Summary of SIP-adus Project (FY2017)

Name of the project	Development of movement support system for people with mobility constraints
Responsible Organization	UTMS Society of Japan

Name   SHUNICHI KAWABE (UTMS Society of Japan)

Objective of the Project

The project will develop sophisticated Pedestrian Information and Communication Systems (PICS) which allows people with mobility constraints to cross the road safely, securely and smoothly. This system is expected to operate for the 2020 Tokyo Olympic and Paralympic games and to be deployed to other regions afterward.

Project Summary

Demonstration experiment was conducted to solve agendas decided in accordance with research study of Year 2016, and to implement new functions with specifications study.

Outline of the demonstration Experiment
(1) Application with large size intersections
    To figure out applicability to large size intersections, verification was conducted using multiple Bluetooth devices.
(2) Remaining time to the Green light
    The "Green light remaining time for pedestrian" information and "count down to pedestrian green light (Red light remaining time for pedestrian)" information were delivered to pedestrian via smartphone.
(3) Verification of GNSS system
    The GNSS test was conducted near tall buildings where it is hard to locate accurate locations with the GNSS system.
(4) Verification of diverse usage
    After the service was provided to visually impaired persons, the survey was conducted.

2. Result of the experiment
It has been confirmed that the equipment works properly in demonstration experiment. According to the survey of visually impaired persons, the 90% replied that the service is necessary. It shows that the service is in need. It has also been confirmed that the system cannot be implemented at locations where GNSS location measurement is not accurate.

Future plan

・Sort out information about new and existing pedestrian Information Communication System
・Feasibility study about implementing the same system to devices such as wearable devices other than smartphones.
・Improving location accuracy by using GNSS with other options likes map matching etc.
・Study about interfacing with other applications like Navigation systems etc.