

Promoting international transport research cooperation: current activities and future work (the EUTRAIN project)

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The context of International Collaboration in Transport research

Aim: to develop institutional structures that will facilitate the development and sharing of technologies and innovations that are conducive to the development and implementation of more efficient and effective transportation systems world wide.

(Elrahman – Munro, WCTR 2007)

Trends: Increased importance and priority as the increased difficulties and the global economic crisis make many governments realise the benefits of such cooperation...

Levels of International cooperation

Pooling of Resources

- Investing in foreign R&D (e.g. creating a research center in a foreign country)
- Joint Programming (coming together of partners to jointly execute research projects)
- Establishing a “common pot”

Coordination of Activities

- Jointly developed work plans (but separate financing)
- Coordinated Calls: Bi-lateral co-funded cooperation on jointly agreed topics
- Twinning (Synchronization of Projects)
- Programme Level twinning (Cooperation at programme level)

Exchange of Information

1. Scanning tours & Piloting projects;
2. Bilateral Sharing of Know-How
3. Hosting of Scientists
4. Knowledge Exchange through a Centralized Coordinating Entity.
5. “Twinning” of different government jurisdictions
6. Scientist to scientist exchanges and bi- or multilateral meetings.

“Instruments” of international research and innovation cooperation (European scene)

Instruments used by countries

- Bi- or multi- lateral S&T agreements with 3rd countries
- Eureka initiative: pan-European network for market-oriented, industrial R&D
- Inter-governmental Cooperation agreements (e.g. ESA, ESO, CERN)
- Joint programming initiatives

Instruments used by the Commission of the EU

- Bilateral Science and Technology Agreements
- The *Research Framework* programme / currently FP7 – after 2013, the **CSF Horizon 2020 programme**.
- INCO-NETS (International cooperation Networks - South-East Asia / Latin America / Eastern Europe / Central Asia / Africa / The Mediterranean region / The Western Balkans
- Special Funding Programmes (e.g. pre-accession funds, CIP, ...)

Coordination of EU Member State Research

- ERA-Nets
- *Strategic Forum for International S&T Cooperation* (SFIC)
 - Coordination of national or international cooperation activities of similar nature;
 - 1st Pilot initiative with India on water and energy research;
 - 2nd Pilot Initiative with US.

Characteristics of the EU international transport research cooperation

- International cooperation is centered on the basis of mutual benefit in areas that are especially suited for it (e.g. pre-normative research, and global challenges such as traffic congestion, energy efficiency, and environmental impacts)
- Reflect top-down and bottom-up priorities
- Focus on large emerging economies and neighbouring regions
- No specific quantitative targets.

Ways to involve Third Countries (EU practice)

- Full participation of third country nationals to one's national research programme (i.e. with Grant Agreement co-signed). EU examples:
 - Participation of partners in main calls - with EU funding or not
 - *Specific International Cooperation Actions* (SICAs) can be co-funded by 3rd country, specific participation rules.
- Programme Level Cooperation (A priori Twinning) and Coordinated Calls: Bi-lateral co-funded cooperation on jointly agreed topics
- Synchronization of Projects (Twinning)

Examples of SICA-projects in EU FP7

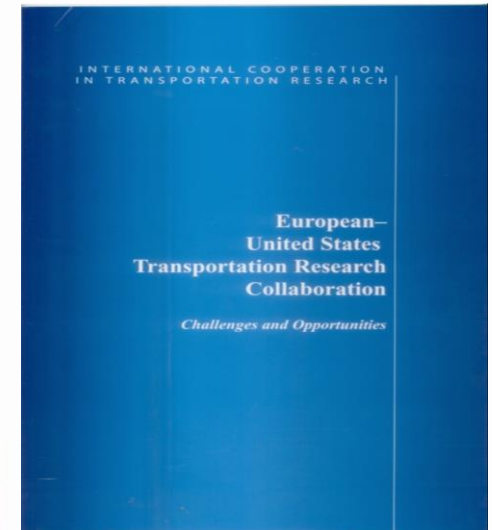
- Exploring and fostering international collaboration in the waterborne transport sector (Brazil and Russia);
- Integrated intermodal traveller services (Brazil, China and Russia);
- Assessing and predicting the combined effects of natural and human-made pressures in the Mediterranean and Black Seas;
- Knowledge-base and tools for regional networks, integrated management of activities together with assessment of wind energy potential in the Mediterranean and the Black Sea.

Two notable initiatives

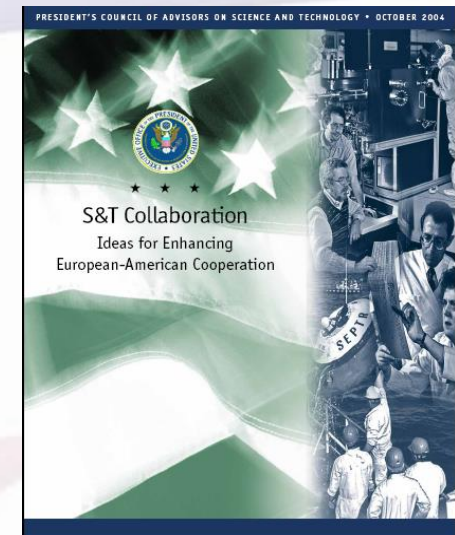
The TRB – ECTRI Working Group (2009):

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

Posted online at: <http://onlinepubs.trb.org/onlinepubs/general/EU-USResearch.pdf>, and <http://www.ectri.org/>



An earlier US report (2004):



EUTRAIN

European Transport Research Area International cooperation activities

*Assigned in response to call TPT.2011.3-1:
A productive international cooperation to strengthening the European
Transport Research Area and facing global challenges*

Consortium

ECTRI



ECTRI Office
CERTH/HIT
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KTI
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ERTICO



FEHRL



FEHRL Office
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Project Objectives

- Lay the ground work for implementing an improved **framework for international transport research cooperation** along the lines of the EU Communication: “*A strategic European Framework for International Science and Technology Cooperation*”[COM(2008) 588 final]
- Identify **research capabilities, funding potential, future priorities and policies for international transport research cooperation** in major regions around the world (relevant to EU policies and the ERA-T)
- Discuss **current practices** for research governance and management, barriers, gaps and diversions for international transport research cooperation
- Assess the **benefits or added value** to the EU (ERA-T) and the prospective synergies from such closer international cooperation
- Investigate alternative **cooperation models and tools**
- Disseminate **European know how and practices**

Topics of interest, and recommendations on:

1. Research themes of common interest by area;
2. Programming and governance issues;
3. Research infrastructures and their networking - Information and data sharing issues;
4. Research training and human resource issues – mobility and networking;
5. Differences in Institutional cultures and research governance regimes;
6. Pre-standardization and means of harmonizing approaches and practices;
7. Intellectual Property regimes and their application in transport research.

Main activities:

- **Desk research**
- **Questionnaire survey**
- **three regional workshops**
- **one Conference**

Aiming at:

- **collecting further data and experiences related to international collaboration**
- **Assessing needs and topics of interest and priorities for research cooperation of the respective countries and regions with the EU**
- **Recommending viable instruments and tools.**

	Month	Location	Focus on
Workshop 1	10 th	Russia	Russia, Balkan countries, CIS, and Black sea countries
Workshop 2	12 th	Greece	Mediterranean cooperation countries
Workshop 3	14 th	China	BRICS plus Korea, Japan, Australia, Chile
Conference	23 rd	Brussels	Overall conclusions and consensus on project recommendations

Current activity: World Questionnaire survey

Objective

To obtain a first hand account and understanding of the views, attitudes and experiences in international transport research cooperation from the surveyed Organizations.

Addressed to

Governmental administrations (or equivalent) dealing with research policy formulation and research governance more generally at National or Federal level

Completion Methodology

Information Seminars / Workshops (half-day, by project representatives) and bilateral interviews

“Network of Associated Entities - NAE”



Transportation Research Board – National Academies (TRB), U.S.A.



Center for Transportation Studies, University of Minnesota, U.S.A.



Petersburg State Transport University, St. Petersburg, Russia



Beijing Transportation Research Centre, China



Pontificia Universidad Católica de Chile, Chile



Korea Transport Institute (KOTI), Korea



Council for Scientific and Industrial Research (CSIR), South Africa



Federal Highway Administration (FHWA), U.S.A.



Federal Railroad Administration (FRA), U.S.A.



ARRB Group (former Australian Road Research Board), Australia



PWRI - Public Works Research Institute, Japan



CRRI - Central Road Research Institute

“Network of Related Entities - RE”

Organizations with which the project will create contact and keep correspondence as a way of sounding their opinions, views and reactions to the project’s findings and proposals, i.e. as a kind of “Advisory Board”.

MEETING SCEDULED FOR:

WED 24TH JANUARY 5.45-7.30 HILTON COLUMBIA 3&4.

Participation of 100 Organizations from:



Russia



China



India



U.S.A.



Japan



Australia



Brazil



United Kingdom



Argentina



Canada



Korea



Mexico



Portugal



South Africa



Switzerland

The International perspective of the TRB (1 / 3)

A. STRATEGIC LEVEL

1. Become a “facilitator” and initiator of international research cooperative work
2. Provide know how and the necessary groundwork to enhance international cooperation through its current channels (Committees and working groups, Conferences, publications) and possible new mechanisms.
3. Advise governments on relevant issues (policy and operational)
4. Provide a funding and research governance vehicle for international research programming and implementation.

The international perspective of the TRB (2/3)

B. OPERATIONAL LEVEL

1. Promote training and human resource management focused on international cooperative research
2. Become a “facilitator” through its soft infrastructures (libraries, data, information channels), facilitating networking, advising on appropriate Themes and challenges for Intern’l cooperative work.
3. Provide benchmarking at all levels (research programming, program management, funding, research evaluation)
4. Provide funding directed to “common pot” activities with other International Organizations
5. Provide program management and / or research evaluation.

The international perspective of the TRB (3/3)

C. NEED TO PLAN AHEAD, AND GO IN STAGES

1. Prepare a strategic vision document for international activities (long term) with: Objectives / priorities / activities / budget / human resources
2. Build on existing base and utilize current success stories (Conference / publications / etc).

Thank You !

WG10: Recommendations (1/2)

- ❑ *Statutory framework and enabling policies*
- ❑ *Mobilize and train the human capital*
- ❑ *Build extended collaboration mechanisms and coordinated programming of many levels*
- ❑ *Improve data management and sharing*
- ❑ *Systematically address the main barriers of: Awareness and Access to calls, IPR, Labor issues, national / individual mentalities to “go-it-alone”, etc.*

WG10: Recommendations (2/2)

- Intergovernmental decisions for the issuance of international research calls for tenders, bids and their evaluation;
- “Merging” of international sources of finance for funding “common” international research programs;
- Common rules for the allocation and commitment of research funding;
- Common administration and monitoring procedures for (international) research projects;
- Common evaluation procedures of research results;
- Common rules relating to IPR and exploitation – implementation of research outcomes.

