

# Awarded the Minister of Land, Infrastructure, Transport and Tourism Award at the Twelfth Industry, Academia, and Government Cooperation Awards

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(Key words) ITS, Expressway sags, congestion countermeasure, industry, academia, and government cooperation

## 1. Introduction

The Minister of Land, Infrastructure, Transport and Tourism Award of the Twelfth Industry, Academia, and Government Cooperation Awards has been awarded to the National Institute for Land and Infrastructure Management, Prof. Oguchi of the Institute of Industrial Science, the University of Tokyo, and to the Research Consortium for Smart Traffic Flow Control System, for developing Traffic Smoothing System at Expressway Sag Sections, which the Intelligent Transport Systems Division of the Road Traffic Department has been developing as part of an Industry, Academia and Government Project (Photo). These awards have been given since 2003 to contribute to the further development of cooperation between industry, academia, and government in Japan by honoring the achievement of individuals or groups whose outstanding achievements have made a superior contribution to the promotion of cooperative activities between industry, academia, and government <sup>1)</sup>.

## 2. Outline of the award

About 60% of congestion on intercity expressways occurs at places where the gradient changes called sags, making countermeasures for such locations an urgent challenge. The National Institute for Land and Infrastructure Management established the Study Group for Traffic Smoothing at Expressway Sag Sections in FY 2010, which under the leadership of Prof. Oguchi of the University of Tokyo, who acted as group chairperson, and with the cooperation of five auto makers (Toyota, Nissan, Honda, Mazda, and Fuji Heavy Industries) that are the members of the Research Consortium for Smart Traffic Flow Control System, carried out research and development of the Traffic Smoothing System at Expressway Sag Sections that unites road with vehicles. This system, which is based on academic knowledge of Prof. Oguchi and others who have clarified the basic causes of congestion at expressway sag sections, provides information on information signboards and to car



Photo Industry, academia, and government

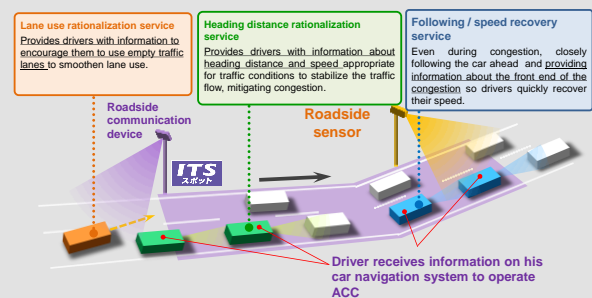


Figure Image of a Service the System Provides

navigation terminals at the same time as it provides drivers with services that use ACC (function that keeps heading distance and traveling speed of automobiles constant) for congestion countermeasures (Figure).

## 3. Future Development

In the future, the development goals and the nationwide level congestion mitigation effectiveness will be clarified through various driving tests and computer simulations in order to strengthen links between industry, academia, and government and to bring the services to the public.

[Sources]

1) Cabinet Office web page: Industry, Academia, and

Government Cooperation Awards

<http://www8.cao.go.jp/cstp/sangakukan/index2.html>

2) NILIM, ITS Division web page: Research on ITS  
"Research on Smoothing Traffic at Expressway Sags by  
Linking Roads and Vehicles".

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