

Efforts to Secure Traffic Safety Making Use of Highly Sophisticated Information Communication Technology

As an effort to secure traffic safety making use of highly sophisticated information communication technology, the use of Intelligent Transport System (ITS) is being promoted. In the “Declaration to be the World’s Most Advanced IT Nation” which is the IT strategy of our country adopted in the cabinet meeting in June of 2014, it is stipulated to achieve the goal of “realizing the safest, the most friendly to the environment and the most economic road traffic society in the world” and for the purpose “to formulate a comprehensive roadmap, to build the promotion system and promote therewith the development and translation into practice of sophisticated driving support technology and automatic traveling system.” It is also stipulated “to specifically accelerate the efforts to translate into practice the safety driving support system which is currently under development by both public and private sectors” and “to promote the efforts on collection and distribution of traffic information which will be useful for the safety driving support, congestion reduction and prevention of damage from disasters among others.” “With all these measures combined, it is intended to reduce the number of fatalities in traffic accidents to less than 2,500 by 2018, and to realize the safest road traffic society in the world and to reduce traffic congestion drastically by 2020.”

In light of these visions, the experimental showcase of cooperative ITS on public roads in the 2013 ITS World Conference in Tokyo and the “Public-Private ITS Initiative/Roadmaps” which show the direction to be followed by both the public and private sectors and specific roadmaps were formulated.

Efforts in the 2013 ITS World Conference in Tokyo

For the first time in 9 years, the 2013 ITS World Conference in Tokyo was held at the Tokyo Big Site between October 15 and 18 of 2014. In the conference, the Japanese government appealed for the promotion of the so-called “ITS GREEN SAFETY,” an effort aimed to solve traffic problems using cooperative ITS system by both public and private initiatives and the so-called “ITS GREEN SAFETY SHOWCASE (IT)” which allows the 5 cooperative ITS projects (Fig.1) to be experimented on public roads.

[Fig.1] ITS GREEN SAFETY SHOWCASE / 5 projects



Source: Data of ITS Japan

< ITS GREEN SAFETY SHOWCASE >

- Next generation DSSS* (I2V: Infrastructure-to-Vehicle)
- Advanced safety automobile using communication (V2V: Vehicle-to-Vehicle, V2P: Vehicle-to-Pedestrian)
- ITS spot service (I2V)
- Traffic smoothing service in sub-sections of expressways (I2V, V2V)
- Cooperative service between mobile communication and ITS spots (I2V)

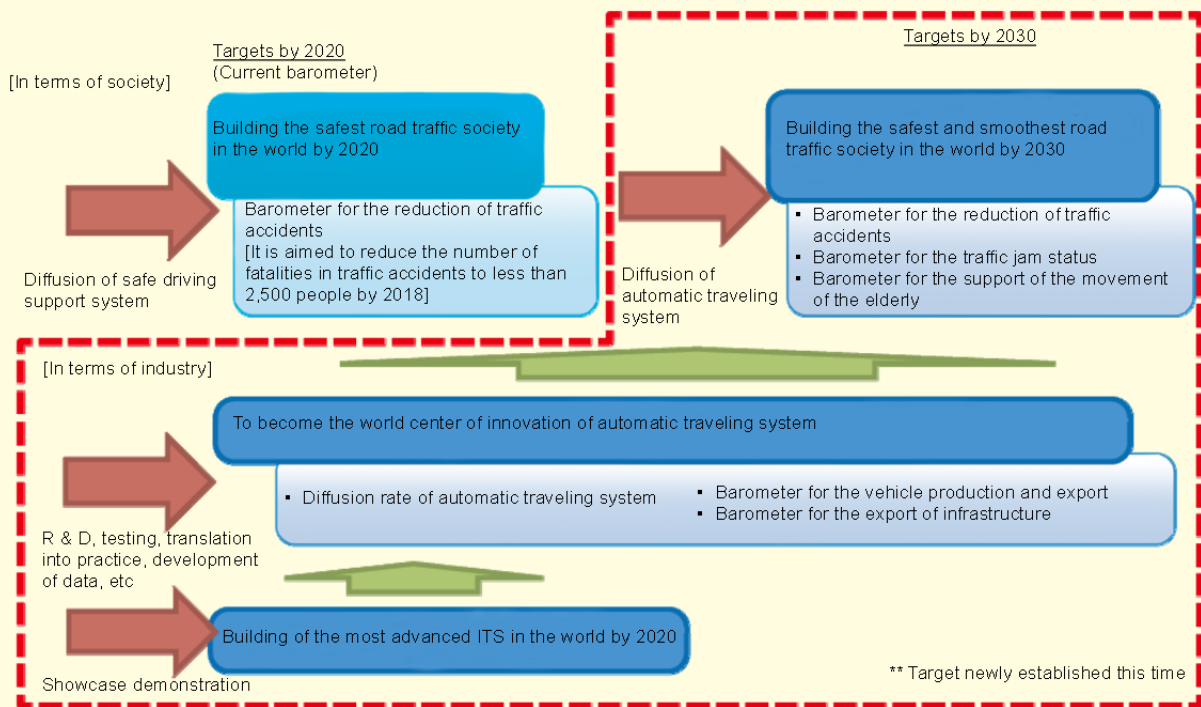
Formulation of “Public-Private ITS Initiative/Roadmaps”

According to the “Timetable for the Declaration to be the World’s Most Advanced IT Nation” (approved by the IT Comprehensive Strategy Headquarters in June, 2013), it is aimed to “study the Public-Private ITS Initiative/Roadmaps by setting 10 to 20 year targets in order to formulate Public-Private ITS Initiative/Roadmaps,” a road traffic sub-committee was created under the New Strategy Promotion Expert Committee and meetings were held to discuss for the formulation of “Public-Private ITS Initiative/Roadmaps.”

With a view of reducing the number of traffic accidents, mitigating traffic congestion, and supporting the movement of the elderly, among other measures, not only the targets for building the world’s most advanced ITS were clarified (Fig.2), but also the expected commercialization timing for each level of automatic traveling system currently discussed all over the world (Table 1) was established in the “Public-Private ITS Initiative/Roadmaps.”

The present “Public-Private ITS Initiative/Roadmaps” were formulated at the fourth meeting of the New Strategy Promotion Expert Committee held on March 24, 2014 and will be adopted by the IT Comprehensive Strategy Headquarters in June, 2014. In the future, a variety of policies described in the “Public-Private ITS Initiative/Roadmaps” will be promoted and challenges which need to be addressed will be studied.

[Fig.2] Society targeted at the Public-Private ITS Initiative and essential targets



Note: In accordance with the ITS initiative and Road Map by public and private sectors (as of March 24, 2013)

* Driving Safety Support Systems

[Table 1] Expected time schedule for the commercialization of automatic traveling system

Level	Technologies expected to be achieved	Expected timing for commercialization	Target timing by EU and the like (for reference)
Level 2	Tracking system	Middle of 2010s	2013-2015
	Steering to avoid a collision		2017-2018
	Automatic traveling in a plurality of lanes	2017	2016
Level 3	Automatic crossing	Early 2020s	2020
Level 4	Fully automatic traveling	Later than late 2020s (Note)	2025-28 (expressway) 2027-30 (urban areas)

(Note) In accordance with the ITS initiative and Road Map by public and private sectors (as of March 24, 2013)

[Information on the topic is available on the website of the government]

The “ITS initiative and Road Map by public and private sectors” adopted by the fourth New Strategy Promotion Expert Investigative Panel is available on:
<http://www.kantei.go.jp/jp/singi/it2/senmon/dai4/siryou4-2.pdf>