

INRETS EU French Presidency Event Lyon, 8-12 December 2008

“Sustainable Transport & Mobility Research and Climate Change Challenge”

TRANSPORT RELATED RESEARCH EUROPEAN RESEARCH AREA GREEN PAPER

Summary proceedings of the event

*This document is not committing the French Government.
It is a summary of the European Research Area Green Paper results of the event.*



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Introduction

This document collects the results of the final, plenary session of the event, giving a flavour of the different challenges faced by the transport research community when contributing to the ERA Vision 2020. These are the unedited texts as presented at the session.

The speech of Mr. Bourgeois at the presentation of the “Lyon declaration” contains six key messages underlining the need for cooperation among governments and research stakeholders in order to achieve the ambitious goals set by the Vision 2020.

The conclusions of the “management and governance” session address the need to promote excellence in transport research, to establish sufficient training opportunities and suitable benchmarking of European research governance, to promote cooperation with stakeholders and to proceed with more Joint programming efforts.

Regarding “Gender equality” the conclusions show the complexity of the social web determining the professional position of women in transport research. The main issues: how to attract women to the job? and how to close the gap in high level positions? They include economic, social, and psychological aspects and are closely related to the situation of young researchers.

The essay on “Young researchers” summarizes the discussions but also reflects the personal experiences of the chairwoman, Prof. Cristina Pronello. When dealing with the attitude towards research, she argues that young researchers should be taught the sense of “slowness” when investigating problems, in order to fully appreciate the research work. High potential young researchers are characterized by their curiosity and their speculative minds.

The presentation on the “European Transport Research Review” (ETRR) stresses the main features of the publication: an Open Access Journal that makes it easily and widely available through the Internet, provides focus on issues of European interest and it is oriented towards researchers and practitioners as well.

Presentation of the Lyon Declaration: speech of Guy Bourgeois, INRETS Managing Director, 11 December 2008

Mrs. Pappalardo, Commissioner for Sustainable Development, the representative of the French Government,

Mr. Director, the representative of the European Commissioner for Research,

Mr. Representatives of the Czech, Swedish, and Spanish Governments,

I have the great honor to present you what we call the "Declaration of Lyon".

As all the European statements, it should be read at two levels:

- the first level, which I will hold on, is the level of key messages
- the second level, more reserved to specialists and experts, translates these key messages into the European common language, the "Brussels english", which then can be used by all the concerned stakeholders in an operational way.

Thus I will hold on key messages. Before that, I would like to congratulate and thank all the persons - our "sherpas" - managed by Jean-Pierre Médevielle, who helped us to identify the key messages on the one hand, and to ensure the best possible draft on the other hand. They spent much time and did many efforts, and I would like to thank them under your name.

There are six key messages:

- The first key message is the alignment of our seven logos: the vast majority of the European transport research, structured in our associations and networks of excellence, is gathering, meeting and regrouping in this common draft. We are sure that our circle will keep on widening.
- Second key message: we want to implement the 2020 Vision of the European Research Area, as it was approved by the Council of Ministers of last December 2nd, in our activity sector, transport: the excellence of European research should find its roots in strong regional "clusters", linked with each other through solid and structured networks. We represent these European networks, and we commit ourselves to ensure the best complementarity, the best possible coordination, through the setting up of our "common working task force".
- Third key message: our societies have big challenges to face today: energy, climate change, globalization, the new technologies of information and communication, the ageing of our populations; in the field of transport, we all are faced to them, since transport and society are a daily life issue; these challenges also are specific to transport challenges: congestion, safety, security. We are ready to mobilize our strengths, our energy in order to cope with these challenges together, through a permanent dialogue with public authorities, economic and industrial stakeholders, and with the whole society too. We namely consider the dialogue with the technological platforms ERRAC, ERTRAC, WATERBORNE as extremely important, especially to identify the most promising actions relative to the competitiveness of the European economy and industry.

- Fourth key message: the affirmation, through the 2020 vision, of a "fifth European freedom", the free movement of researchers, invite us, beyond the mobility of persons that we must facilitate and promote, to welcome and train the new generations of researchers in a definitely European area. This fifth freedom invites us to continue our efforts for the mutualisation of our research infrastructures, especially for those which make it easier to collect and disseminate knowledge. In this minding, we finalized yesterday the organization of the next session of our "young researchers" seminar, common to ECTRI, FEHRL, and FERSI, which will be held in Torino on next spring. Yesterday too, we proceeded to the official launching of the European Transport Research Review, the first scientific multidisciplinary journal in open access, created by the European research for the European research, which we want to see at the best rank among the scientific journals in the world.
- Fifth key message: we acknowledge the will of the Member States, expressed in the 2020 vision, to reinforce the joint programming of research in the planning of strategic agendas, in the drafting of the national and European programs, in the calls for the projects of the ERANET mechanisms. Our transnational research networks will bring their contributions, prepared in our joint working groups, to each of the Member States and to the European Commission. So far for the updating of the FP7, we just did it; this is the result of the intensive work achieved by our working poles and our networks of excellence during the two latest days. For example, the FERSI, with the assistance of ECTRI's ad hoc group has developed significant proposals for a strategic research agenda on road safety.
- Sixth and last key message: Europe is opened on the rest of the world, should stay opened, and international scientific cooperation should develop in a cooperation spirit, without naivety, especially concerning intellectual property rights. I would like to mention here the next issue of the "International Cooperation in Transportation Research" report, which was elaborated by ECTRI and TRB, which will be very useful for those who wish to develop scientific cooperation between the Europeans and the Americans, and beyond that, to promote our scientific cooperation with the rest of the world.

I am very glad to invite my colleagues and friends now to join me and sign the "Lyon Declaration".

Conclusions “Management and Governance”: G. A. Giannopoulos

The Session speakers and discussants touched upon a number of critical issues regarding transport research management and governance in Europe. These issues can be summed up as follows:

1. There is a need to promote excellence in transport research by paying attention to issues like:
 - ✓ Lean management of research programmes and projects
 - ✓ More collaboration at European level
 - ✓ Promoting common standards
 - ✓ Intellectual property issues
 - ✓ Promoting common (research) evaluation methods
 - ✓ Solving outstanding legal and ethical issues
 - ✓ Promoting common European principles for the conduct of research.
2. Establish sufficient training opportunities for the future European researchers by promoting issues like:
 - Establish a commonly acceptable profile for the European (research) project manager
 - Adopt a multidisciplinary approach in the training curricula
 - Establish a European Master degree for research management and governance
 - Promote the virtual European doctorate school.
3. Establish suitable benchmarking of European research governance. This will enable easily identifiable and more uniform research governance standards to be applied as a prerequisite for funding.
4. Promote cooperation (of the research community) with the stakeholders. This is of great importance if we want to make sure that the research results are properly promoted to becoming useful and meaningful applications promoting the economy, causing development, and covering true societal needs. To this end the recent idea of establishing of “Industry lead Competence centers” is in the right direction.
5. Proceed with more Joint programming efforts and research networking, as an antidote to the inherent complexity of transport research.

At the end we must all strive to achieve in the European transport research context more:

- Value for money,
- Long term perspective and viability, and
- Fostering of the (transport) policy goals and objectives.

Conclusions “Gender Equality”: Ariane Dupont-Kieffer-INRETS, Micaela Caserza Magro-NITEL, Willy Diddens-DVS

- Gender issues in Transportation Research sector is an issue,
- Still national differences in Europe (not only according a North-South distinction, cf. Germany)
- two main questions at stake, related to the young researchers issues, even if the proportions of graduates student are equal according to gender equality criteria:

1/ How to attract women to the job?

Identifying a gap between social sciences and engineering and exact sciences. Why? What to do?

	EDUCATION	HUMANITIES & ARTS	SOCIAL SCIENCES, BUSINESS & LAW	SCIENCE, MATHEMATICS & COMPUTING	ENGINEERING, MANUFACTURING & CONSTRUCTION	AGRICULTURE & VETERINARY	HEALTH & WELFARE
EU-25	60.5	51.4	43.1	40.0	21.9	49.6	51.1
Austria	65.3	47.5	43.4	30.2	18.9	65.9	72.0
Belgium	43.8	42.2	36.1	33.1	14.3	30.6	45.4
Cyprus	-	-	-	100.0	-	-	-
Czech Republic	66.7	48.6	40.0	36.7	22.3	36.7	42.2
Denmark	-	46.9	38.6	33.6	23.8	52.4	54.0
Estonia	50.0	58.8	62.5	21.9	17.6	37.5	72.5
Finland	66.7	57.9	51.6	43.1	25.5	41.7	64.3
France	49.0	55.5	41.4	38.4	25.9	55.6	56.1
Germany	52.6	49.5	34.5	29.9	11.4	54.3	47.7
Greece	:	:	:	:	:	:	:
Hungary	59.5	56.4	35.9	37.5	29.7	32.0	43.3
Ireland	50.0	53.1	47.2	56.6	31.2	31.6	50.7
Italy	72.5	58.5	50.4	54.0	31.2	54.4	61.5
Latvia	83.3	66.7	100.0	57.1	37.5	100.0	0.0
Lithuania	-	78.9	63.9	47.2	43.9	50.0	68.3
Luxembourg	-	-	-	-	-	-	-
Malta	100.0	33.3	0.0	-	-	-	-
Netherlands	-	43.8	48.5	40.1	19.9	44.3	48.7
Poland	:	51.6	42.7	50.1	24.1	53.8	47.2
Portugal	65.4	66.8	53.9	58.1	34.1	64.6	63.3
Slovakia	72.4	46.2	49.6	57.3	26.2	32.1	71.3
Slovenia	60.0	63.0	37.7	44.8	19.3	36.4	52.0
Spain	59.2	48.6	47.3	46.6	21.3	41.2	49.3
Sweden	64.0	53.2	48.3	34.8	26.4	50.7	59.4
United Kingdom	53.6	45.9	42.2	41.9	19.6	45.2	52.4
Bulgaria	52.2	68.4	50.0	52.8	31.4	46.4	56.4
Iceland	-	50.0	-	0.0	-	-	33.3
Israel	73.8	51.4	51.6	44.0	25.0	45.5	55.6
Norway	60.0	33.7	49.5	40.7	22.8	46.9	46.9
Romania	-	58.9	46.6	57.6	38.3	36.6	66.5
Switzerland	54.2	44.7	28.9	29.4	15.2	57.5	47.7
Turkey	35.3	29.2	29.7	34.8	28.9	39.8	62.6
Japan	48.6	48.7	32.4	19.9	9.2	24.7	25.7
United States	66.0	45.7	55.9	35.5	18.0	36.8	68.5



ISSUES RELATED TO SCIENTIFIC TOPICS

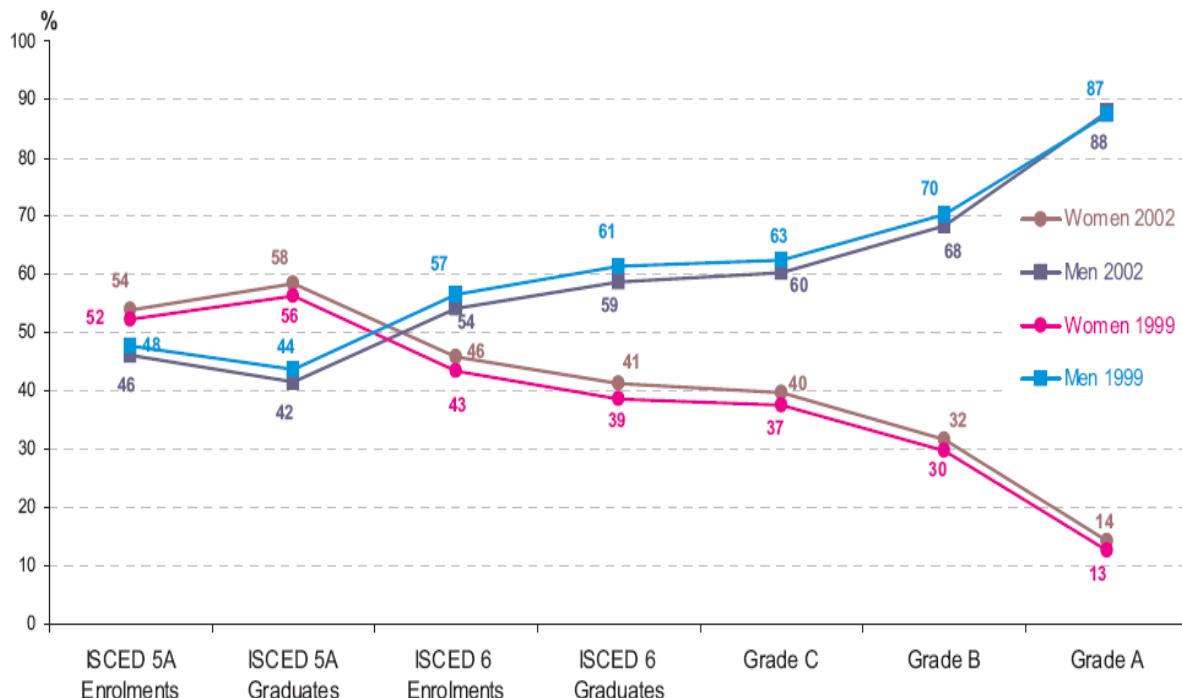
	Science, Mathematics & Computing				Engineering, Manufacturing & Construction		
	LIFE SCIENCE	PHYSICAL SCIENCE	MATHEMATICS & STATISTICS	COMPUTING	ENGINEERING & ENGINEERING TRADES	MANUFACTURING & PROCESSING	ARCHITECTURE & BUILDING
EU-25	54.4	33.0	31.6	18.6	17.1	32.0	31.3
Austria	50.3	21.8	24.4	9.5	16.1	36.4	20.0
Belgium	40.3	29.8	35.4	3.2	13.4	0.0	21.4
Cyprus	100.0	-	-	-	-	-	-
Czech Republic	50.9	28.6	31.7	10.3	19.9	47.6	25.8
Denmark	33.6	-	-	-	23.8	-	-
Estonia	28.6	18.2	0.0	100.0	15.4	100.0	0.0
Finland	62.0	39.3	34.3	13.9	23.6	42.9	34.4
France	53.4	34.3	24.3	18.8	22.8	37.7	27.8
Germany	46.7	22.8	27.9	11.9	6.8	24.2	22.3
Hungary	43.0	37.4	25.0	30.0	33.3	32.1	16.7
Ireland	60.2	52.4	0.0	21.4	24.1	58.8	0.0
Italy	72.4	45.2	42.4	25.0	13.5	25.6	48.9
Latvia	66.7	0.0	-	66.7	41.7	33.3	0.0
Lithuania	88.9	28.6	75.0	0.0	44.1	-	42.9
Netherlands	-	39.9	-	-	18.0	-	-
Portugal	73.0	56.7	58.3	28.0	28.0	51.6	42.6
Slovakia	71.4	48.9	46.2	20.0	23.9	26.9	33.3
Slovenia	65.0	34.5	20.0	15.4	10.4	28.6	57.1
Spain	54.5	46.8	40.4	22.8	16.0	62.9	24.0
Sweden	51.7	32.4	16.0	21.6	24.1	32.7	39.3
United Kingdom	56.6	32.6	24.1	23.3	16.2	33.4	21.3
Bulgaria	77.8	49.2	30.0	-	33.3	42.9	0.0
Norway	-	0.0	-	-	13.3	-	20.0
Romania	57.6	:	:	:	37.5	-	42.9
Switzerland	42.6	23.3	22.2	7.5	16.9	-	5.0
Turkey	54.1	31.7	28.6	28.6	14.7	42.5	39.8
United States	45.7	27.7	27.0	21.0	17.2	-	45.7

2/ How to close the gap between men and women in high level positions within the Transport Research field?

Over the time, since the adoption of the action plan Women and Science, some progresses have been experienced:

- **Evaluation Panels:** in FP5 the percentage of women varied from 22% to 27% (in 2001). In 2003 in FP6 the percentage reached the 26%
- **Advisory groups:** in FP5 the percentage of women was 28%, which decreased to 27% in FP6
- **Expert database:** in FP5 the percentage of women was 17%, which increased to 24% in 2004
- **Programme Committees:** in FP5 the percentage of women was 22%, which increased to 25% in FP6

Project Coordinators: in FP5 the percentage of women was 16%, which decreased to 14% in FP6



1/ How to attract women to research jobs within the transport sector?

- Lack of information and misunderstandings on the jobs: actions to be done especially during education and training processes
- Social representations and consideration (common sense) on transport activities seen as male activities and jobs
- To make the job attractive by
 - Giving more responsibilities
 - Success stories: make known that having a career is a reality
 - Attractive Wages, especially compared to the private sectors, and permanent positions
 - Allowing combining job and family life

2/ How to close the gap in the high level position?

- Few leaders because of few female researchers:
 - a matter of time: the female young researchers of today will be the senior researchers of tomorrow !!
 - Help them to be senior researcher by monitoring process between seniors and juniors and by development training in management. The later issue is broader than a gender one: young researchers need to be trained as managers, and project officers
- Having a career: to reconcile job and family life, a challenge that men and women should have to face –or are facing in some countries by
 - First challenge: to overcome the maternity leave (technologies, age limits to apply to research positions, etc.)
 - Developing facilities to take care of the children and manage job activities as kindergarten and day-care centers, flexible working hours, development of new technologies to allow working at home.... Integrated policies in favor of family (single parents issues and family with two involved parents with a career issue)at the national level
 - To develop integrated mobility programs at the European level to ease the mobility of the two persons of the couple, mobility being a key step in a career
- Changing mentalities and the issue of the acceptability of policies in favor of women, acceptability by men but also by women, by the different generations also: social representations of men's role and women's role (role models)
- Informal mechanisms and various information programs

Concluding remarks: Be aware of overlapping discriminations

Conclusions “Young researchers”: Cristina Pronello, POLITO-Italy

Young researchers issue is quite close to gender equality one as both deal with generational problems also related to attractiveness and continuity of the scientific career.

The Eurobarometer survey conducted in 2008 on people aged between 15 and 25 in large EU shows that 67% of respondents were interested in science and technology news and just under 45% said they were interested in news from the worlds of economics and politics. In addition, young men are much more likely to be interested in science and technology news than are young women. However, few are interested in pursuing a scientific career.

Transport is a largely transversal discipline and, thus it has the potential to overcome the contradiction highlighted above allowing to the youngsters to apply the scientific knowledge in solving practical problems relevant to society.

How did the participants to our session contribute to bridge the aforementioned contradiction? We have heard the experiences from the world of the Network of Excellences (EURNEX, NEARCTIS, HUMANIST and ISN) and of the Associations (ECTRI, FERSI, FEHRL and EARPA). I have remarked that all of them give contribute to reduce the gap, basically along two lines of action:

- special training through conferences and seminars; education through specialization courses leading to an academic qualification;
- promoting mobility of researchers among their members (short term visit, exchange ...).

Although all participants pursued the same goals, we can remark some differences. NoEs were created to tackle key research issues and are offering a more specialized opportunities as far the Associations are concerned I remark that their approach is more general addressing multidisciplinary and multicultural issues. Their on the job training offer the possibility of transfer of tacit knowledge and to address more managerial aspects.

Due to their freedom of action, the Associations are also able to undertake activities transcend the boundaries of their community, as for example, the YEAR 2010 initiative.

During the final discussion, finally, an interesting issue emerged about how to integrate the activity for young researchers in the long life learning perspective ... as we all are young researchers! Thus, the efforts devoted to improve the access to youngsters to research career should be maintained along all their working life to ensure a continued growth of their expertise and knowledge.

Important questions to reply:

1. *Which is the attitude or feeling of young researchers towards the research?*

The young researchers often feel that their research experience will not help them to create an own future, to find a job in the external world – the world outside universities or research centres – as they understand that the research is perceived as something abstract and far from the industry world.

They often superimpose the “external world” thought to their own thought, thinking that the truth lays in the industry knowledge or requirements ... or often they know that this is not true, but they think they cannot change what the work world asks to them. Thus, the pure speculative thought (or basic research) is not loved, it is not appealing for them, also because it seems missing of pragmatism or too far from the reality or the real world needs.

This is why they have some difficulties in understanding or seeing the practical side of their research work as they would like doing activities where it is immediate to see the results and the practical application. But this is not proper of the research work. If we will be able to teach them the sense of “slowness” and the importance of taking the right time to investigate the problems, they will begin to

appreciate the speculative side of the research activity. Slow food is better and more healthy in respect to fast food ... the same could work for the research work.

Most part of this belief lays in the fact that there are not real and concrete career or stable work perspectives. This is due to the absence of funding continuities they observe when they work in university or in research institutes. They see that the work is paid on research funds and that it is not so evident to catch money with a good continuity as the research is too much tied to "business" and there is not so room for the pure speculative (or basic) research that is the basis of the important discoveries and applications.

Another critical point regards the proposal of own ideas that could be the driving power of the research and in catching funds.

The current system is based on absurdly long proposals to be prepared where the bureaucratic aspect covers the other ones and the researchers are obliged to write many pages fitting the proposed schemes knowing the dictates proposed by the funders. Often this scheme does not help also the evaluators who have to do big efforts in following the thoughts of the proposers in several pages, often affected by wording induced by the "heavy schemes".

In USA the proposal schemes are lighter and facilitate the proposers' task as also induce more the researchers to present their ideas to catch funds.

2. Which is the way to find out young people having a high potential in doing research?

My experience shows that the youngsters well suited to the research work are immediately visible as you can strongly feel their love for the speculative activities and for the curiosity pushing them to read, to ask questions, to know more and, hence, to search information and to investigate to understand the hidden dynamics of the phenomena. They really show speculative minds.

The experience of the recruiter is fundamental to catch this aspect and feel the vibrations they are sending when you are speaking with them. This is often disregarded in the recruiting methods or principles as the recruiters are not always up to their task. This implies they are not able to understand if people are suited to the requirements and the recruitment becomes not effective.

I feel this also linked to the way used in teaching by several professors. We are losing the attitude to think, to elaborate ideas, to develop the ability to logical constructions and to inspire the youngsters to do so. Sometimes the teaching is reduced to give a superficial factual knowledge. But this last one is the easiest to learn. Nowadays, we have so many means of communication, we have internet; the information is so easy to capture. But the critical analysis, the development of a critical thought, the learning to "see the things" and deeply understand them, these aspects are another thing and allow us to distinguish the superficial factual knowledge from the thoughts inspired by real knowledge.

To arrive to this target we need "educators" that, besides being experts in their discipline, they must have the ability in teaching to observe the "things" from multiple points of view, with the others' eyes, and to never close themselves within the boundaries of a discipline, but to learn also to look at somewhere else to find the solutions here.

Another cause of missing the right people during the recruitment is the clear lack of transparency or the need to cover not "high profile" tasks as the researches do not always need high level thinkers, but good practitioners.

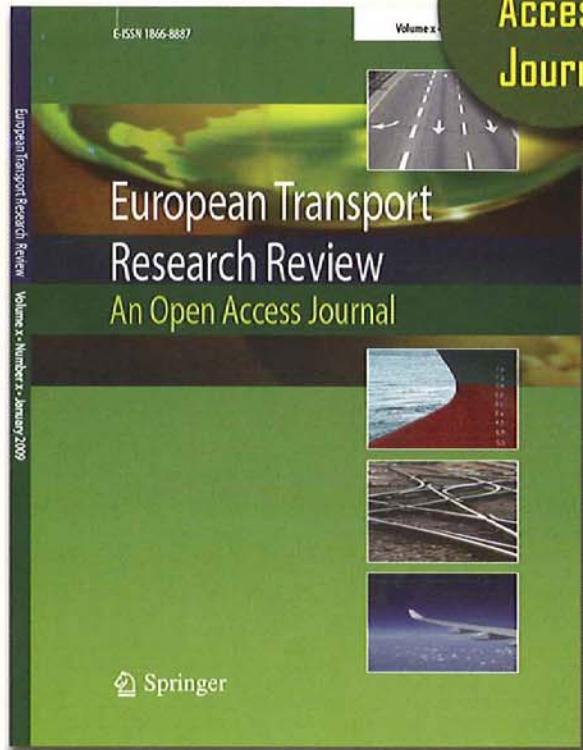
The Code of Conduct for the Recruitment of Researchers from EU Commission is of course useful, it is so "natural" in the points it envisages, but the real problem is the own ethical code of recruiters. In fact, there is not a real possibility to control the conduct of recruiters as the subjectivity plays a huge role in the judgment and, most important, this depends a lot on the culture of a country.



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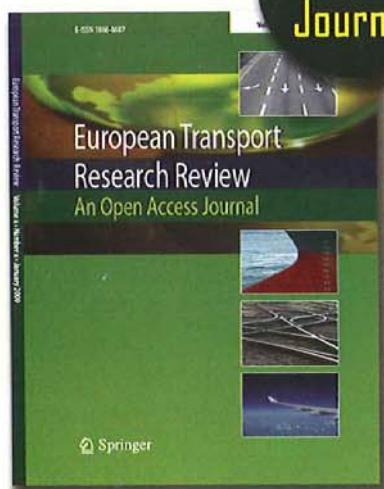
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About the Journal

The European Transport Research Review – An Open Access Journal (ETRR) is an online scientific platform aiming at disseminating research results in the field of transport. The main goal of the Journal is to provide a forum for the publication of high quality scientific papers in the field of transport in general, and a dissemination medium for new ideas and developments that originate in, or are of interest to, the European transport research community. The Journal was established by the European Conference of Transport Research Institutes (ECTRI).

There are three aspects of the Journal's concept that mark a distinct difference to the other journals in the field of transport; first, it is the open access configuration that makes it easily and widely available through the internet to all researchers and practitioners with a minimum of constraints and costs; second, it provides focus on issues of special interest to European transport research, its funding bodies and supervising organisations; third, it is clearly oriented towards researchers and practitioners as well.

The Journal considers primarily papers, on both theoretical as well as applied research, whose excellence and content represent an important contribution to transport research in Europe. Papers dealing with theoretical or applied research outside Europe are also encouraged to be submitted for publication, as long as their results are of relevance to European transport concerns, or can contribute to scientific knowledge or best practice transfer between researchers in Europe and their counterparts in other continents.

Contributors are advised to submit papers that fit at least in one of the areas of interest identified by the Journal. However, the Editorial Board can also consider papers that are not directly related to these areas but are considered of interest or of particular concern to the aims and goals of the Journal. Papers published in the Journal are subjected to peer-review in accordance with standard international practices for scholarly journals. In addition, the Journal will also periodically publish information papers, as well as book and conference reviews regarding transport policy and research in Europe.

Proposals should be submitted through the
"Online Submission System", which is accessible at:
www.editorialmanager.com/etrr

For all enquiries about content or submissions please contact by e-mail the Editor-in-chief at: abek@certh.gr