

USDOT International Collaboration

ITS World Congress

Brian Cronin

Intelligent Transportation Systems
Joint Program Office, RITA, US Department of
Transportation

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Overview

- Benefits of International Collaboration
- USDOT International Collaborative Research
- Collaborative Research with:
 - European Union
 - Japan
 - Korea
 - Canada

The Benefits of International Collaboration

The USDOT/RITA aims to foster cooperative international research of intelligent transportation system (ITS) and to support international harmonization of ITS standards.

Coordinated research can:

- Preclude the development and adoption of redundant standards
- Provide significant cost savings
- Support and accelerate the deployment and adoption of cooperative vehicle systems

USDOT International Collaborative Research

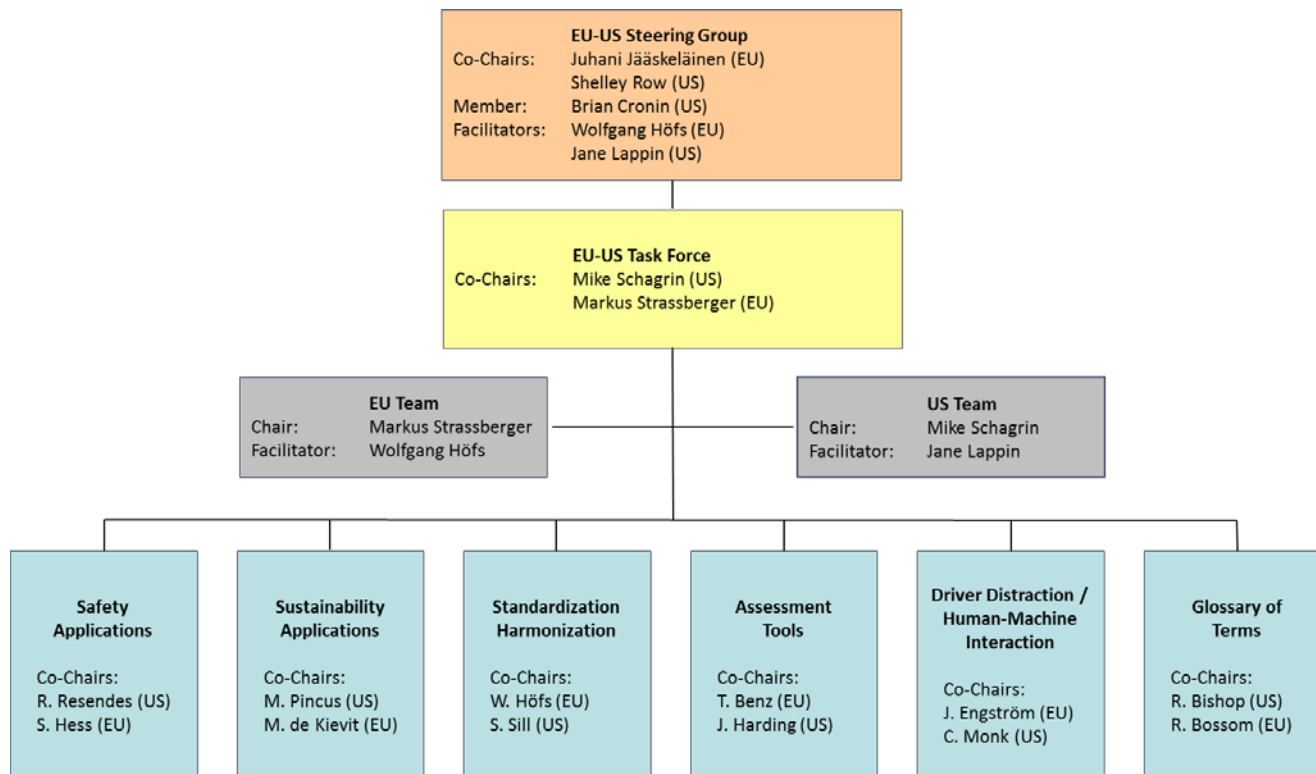
RITA is collaborating with the:

- European Commission (EC) Directorate General for Communication Networks, Content and Technology (CONNECT)
- Japanese Ministry of Land, Infrastructure, Transportation and Tourism (MLIT)
- Korean Ministry of Land, Transport and Maritime Affairs (MLTM)
- Transport Canada



Collaborative Research with the European Union

In January 2009, RITA and CONNECT signed an Implementing Arrangement to develop coordinated research programs, specifically focusing on cooperative vehicle systems.



U.S. and EU Joint Achievements

One of our most significant achievements is the development of a substantially harmonized core safety message set:

- The EU Cooperative Awareness Message (CAM) has been harmonized with the U.S. Basic Safety Message (BSM)
- While the messages are not identical, they are now sufficiently harmonized to require simple software reconfiguration for systems to use both messages

Harmonization enables the use of common hardware and software for products destined for both regions, reducing both cost and complexity to manufacturers and, ultimately, to consumers.

U.S. and EU Joint Showcase

To demonstrate the U.S.-EU joint effort in developing cooperative vehicles, the USDOT and CONNECT are hosting a showcase here at the ITS World Congress:

- Provides a live demonstration of how a system of cooperative vehicles might work
- Uses U.S. and European cars that exchange similar wireless safety messages that can be understood by the hardware platforms on both vehicles



Visit our showcase:

Exhibition Hall A

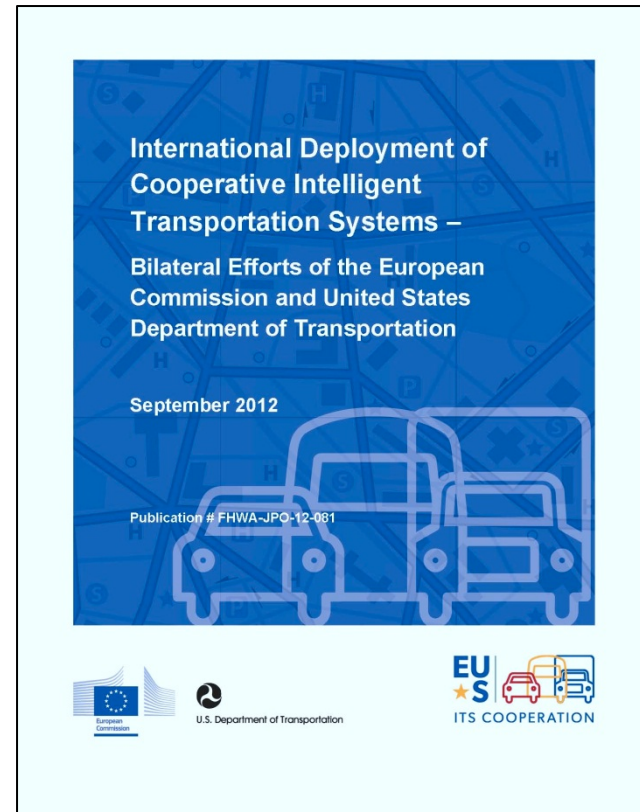
(near the entrance to the outdoor demonstration area)



U.S. and EU Joint Accomplishments Report

A new EU-U.S. report highlighting our joint accomplishments and future plans in areas such as cooperative vehicle harmonization is available now. Get your copy from:

- The joint U.S.-EU Showcase
- The ITS JPO web site:
http://www.its.dot.gov/connected_vehicle/international_research.htm



U.S. and EU Next Steps...

Going forward, the U.S. and EU bilateral efforts will continue to focus on international standards harmonization as a key outcome of our collaborative work.

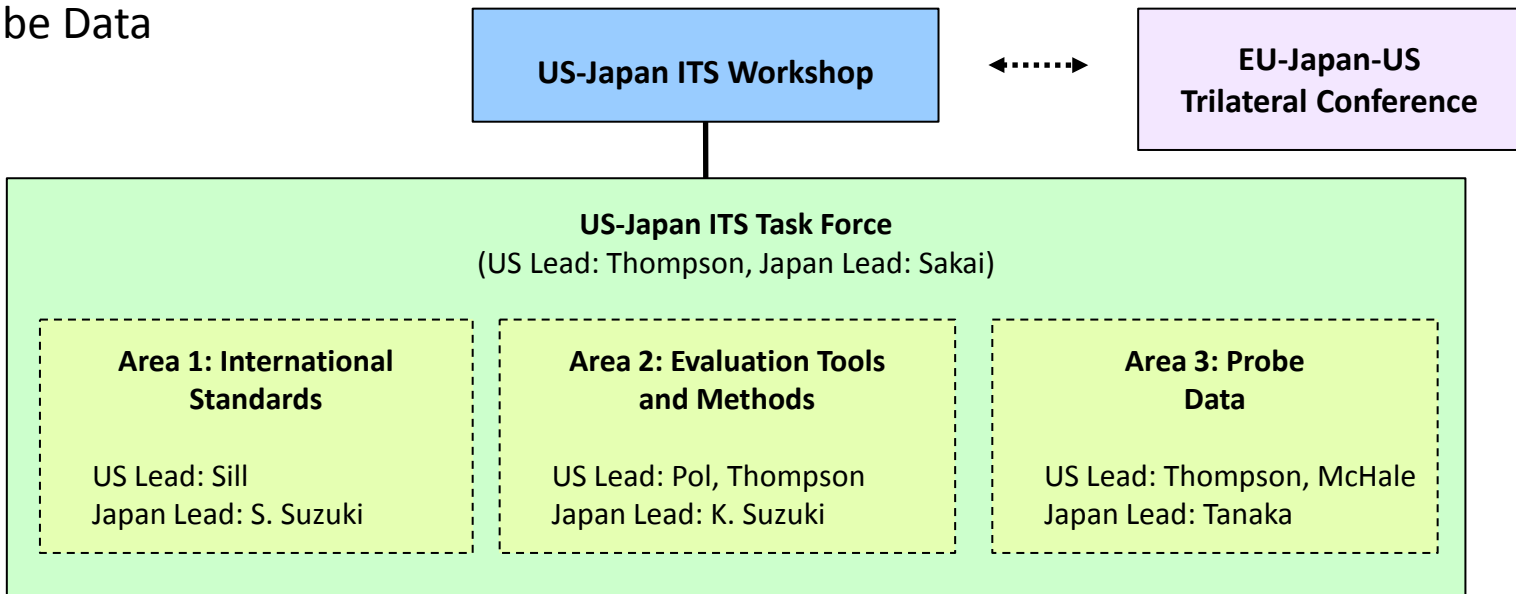
In addition:

- The Safety and Sustainability Applications Working Groups will identify critical technical issues
- The Driver Distraction and HMI Working Group will continue to gain knowledge in safe HMI design
- We will share the results of each region's individual demonstrations (such as the U.S. Connected Vehicle Safety Pilot and the EU CAR 2 CAR Communication Consortium demonstration) to maximize our overall knowledge and research

Collaborative Research with Japan

In 2010, RITA and the MLIT of Japan signed a Memorandum of Cooperation to enhance bilateral cooperation and further the development and implementation of global ITS activities. Bilateral efforts focus on three main areas:

- International Standards
- Evaluation Tools and Methods
- Probe Data



U.S.-Japan Probe Data Research Outcomes

- Promotion of probe data research and development in both the United States and Japan through the mutual exchange of information on advanced approaches to probe data
- Reduced costs for research, development, and testing of applications through shared experiences and collaborative/coordinated research
- Expedited or immediate transferability of lessons learned from the Japanese experience in the United States and vice versa
- Increased understanding and quantification of prospective benefits of deployments similar to Japan's ITS Spot for sharing with domestic public and private sector partners (e.g., original equipment manufacturers) in the United States

U.S.-Japan Probe Data Research Outcomes (cont.)

- Global marketability of products due to consistency and compatibility of data, probe systems, technology, and practices, and harmonization of data standards
- Sustained global competitiveness for auto manufacturers and device makers
- Effective strategies to improve roadway operations, planning, and maintenance; provide better traveler information than what is currently available; and mitigate negative environmental impacts

Collaborative Research with Korea

The USDOT has signed an Implementing Arrangement with the MLTM of Korea to collaborate on ITS research.



Collaborative Research with Canada

- Working on International Border Crossing ITS Research
- Working with Canada on a Connected Vehicle Deployment Project through the American Association of State Highway and Transportation Officials (AASHTO)



International Collaboration Is a Must for Connected Vehicles



For More Information

The screenshot shows the RITA (Research and Innovative Technology Administration) website. The header includes the RITA logo, the U.S. Department of Transportation name, and a search bar. The main navigation menu includes About, Research, Tech Transfer, Library, Press Room, and Training. A secondary menu includes Contact Us. The page is dated October 1, 2012. A 'Print page' button is visible. The main content area features a 'Technology Transfer' section with a photo of a man pointing at a screen and text encouraging visitors to use the Technology Transfer Portal. Below this is a 'Spotlight' section with news items: 'U.S. DOT Announces Public Meeting and Webinar to Discuss Connected Vehicle Safety Program' and 'DOT Launches Largest-Ever Road Test of Connected Vehicle Crash Avoidance Technology'. To the right is a 'Procurement Opportunities' section and a 'Public Meetings' section with a 'MARK YOUR CALENDAR' heading. At the bottom right is a 'SAFETYPILOT' logo with the tagline 'CONNECTED VEHICLE TECHNOLOGY' and a 'Stay Connected' section with social media icons for Facebook, Twitter, Email, and RSS, along with a 'Share' button.

www.ITS.DOT.GOV

Brian Cronin, Team Leader, Research RITA, ITS Joint Program Office (JPO)

Brian.cronin@dot.gov