3. Intelligent Transport System (ITS) Developed by the Japanese Police

The NPA is promoting research and development of Universal Traffic Management Systems (UTMS). UTMS, designed to utilize advanced information and communication technologies, develop businesses, ensure road traffic safety and smooth traffic flow, create harmony between road traffic and environment, and thereby contribute to enhancing public welfare.

The principal subsystems of UTMS are as follows:

(1) **Advanced Mobile Information Systems (AMIS)**
AMIS generate information on congestion and travel time, based on traffic information collected at the Traffic Control Center and provide that information to general drivers via VICS. The information is also provided by roadside traffic information display boards as well as radio broadcast.

(2) **Traffic Signal Prediction Systems (TSPS)**
TSPS encourage safe and eco-friendly driving by providing drivers with driving support information based on information about the color of traffic lights.

(3) **Driving Safety Support Systems (DSSS)**
DSSS grasp the traffic situations of an area which is hard to see from the driver’s position using roadside sensors and alert drivers via on-board units and thereby prevent traffic accidents caused by careless oversight such as inattentive driving.

(4) **Public Transportation Priority Systems (PTPS)**
PTPS ensure the scheduled operation of buses and other public transport and encourage the use of public transport. Based on vehicle ID information received from the on-board unit in the bus via infrared beacons, the Traffic Control Center extends the green or shortens the red light so that buses can pass intersections smoothly.

(5) **Pedestrian Information and Communication Systems (PICS)**
PICS facilitate safe crossing of intersections by pedestrians including the elderly and people with disabilities by providing information by voice, on the name of intersection and the pedestrian signals status.

(6) **Fast Emergency Vehicle Preemption Systems (FAST)**
FAST are intended to assist emergency vehicles to reach an accident site as quickly as possible and prevent secondary accidents caused by emergency vehicles. Based on the information received from emergency vehicles via infrared beacons, the Traffic Control Center extends the green or shortens the red light so that emergency vehicles can arrive at the scene of accident faster.

(7) **Enhancement of Mobile Convenience**
The police have adopted measures to enhance the convenience of the private sector utilizing public traffic information. Each prefectural police has its own system to provide online, real-time traffic information gathered from approximately 208,000 vehicle detectors and approximately 56,000 infrared beacons on all parts of Japanese roads. Through these systems, the police have provided the private sector with traffic information which the public, including drivers, can receive from in vehicle navigation systems, the Internet, smartphones and other media.