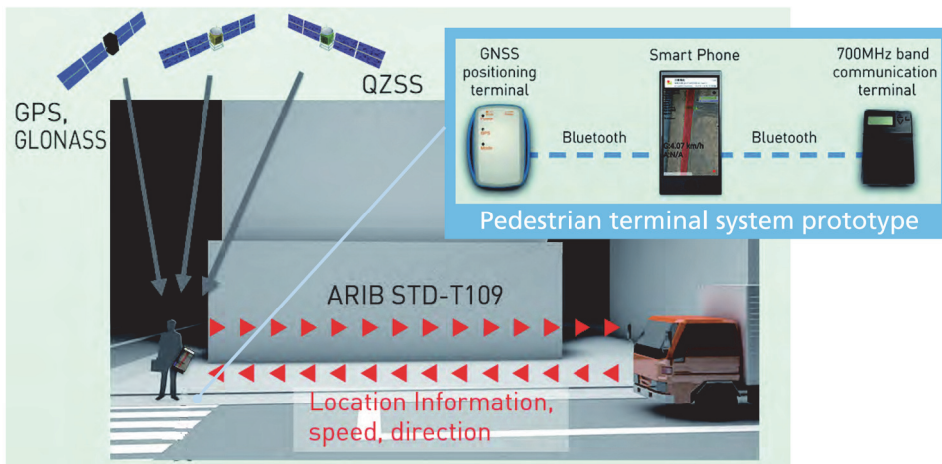
V2X communications

Theme2 : Vehicle-to-Pedestrian (V2P) Communication

[700MHz Direct Wireless Communication]

To realize a direct V2P communication system that can alert pedestrians or drivers in appropriate situation and timing to reduce traffic accidents involving pedestrians, we develop key technologies required for a pedestrian terminal.

- 700MHz band communication
- High-precision positioning
- Danger identification and pedestrian safety support



Proof-of-concept experiments

This test scenario assumed collision avoidance at the blind intersection without traffic signal.

Target value: Before the road crossing	6m
Mean values of measurement	6.5m

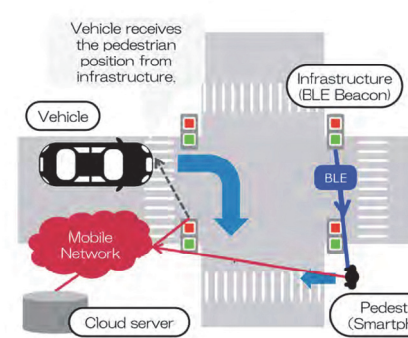


[Mobile phone]

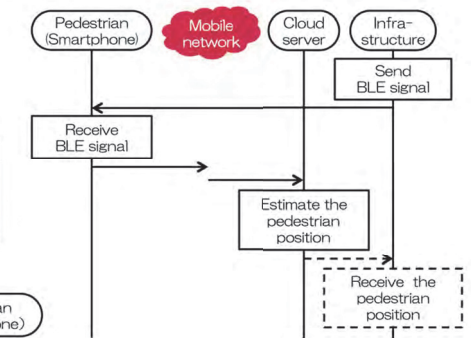
Goal :

To estimate the pedestrian position in the intersection by using BLE.

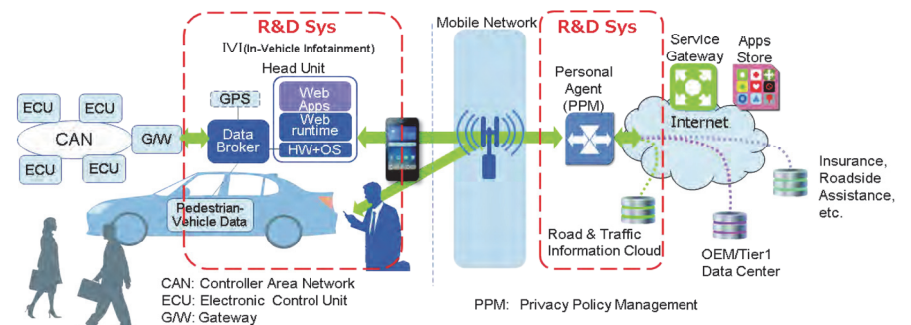
•System summary



•System sequence



Goals	To Collect and Distribute Driving-Context & Warning Information using Web Technologies
Purpose	1) To contribute to the international standardization activities (W3C, etc.) 2) To promote establishing a Social-based ITS platform
Actions	-To develop technologies which collect and analyze the next generation probe data such as pedestrian recognition information, road environment, driver's context, etc. -To develop pedestrian recognition and privacy protection technologies.



Theme 3 : Infrastructure radar with V2I communication

- Sensing each location of pedestrian and vehicle by using 79GHz band radar from roadside of intersection
 - Robustness under poor visible conditions [night, fog, snow, etc.]
 - Wide-view and high-precision detection with compact radar unit
- Notifying the object location, via wireless channel, to vehicle-mounted system aiming to prevent accidents

