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Cover: Satta-toge Pass (Left: "Yui" of the "Fifty-three stations on the Tokaido Road" ANDO Hiroshige, Right: Photograph taken by OI Hirotsugu)

# 2007年、さらに広がるスマートウェイ

現在展開中のITSサービス

2007年以降、広がるITSサービス

ITSサービスがさらに多様に

一つの車載器で多様なサービス

次世代道路サービスのプラットフォームが展開

2007年、日本で動き始める最先端のITSサービス

Demo2006で既に公開

## Smartway further spreading in 2007

Today deployed ITS services

ITS services further spreading in and after 2007

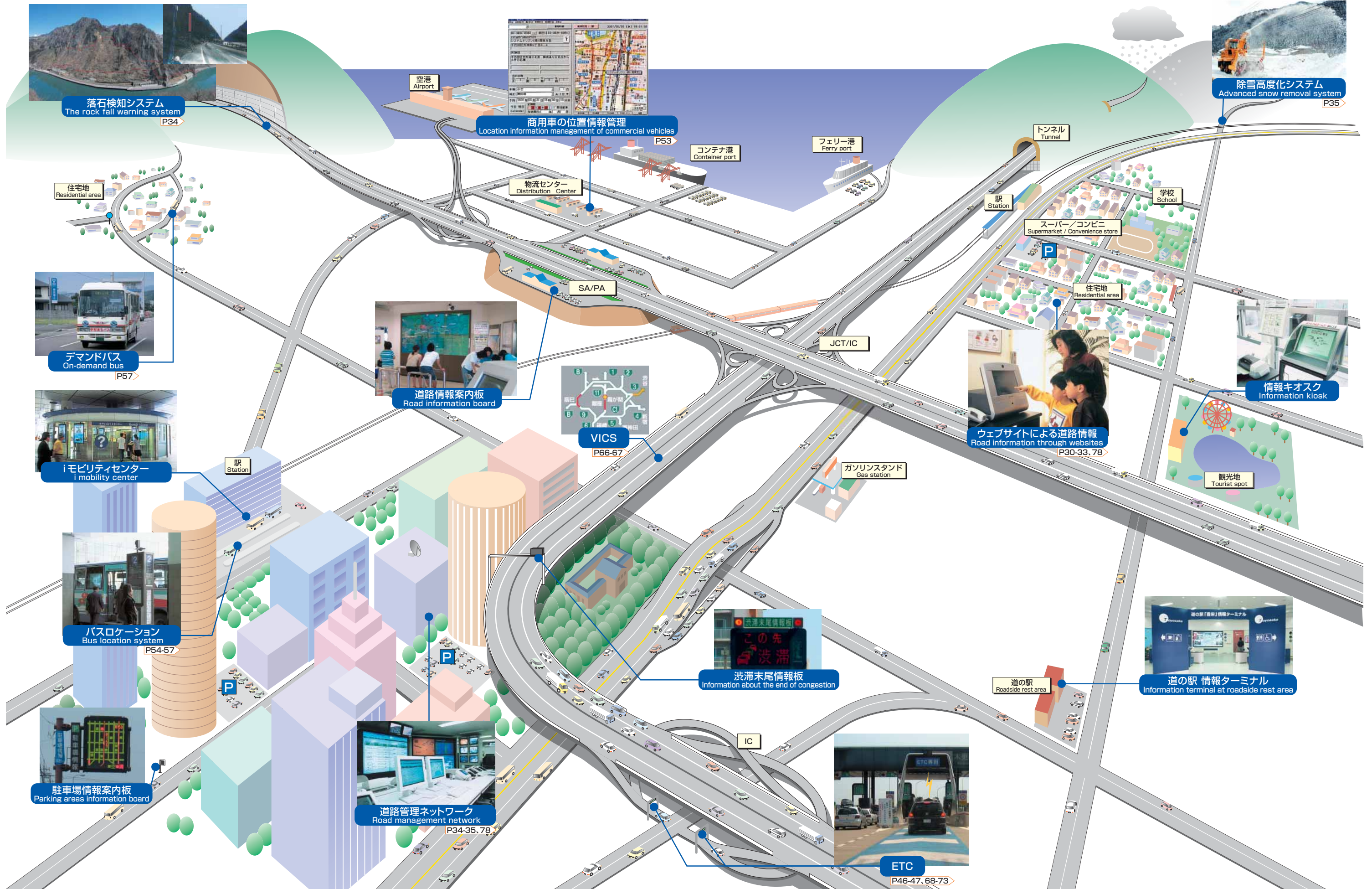
More various ITS services

Providing various services with a single ITS on-board unit

Deployment of the platform for next-generation road services

State-of-the-art ITS services will start in 2007 in Japan

Demonstrated in "Demo 2006"





## ■ 基礎的サービスから多様なITSサービスの実現へ

「車両情報送信」、「決済」、「情報提供」、「案内・警告」などの基礎的サービスの活用や組み合わせにより、多様なサービスシーンが実現する社会の構築を目指しています。

## ■ The fundamental services will enable various ITS services

Various services will be offered by combining fundamental services such as "Vehicular information transmission", "Fee payment", "Information provision", and "Information and Warnings".

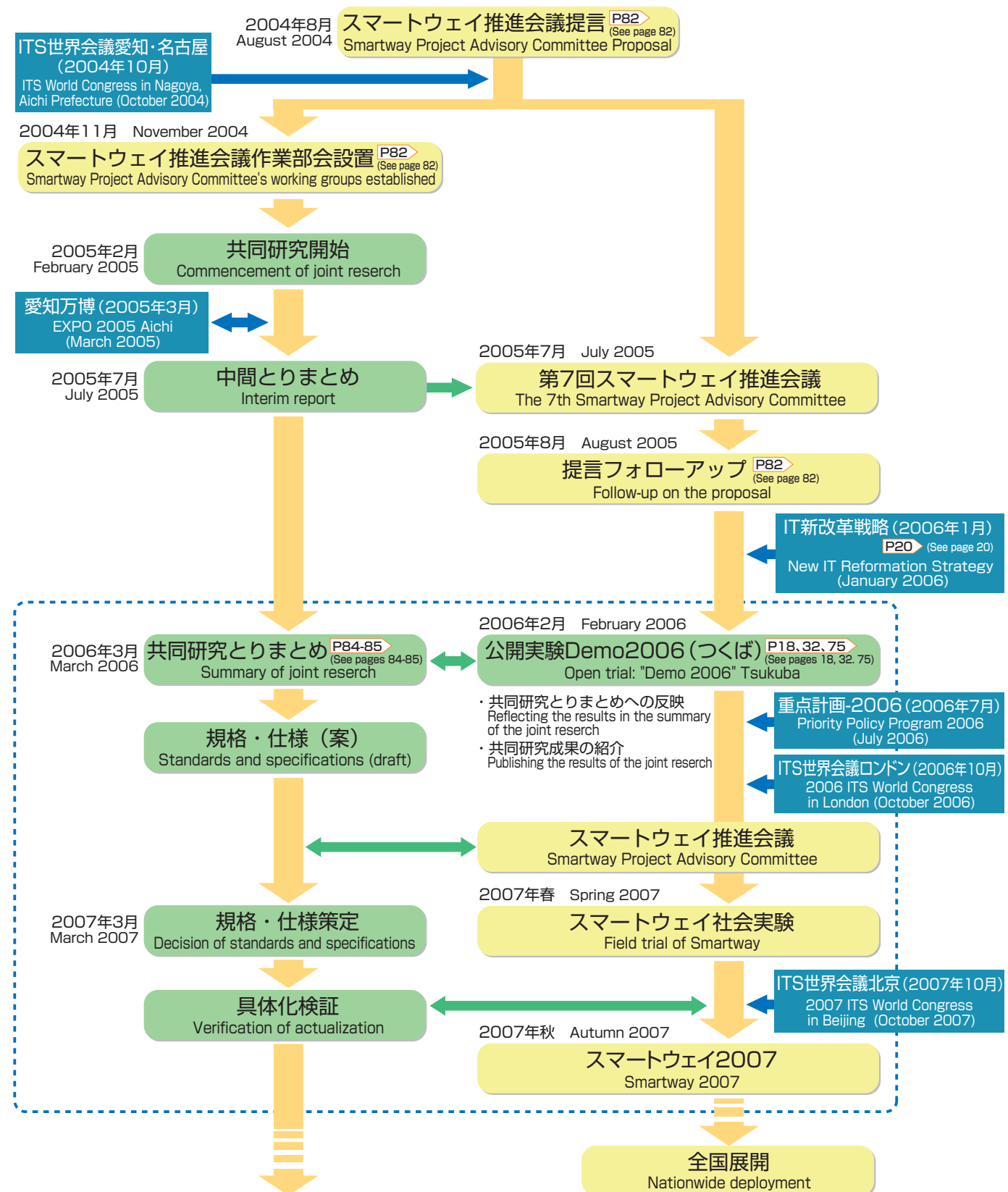


## ■ 2007年秋、最先端のITSサービスがスタート

2004年8月のスマートウェイ推進会議の提言を受け、官民共同研究がスタートしました。これを受け、国際標準化も視野に入れて規格・仕様の策定、基盤の整備等を進め、2007年秋から最先端のITSサービスがスタートします。P82

## ■ State-of-the-art ITS service to start in autumn 2007

Based on the proposals offered by the Smartway Project Advisory Committee in August 2004, industry-government joint studies have been conducted to decide standards and specifications, by considering international standardization, and to construct infrastructure. State-of-the-art ITS service will start in autumn 2007. (See page 82)



## 一つのITS車載器で多様なサービスへの対応を可能に

ITSの多様なサービスが展開しても、アプリケーションごとに車載器が必要になれば、狭い車内に機器が氾濫するとともに、各サービスが情報を個々に発信し、利便性が低下します。そのため、複数のアプリケーションに対応する一つのITS車載器で、多様なサービスを受けられるようにすることが重要課題となっています。

ITS車載器の開発・商品化に向けては、既存の検討組織と連携して、官民共同の取り組みによって規格・仕様を決定するとともに、国際標準を視野に入れた取り組みを進めています。また、交通安全へ十分に配慮するとともに、利用者本位に立った、安心して利用できる仕組みとセキュリティを確保することが必要です。



## A single ITS on-board unit to provide various services

Even when various ITS services become available, it would be inconvenient if each ITS application, independently communicating various information, needed its own on-board units as these would crowd the limited space around the driver's seat. Therefore, a single ITS on-board unit that can provide various services should be developed.

The development and commodity production of ITS on-board units is being jointly promoted by governments, private companies, and existing investigation committees which are deciding standards and specifications based on international standards. Traffic safety and convenience for users are also considered to ensure safety.

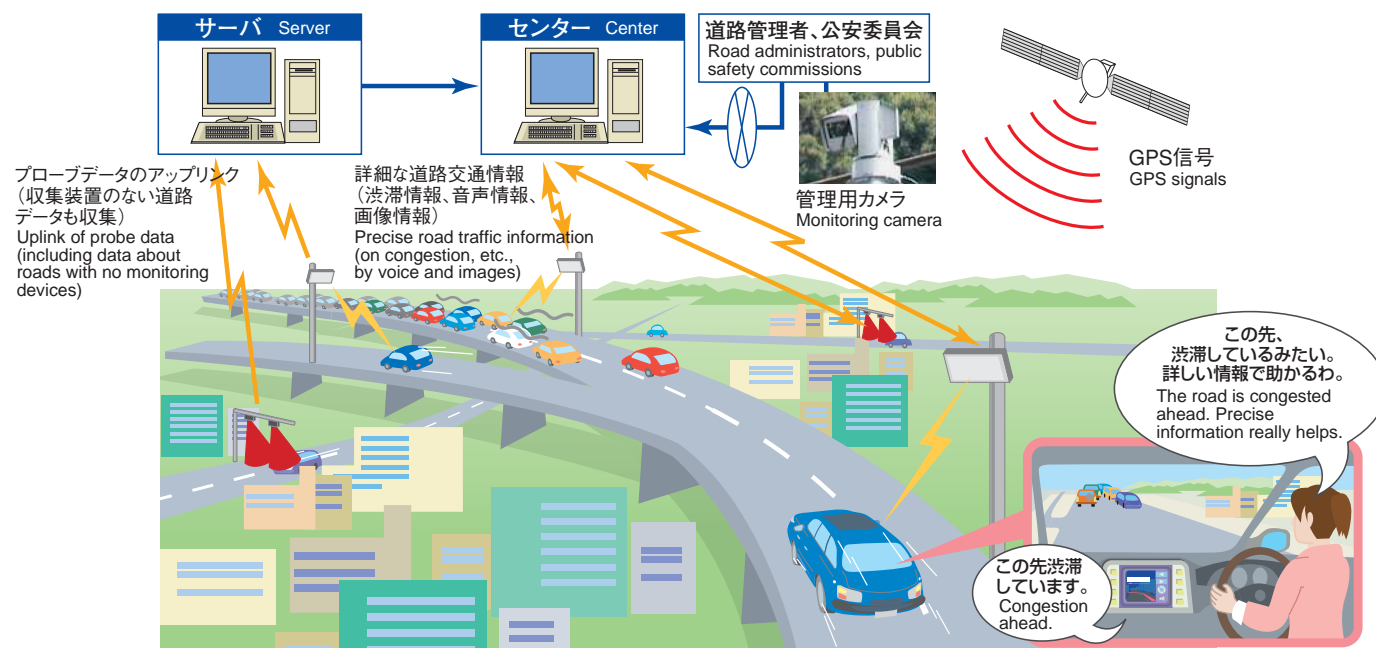


## 道路上における情報提供サービス

走行中に事故多発地点、詳細な工事規制、渋滞末尾などの情報をリアルタイムに提供するサービスで、安全・安心なドライブを支援していきます。P18, 22-27, 32, 67

## Information provision services along roadways

Precise information about accident-prone road sections, traffic restrictions, the end of queue of vehicles, etc. will be provided in real time to traveling vehicles to assist safe driving. (See pages 18, 22-27, 32, 67)

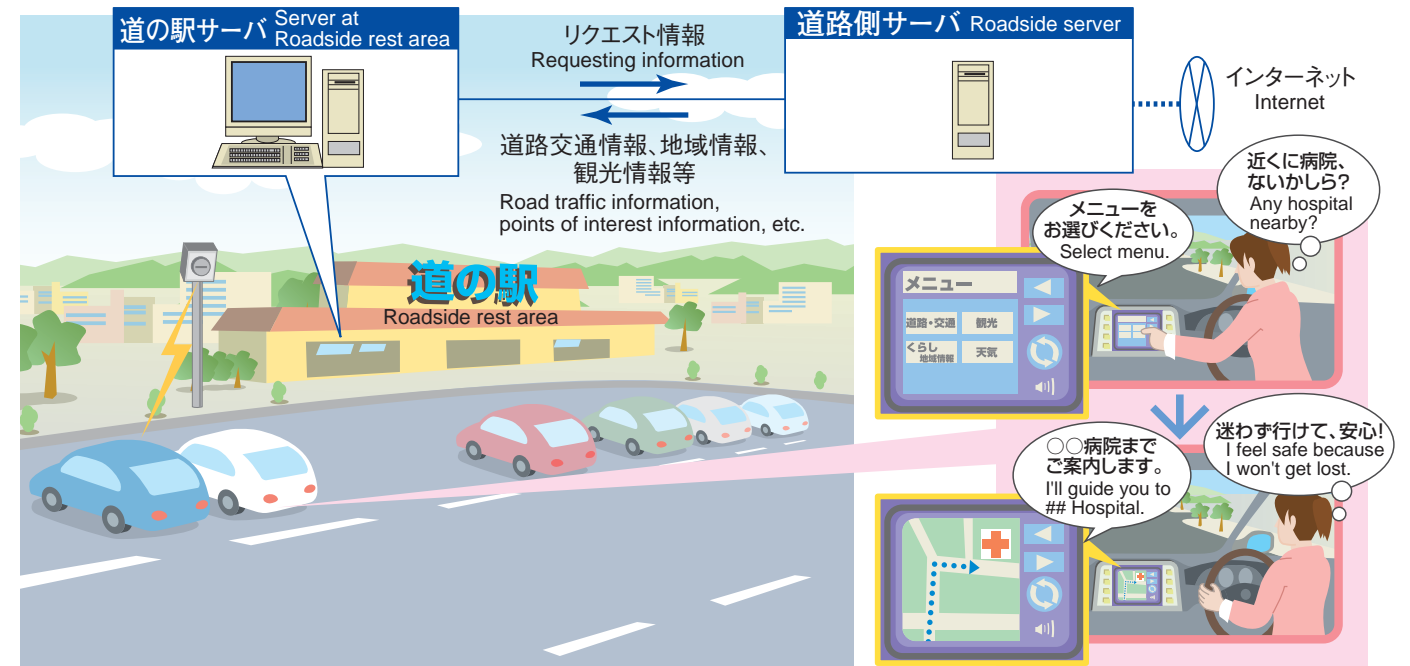


## 道の駅等情報接続サービス

道の駅やSA、PA等で、周辺の道路交通情報や地域・観光情報などを駐車中の車内で受信できるようになり、ドライバーの利便性向上や地域活性化につなげることが可能になります。P18, 76-77

## Information connection services at roadside rest areas

Provision of information on local traffic conditions and point of interest at roadside rest areas in parking vehicles will benefit drivers and revitalize local communities. (See pages 18, 76-77)

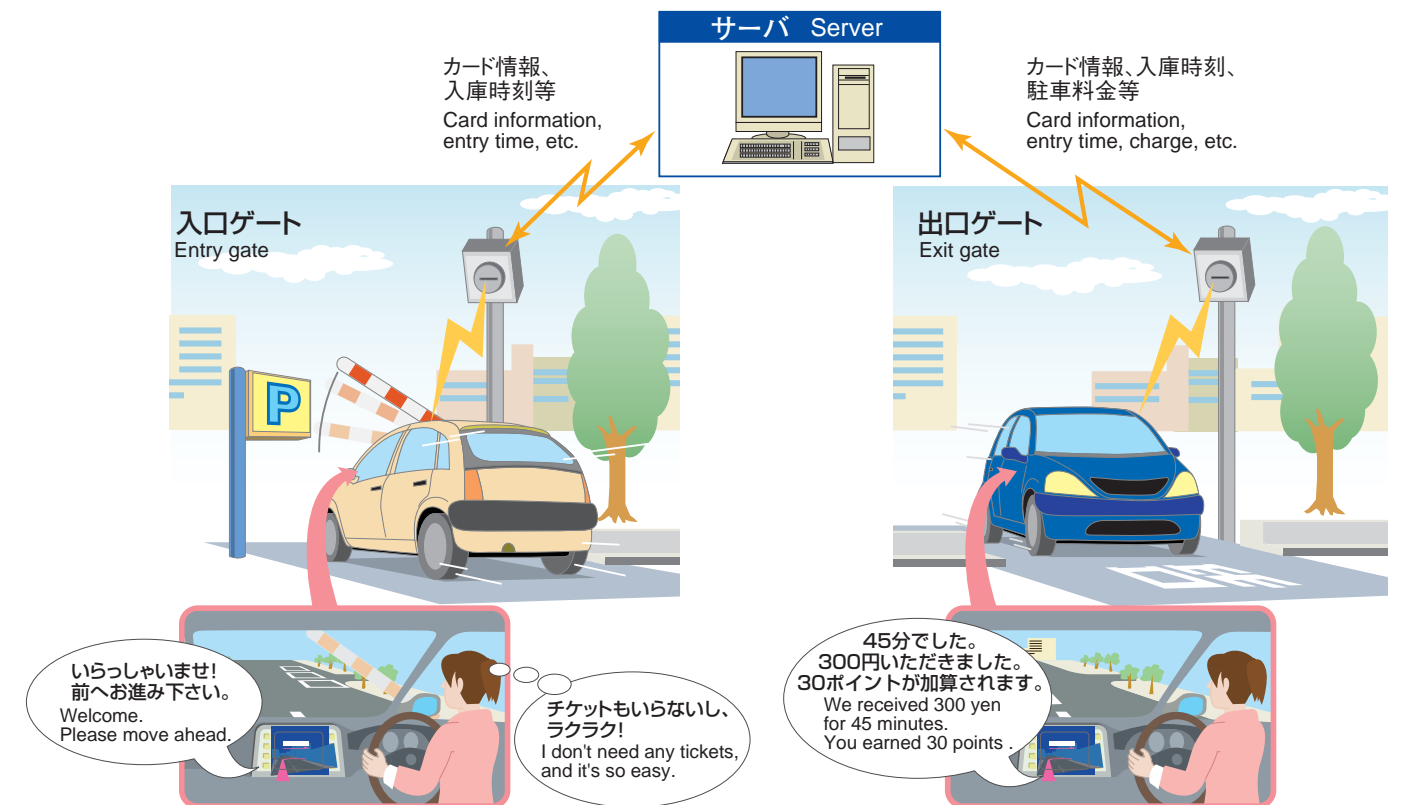


## 公共駐車場決済サービス

公共駐車場で、キャッシュレス料金決済が導入され、ゲート前で料金を支払う煩わしさがなく、スムーズに通過できるようになります。P18, 72, 74-75

## Public parking lot payment services

Cashless payment will be introduced at public parking lots, freeing drivers from paying charges at gates and enabling them to smoothly pass the gates. (See pages 18, 72, 74-75)



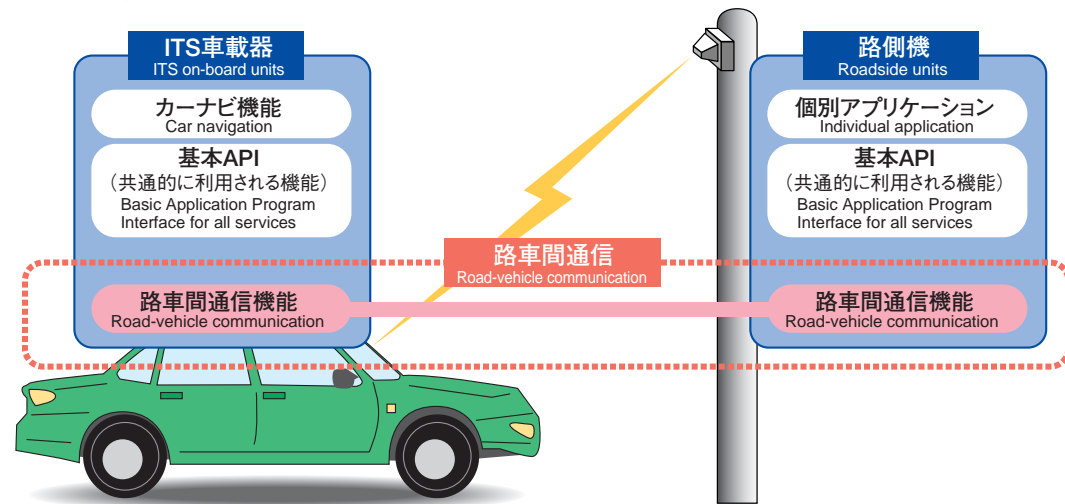
## 次世代道路サービスのシステムは 路側機・ITS車載器・路車間通信で構成

カーナビ、VICS、ETCなどこれまでは個別に提供されていたサービスを一つの車載器で提供できるようにし、さらにこれらに加え、次世代道路サービスを提供します。

この次世代道路サービスを実現するシステムは、「路側機」、「ITS車載器」、「路車間通信」より構成されます。「路側機」と「ITS車載器」は、各サービス共通で利用する機能(基本API: Application Program Interface)を含みます。

## Next-generation road service system consisting of roadside units, ITS on-board units, and road-vehicle communication

Services such as car navigation systems, VICS, and ETC are now provided by different on-board units. The units will be integrated, and various next-generation services will be provided by a single device. The system for providing next-generation services will consist of roadside units, ITS on-board units, and road-vehicle communication. The roadside units and ITS on-board units will be installed with the Basic Application Program Interface, which will cover all services.



## プラットフォームの活用で多様な民間サービス実現へ

プラットフォームを活用した共通機能の組み合わせにより、道路上における情報提供、道の駅等情報接続、公共駐車場決済だけでなく、様々な民間サービスの需要喚起によって、新たなサービスの多様な展開が期待されています。この実現に向けて、ITS車載器や路側機の規格・仕様の策定はもとより、共通ロゴマークなど安心して利用できる仕組み等についても検討していきます。

## A common platform for deploying various private services

Various new public and private services that utilize the common platform are expected to be deployed, including Information provision along roadways, Information connection at roadside rest areas and Public parking lot payment. Standards and specifications for on-board and roadside ITS units are now being drawn up, and measures for facilitating usage, such as common logos, are being investigated.



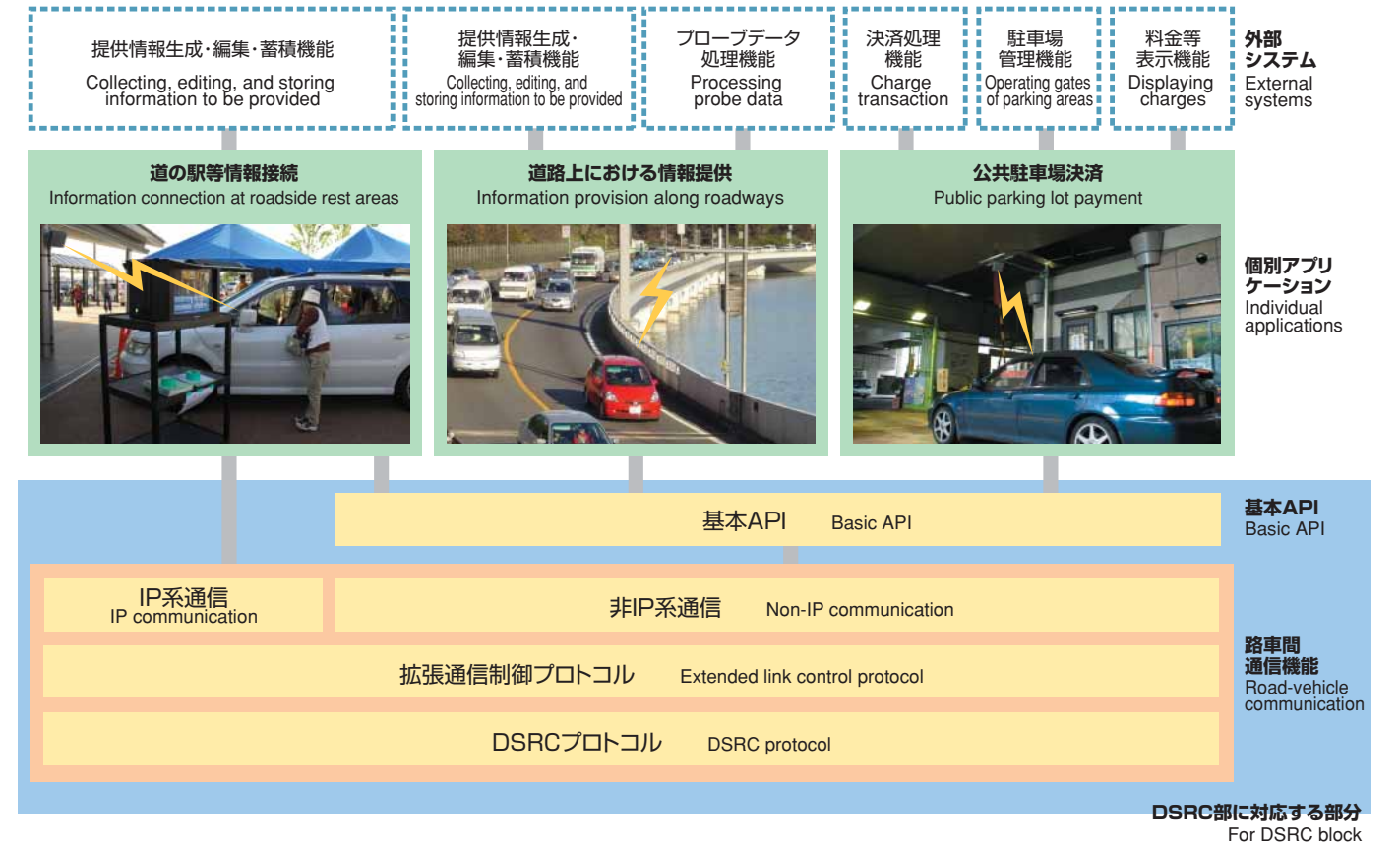
## 路側機がITS車載器へ多様なサービスを提供

次世代道路サービスでは、路側機は外部システムと連携しつつITS車載器へサービスを提供していきます。

[P12-13, 18]

## Various services provided by roadside units to ITS on-board units

Next-generation services will be provided from roadside units to ITS on-board units in cooperation with external systems. (See pages 12-13, 18)



## 一つのITS車載器で多様なサービスを提供

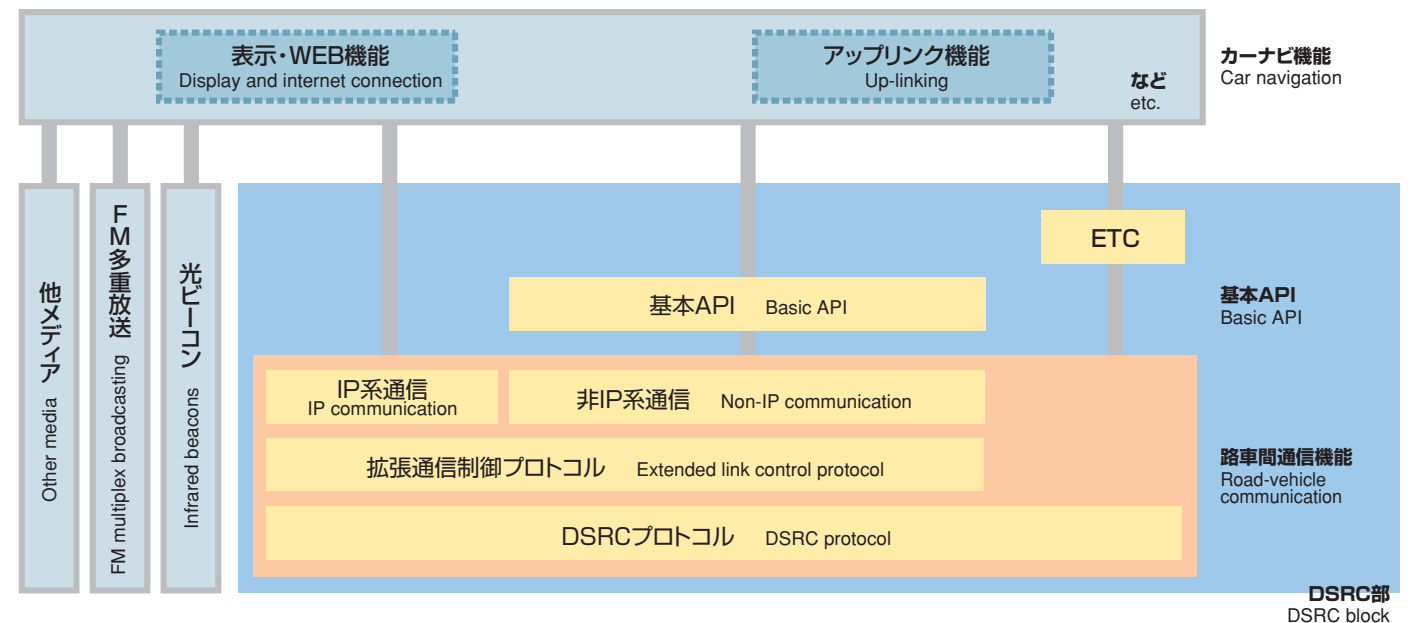
現状ではVICSやETCなどサービスごとにシステムが必要です。しかし、次世代道路サービスでは、共通の仕組みを定義することにより、一つのITS車載器で多様なサービスを提供できるようにしていきます。

[P12-13, 18]

## Providing a variety of services with a single ITS on-board unit

Services such as VICS and ETC are now provided by different on-board units. Next-generation road services will be delivered by a single unit by defining common mechanisms. (See pages 12-13, 18)

## ITS車載器の構成 Architecture of ITS on-board unit



## SMARTWAY 2007 —世界一安全で安心な道路交通を試行運用

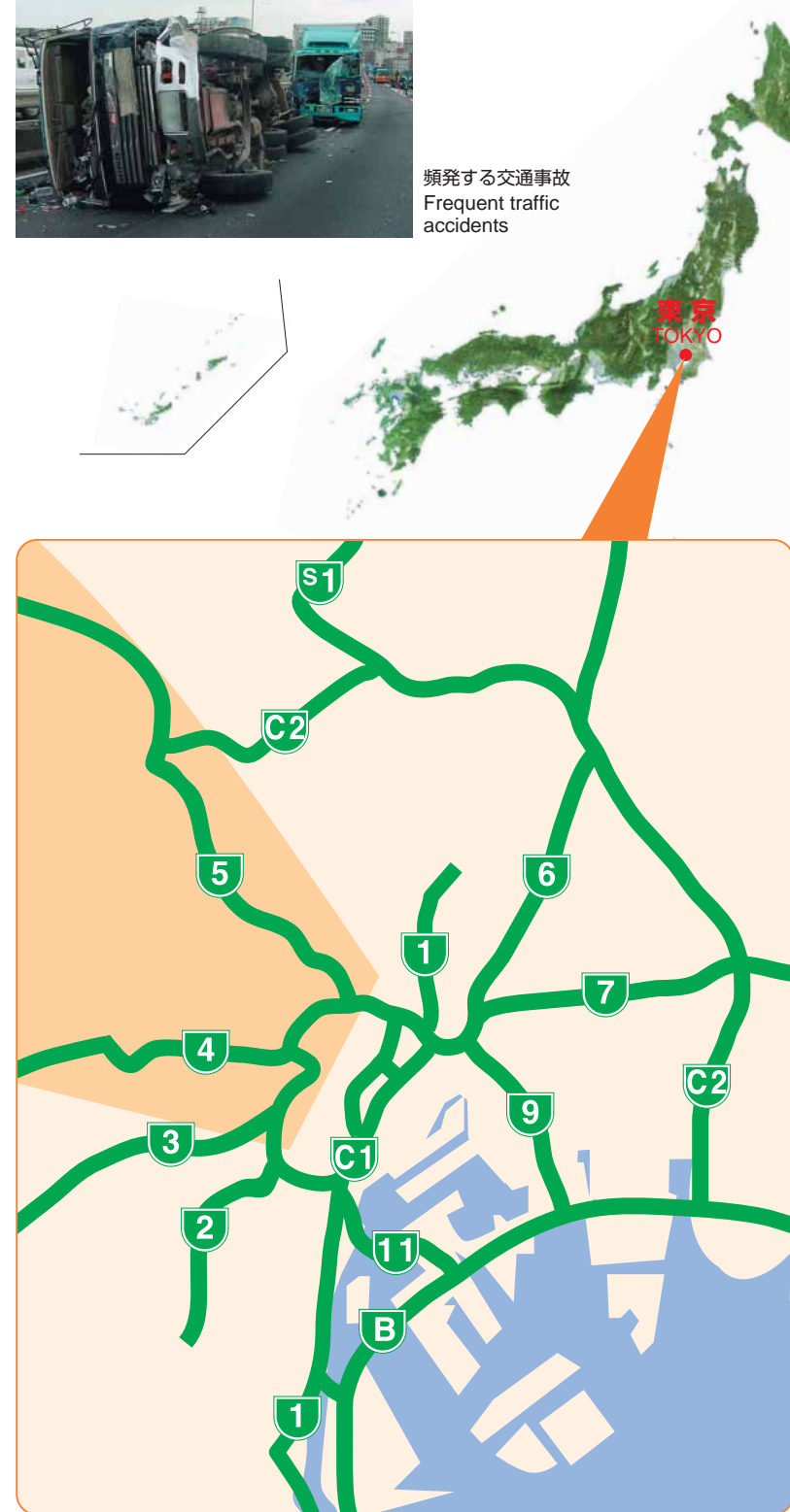
最先端のITSサービスを実現するSMARTWAY2007が、2007年10月15～17日に首都高速を中心に実施される予定です。この試行運用を機に、世界一安全で安心な道路交通の実現に向けて、2008年度以降の本格運用と全国展開を目指しています。試行運用の詳細は、下記ウェブサイトにて順次更新されていきます。http://www.smartway2007.jp



頻発する交通事故  
Frequent traffic accidents

## Smartway 2007 Deployment of the world's safest roads on an experimental basis

Smartway 2007, which will make state-of-the-art ITS services a reality, will be deployed from October 15 to 17, 2007, mainly on the Metropolitan Expressway. Based on this trial, the system is to be deployed on a full scale throughout Japan from 2008 to make the nation's roads the safest in the world. The further information of the trial will be introduced on the website. http://www.smartway2007.jp



首都高速道路網図 Network of the Metropolitan Expressway

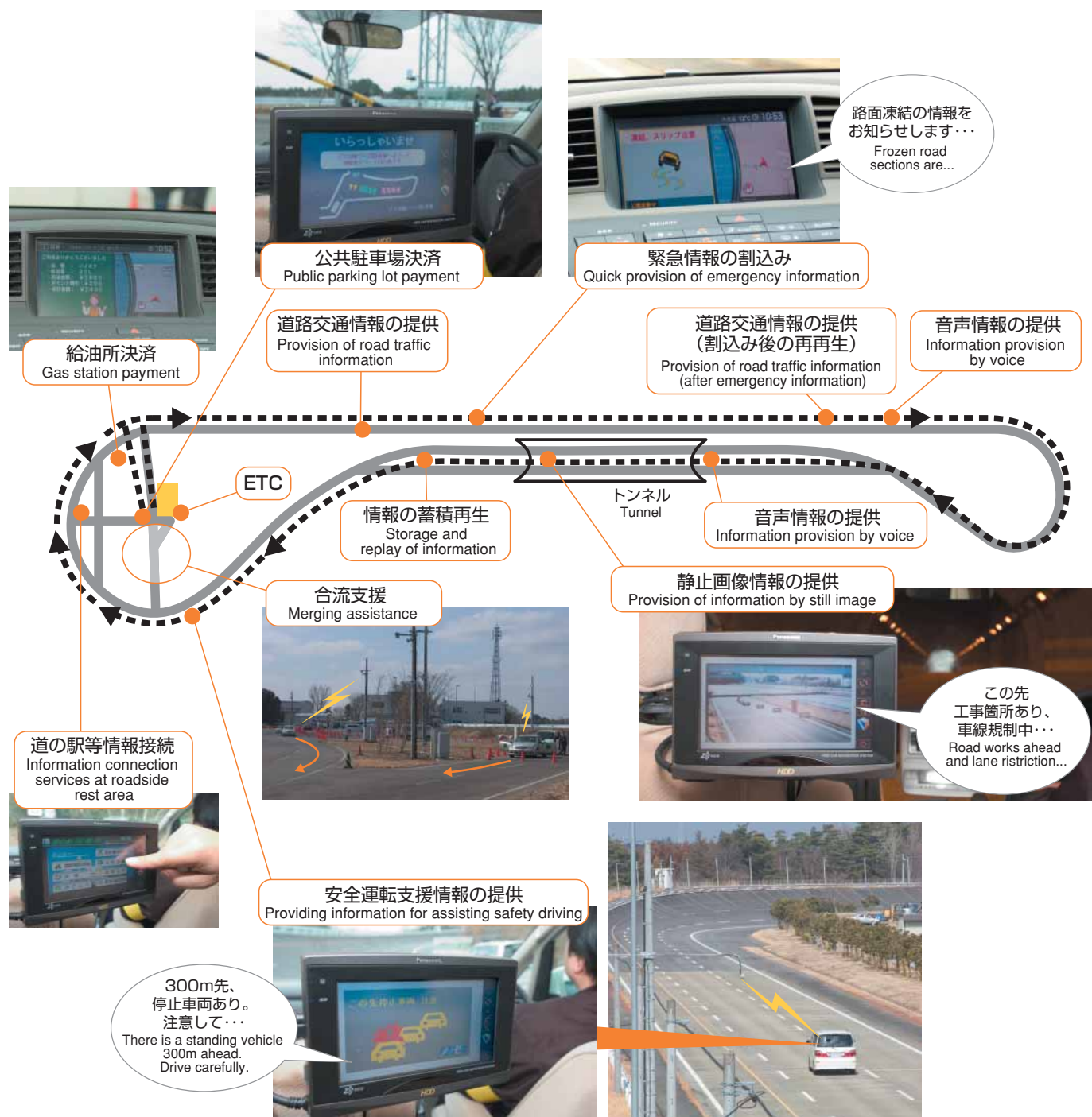


## ■ スマートウェイ公開実験で 様々なサービスを一つの車載器で体験

「スマートウェイ公開実験 Demo2006」が2006年2月に、国土交通省国土技術政策総合研究所（茨城県つくば市）で開催されました。これを主催した同研究所と民間企業23社は、2005年2月から共同研究を実施し、その取り組みの一環として、一つの車載器で受けられる様々な次世代道路サービスを公開し、約1,000名が体験乗車しました。テストコースにて、道路上における情報提供サービスとして、安全情報や道路交通情報を、音声や静止画像で提供するとともに、道の駅等情報接続サービスや公共駐車場決済サービスをデモしました。また、将来展開としての給油所決済サービスや、DSRCを車-路-車通信に用いた合流支援サービスのデモも公開されました。P32、75-76、84-85

## ■ Smartway open trial to experience various services through a single ITS on-board unit

"The Smartway open trial Demo 2006" was held in February 2006 at the National Institute for Land and Infrastructure Management of the Ministry of Land, Infrastructure and Transport (Tsukuba, Ibaraki Prefecture). The Institute and the 23 private companies that held the demonstration have conducted joint researches since February 2005, and demonstrated the provision of various advanced cruise-assist services through a single ITS on-board unit as a part of the research program. About 1,000 people experienced the services during the demonstration. On the test course, drivers experienced the provision of information through voice, still images and warnings; Information connection services at roadside rest areas, public parking lot payment services, and gas station payment services. Merging assistance based on DSRC for vehicle-road-vehicle communication was also demonstrated. (See pages 32, 75-76, 84-85)



# 世界一安全で安心な 道路交通社会が実現

交通事故死者数5,000人以下へ

AHSで交通事故削減へ

ASVでクルマの安全性向上

災害時等の情報提供で安全走行支援

道路管理の高度化で安全・安心を向上

プローブ情報で対策を効果的に

走りやすさマップで安心走行を支援

ドライブレコーダー搭載で事故削減

## Actualizing the world's safest roads

To reduce traffic accident fatalities to less than 5,000

Reducing traffic accidents with AHS

ASV systems to enhance the safety of drivers

Assisting safe driving by providing appropriate information during disasters

Advanced road management to improve safety and safe driving

Probe information to enable effective measures to be provided

Assisting safe driving with easy-to-drive maps

Reducing accidents by installing drive recorders