

Realization of PRT (Primary Rapid Transit)

Propose the addition of new categories of transportation such as MRT, LRT, and BRT

Outline of Proposed Idea

Realize the concept of PRT*¹ for smooth intra-regional transportation in the Bang Sue area.

*¹PRT(Primary Rapid Transit) : Transportation service in which small, eco-friendly vehicles flexibly change roles according to travel demand, saving energy and reducing traffic congestion.

Peak time	Train mode without tracks	
Off-peak time	Single run mode	
	On-demand mode	

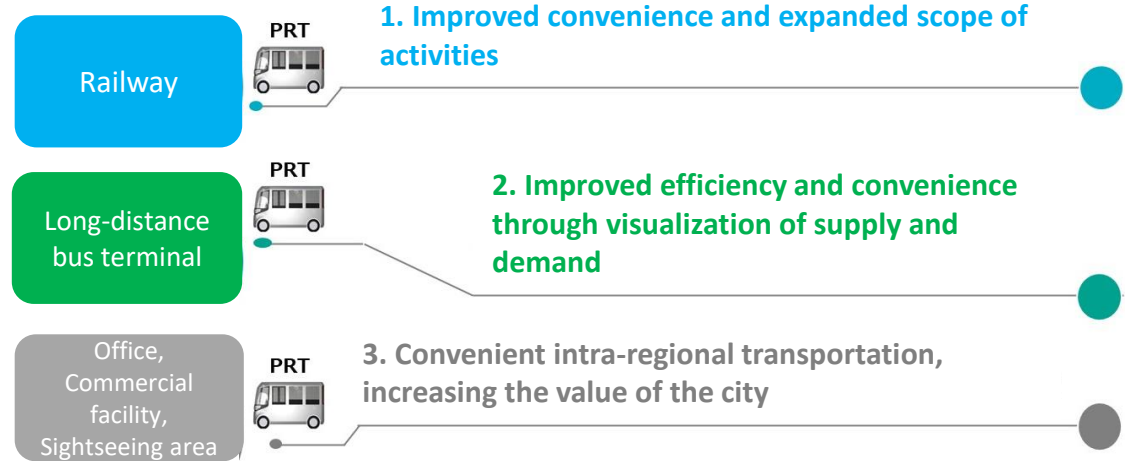


- PRT does not require infrastructure construction like Mass Rapid Transit (MRT) or Light Rail Transit (LRT).
- Utilizing devices such as buses with high environmental performance (e.g., EV and FCV vehicles)*², autonomous EV buses, smart poles, drones, and personal mobility, and controlled by SMOC, the system will realize optimal vehicle dispatch in accordance with travel demand.
- It contributes to energy savings in the city by eliminating unnecessary vehicle trips, improving convenience for passengers, and increasing profits for transportation operators.

*²Named "Eco Bus".

Consistency with Theme

The following points 1-3 are consistent with the theme.



Data to be used

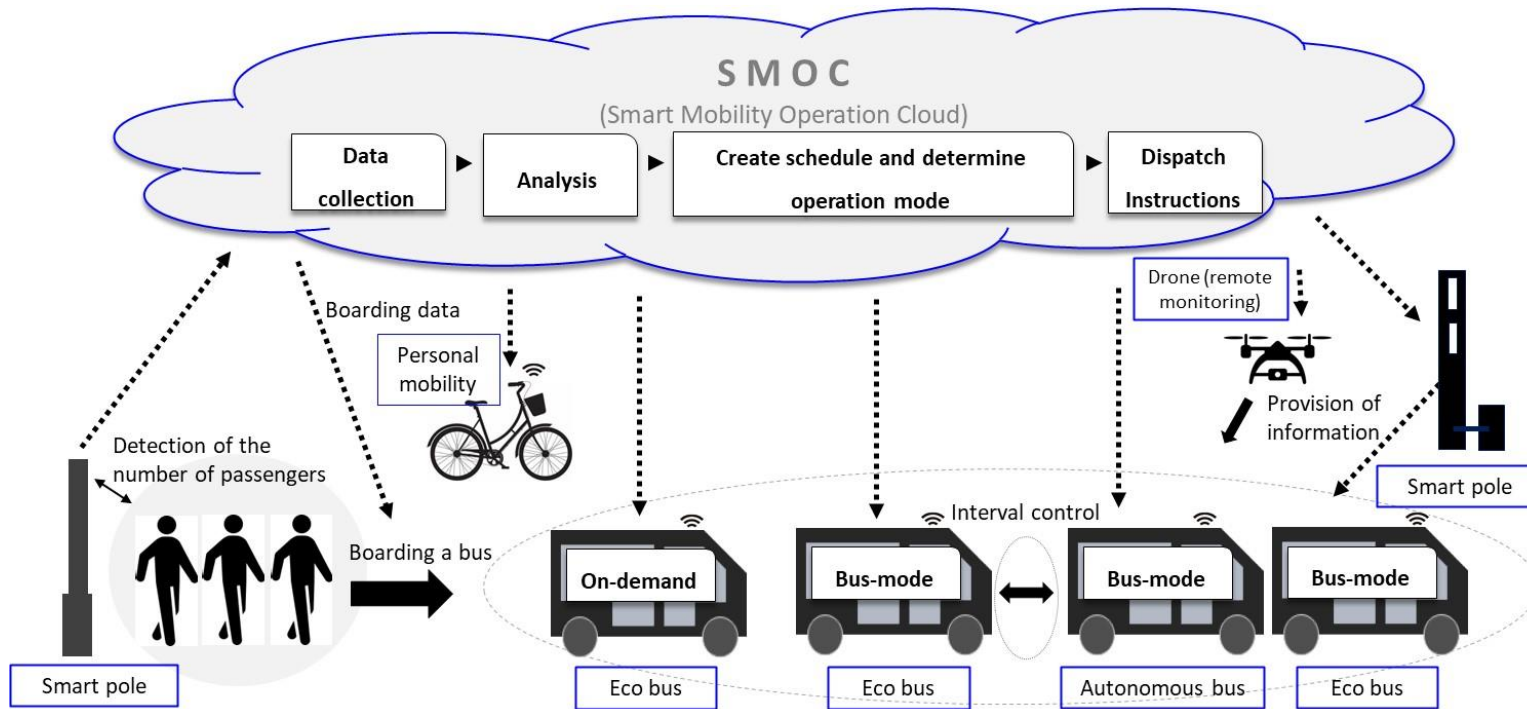
- Data listed in the data list:
 - ✓ Real-time vehicle data (3-81 to 3-88) and weather data (3-98 to 3-105)
- Data that will need to be acquired in the future:
 - ✓ Potential travel demand data (when, where, how many people are coming in).
- Data that could be obtained by the proposed idea:
 - ✓ Understanding of travel demand (when, where, how many people getting on and off)

Realization of PRT (Primary Rapid Transit)

PRT for disciplined and smooth intra-regional traffic

Zenmov Inc.

Technical Aspects of Proposed Idea



- The traffic control system SMOC owned by Zenmov will be constantly linked to devices on vehicles, smart poles, etc. It then collects traffic data to enable efficient transportation of people and goods.
- A project to demonstrate PRT (supported by NEDO and already adopted) will be implemented in the Clark area (Philippines) as an approximately 3-year project starting in November 2022.
- The results of the project will be used and further developed in the Bang Sue area.

▼ Clark area (Philippines) ►



Innovation of the proposed idea

- Based on boarding results and city travel data, optimal vehicle dispatch plans can be automatically generated using AI, and better plans can be created while learning from preliminary results.
- Changing the mode of operation to bus, on-demand, etc., depending on travel demand can improve vehicle utilization and passenger convenience.
- A variety of hardware, such as manned bus vehicles, autonomous bus vehicles, smart poles, drones, and personal mobility, can be integrated and operated, and the information obtained from them can be used for operations.

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SMOC Case Study

Feasibility of the Proposed Idea

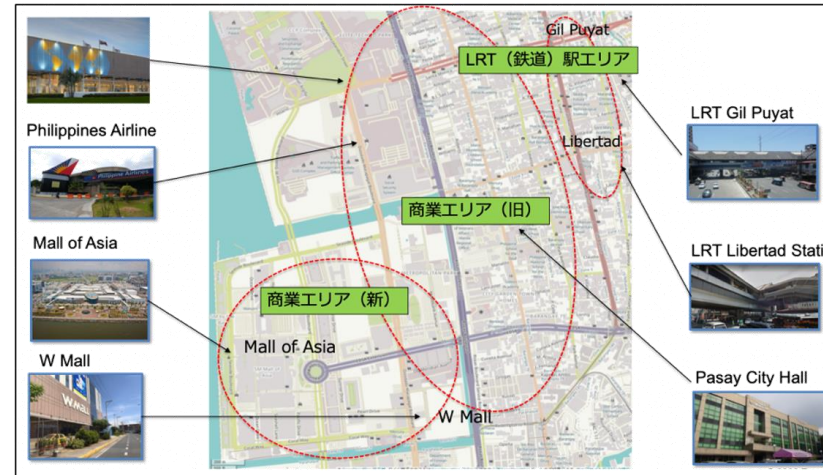
Zenmov has experience in the operation of SMOC in Metro Manila and Pasay City in the Philippines. The system and operational knowledge gained in these areas can also be used to customize the system to the situation in the Bang Sue area, and the same project can be implemented there.

■ SMOC Achievements (1) Intramuros, Metro Manila



▲ Convenient transportation services created demand for mobility and also created jobs.

■ SMOC Achievements (2) Pasay city



▲ Operation of a line connecting the railroad station (LRT) with new and old commercial areas

◀ Example of SMOC Functions