

Expanding the EU-US (transport research) collaboration to other regions of the world (P16-1045)

Prof. George A. Giannopoulos
Director, Hellenic Institute of Transport /
co-chair Int'l Coop Committee
&
Dr. Jaehak Oh,
Vice-President, Korea Transport Institute (KOTI)

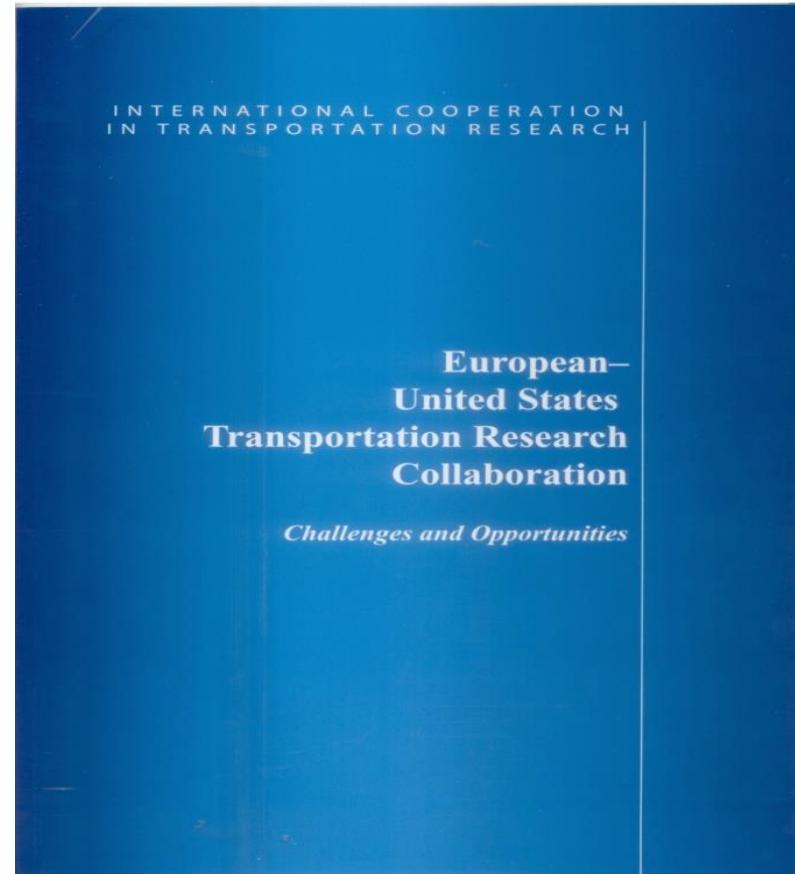
A first thorough look at EU-US TR collaboration: The TRB-ECTRI Working Group 10 (2007 – 2009)

The WG10 identity:

- ❖ **25 Full members (11 US, 14 EU)**
- ❖ **14 associated members for shorter periods**
- ❖ **3 Rapporteurs**
- ❖ **Final Report:**
6 Chapters, 2 Annexes, 105 pages.

Posted online at:

<http://www.hit.certh.gr> and
<http://www.ectri.org/>



WG10: main recommendations

- *Harmonize statutory frameworks and enabling policies*
- *Mobilize and train the human capital*
- *Build collaboration mechanisms*
- *Proceed with coordinated programming of many levels*
- *Improve data management and sharing*
- *Systematically address the main barriers:*
 - ✓ *Awareness and access to calls,*
 - ✓ *Comparable Programme Management (lean)*
 - ✓ *Research Evaluation (common criteria, methods)*
 - ✓ *Training and Human Resource Management*
 - ✓ *Appropriate funding “vehicles” and schemes*
 - ✓ *Thematic co-operation*
 - ✓ *Benchmarking of research governance*
 - ✓ *Harmonised Intellectual Property Rights*
 - ✓ *Cooperation, and greater accessibility between “soft” research infrastructures.*

The ultimate vision of WG10 for the future (but far from being near):

- *Intergovernmental decisions for the issuance of Joint international research calls;*
- *“Merging” of sources of finance for common funding of international research programs;*
- *Common / harmonized rules for the allocation and commitment of research funding;*
- *Common / harmonized evaluation - audit procedures;*
- *Harmonized administration and monitoring;*
- *Common rules relating to IPR and exploitation – implementation of research outcomes.*

EU-US collaboration in TR: A “case model” example

Gradually and steadily building a more substantial, strategic partnership between the two sides. The approach involves:

- ✓ *Top down + bottom-up approaches*
- ✓ *Structured and focused actions*
- ✓ *Joint priority setting*
- ✓ *Programme-level cooperation*
- ✓ *Setting up appropriate “tools” for cooperation*

“Tools” used so far:

1. Implementing Arrangement on Transport R&I

Under the S&T cooperation agreement between US and the EU (signed on 12 Feb. 2013)

2. Series of joint symposia on topics of common interest:

- 1st 'Urban Freight Transport: the last mile', Washington, DC, 30-31 May 2013
- 2nd 'Technology transfer and the implementation of research results' – Paris, April 2014
- *Other 2 to follow (on Road and Vehicle Connectivity and Automation and on Resilience and Adaptation).*

Expanding Transport Research cooperation to other regions (1/3)

- ❑ *The process needs careful preparation and a step by step approach;*
- ❑ *It takes both top down as well as bottom up initiatives;*
- ❑ *Some sort of harmonization of statutory frameworks and enabling policies on which to base collaboration mechanisms;*
- ❑ *A form of “parity” in research capabilities is necessary in order to ensure a balanced participation. “Parity” in research capabilities is meant in terms of one or more of the following characteristics:*
 - ✓ *Existence of qualified human capital*
 - ✓ *Existence of adequately organized and funded research establishments*
 - ✓ *Appropriate research “cultures”*
 - ✓ *Interesting and available research infrastructures or research cases (e.g. use cases, success stories, data collection infrastructures)*
 - ✓ *Existence of adequate research data.*

Expanding Transport Research cooperation to other regions (2/3)

- ❑ *Preparing the human and institutional network for international TR cooperation:*
- ❑ *The view for the Asian Region (1/2)*
 - *Identifying transport researchers who are interested in international cooperation works*
 - *Making collaborations with representative transport research institutions of major countries in Asia Region*
 - *Collaborating with major international academic transport societies such as EASTS, WCTRS, ITS World Congress, etc*
 - *Making use of existing “best practice” examples (e.g. US-EU TR Cooperation)*

Expanding Transport Research cooperation to other regions (3/3)

The view for the Asian Region (2/2)

- Actively attending or supporting existing academic conferences to be held in Asian region*
 - *Creating Int'l Coop related sessions in the conferences jointly organized by TRB, EASTS and WCTRS*
 - *Developing Int'l Coop transport research projects. Possible Themes:*
 - *Global Issues : Climate Change, Aging Society, etc.*
 - *Projects for IC : Mobility Integration, Automation & Electrification*
 - *Developing knowledge sharing programs and global databases*
 - *Actively working with domestic transport research institutes such as KOTI(Korea), ITPS(Japan), ICT(China), etc.*

TRB Int'l Coop Committee relevant actions:

A. *Sponsorship of focused Workshops and lectern Sessions*

Examples from this year's Annual Meeting:

- **Session 101** (Convention center 159 – Sunday 9am - noon): **Reviewing Progress and Achievements on EU–U.S. Transport Research Collaboration**
*To review the progress in transportation research collaboration between the U.S. and the EU
And draw lessons for the future.*
- **Session 673** (Convention Center 151B – Tuesday 3:45-5:30pm): **Leveraging Knowledge through Twinning of Research Projects: Three Twinned Projects from European Commission Horizon 2020 and FHWA**
To capitalize on the existing experience in twinned research projects available in the US and Europe in which U.S. projects, funded by U.S. DOT, collaborate with European research projects funded by the European Commission.
- **Session 830** (Convention Center 146B – Wed 2:30-4:00pm): **International Transport Research Collaboration in the Presence of Knowledge and Resource Asymmetry**
Reviews the differences in scope, depth, quality, and quantity of the transportation-related research conducted in the developed and the developing countries and will seek recommendations for more Parity and convergence.

TRB Int'l Coop Committee relevant actions:

B. New working group on: International TR collaboration and implementation

Short name: ICTRI

Full title: International Collaboration on Transport Research and its Implementation: Governance, private sector involvement, and implementation issues with focus on the Asia – Pacific region

Basic contents of the work:

- *The role of R&I in shaping the future of our transport systems*
- *Patterns of collaboration between regions*
 - Asia-Pacific, US and Europe: Description of current TR&I collaboration efforts
 - Obstacles to increasing collaboration
- *Transportation research governance and financing issues*
 - Overview of current systems
 - Focus on governance regimes in Asia-Pacific. Similarities and differences among countries
 - Enablers and barriers to collaboration in current governance regimes.
- *Private sector involvement in transportation research and implementation*
 - Focus on Asia-Pacific.
- *Review of potential models of collaboration*
 - Focus on incremental steps and the necessary reforms and resources
- *Relevant case studies and best practices*

TRB Int'l Coop Committee relevant actions:

C. New working group:

Global Network of Transportation Research (GNTR)

Purpose & Vision:

Register a global network of transportation research Organizations to:

- *Foster decentralized and seamless exchange of research needs;*
- *Nurture cross fertilization of innovative research ideas; and*
- *Facilitate collaborative conduct of research across geographic and national boundaries.*

TRB Int'l Coop Committee relevant actions:

D. New organisation and focus of the Committee

New Committee Focus:

To enhance the international cooperation and international dimension of transport research, and assist the relevant education and technology transfer activities of the Transportation Research Board (TRB), within it and in the broader global transportation community.

- **Relevant Subcommittees:**

- *(0010-1): Sub-Committee on Mainstreaming International Perspectives, Networking, and promoting International Cooperation & Collaboration: Responsible for promoting awareness of the need for internationalizing transportation education and technology transferability and for strengthening global networks for transportation research, education and technology transfer. Also for identifying barriers, defining strategies and recommending mechanisms for the promotion of international cooperation and collaboration.*
- *(0010-2): Sub-Committee on International Cooperative Research Needs with emphasis on research Implementation: Responsible for identifying international cooperative research needs that has a global dimension and promoting their conduct. Identifying promising research implemented around the world, and raising awareness about the value of transfer findings to other regions.*

TRB Int'l Coop Committee relevant actions: *E. International research needs survey*

List of potential research needs - themes identified and ranked by the ICCommittee.

1. *Security of on-Board Data.*
2. *Connected and/or Automated Vehicles.*
3. *Big Data - Consumer Acceptance.*
4. *Autonomous Vehicles / Autonomous Driving.*
5. *Climate Change and Transition Strategies.*
6. *Cultural differences in International Research Cooperation.*
7. *Development and Maintenance of Transport Infrastructures.*
8. *Framework for harnessing the power of global cooperation the Transport.*

THANK YOU !!!

Prof. George A. Giannopoulos
Dr. Jaehak Oh