

Note from the editor

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Globalisation, as a universal characteristic of our days in which the Internet and telecommunications do play a catalytic role, renders transport, both in terms of transportation of goods and of people travelling for business, leisure or education among countries and across continents, a key pillar of economy and overall quality of life. Now that ideas, information and data can travel so fast at low costs, *transport*—and the connected to it *mobility*—is progressively challenged by an increasing demand, new standards, and unprecedented expectations regarding speed, safety, cost, human-orientation and ecology-friendliness. Clearly, numerous new opportunities and challenges are to arise for the sector of transport in the years ahead because of the radical changes undergoing in modern societies; especially for Europe given its population density, cultural and surface diversity, and devotion to polyphony and equal opportunities.

Some statistics extracted from Eurostat's official homepage on transport illustrate this picture described:

- one out of three inhabitants of European countries is a car owner, while the new car registrations are constantly rising by 1–2% each year from 1998;
- the total length of motorways has more than tripled over the last 30 years;
- 15,711,109 tons of goods were transported in 2006 through the highways and motorways of Europe; a figure that is on a constant rise of 1.2%/year since 2001.

However, although the figures above present a sector that is flourishing and that expands throughout the years,

transport has a dark side as well. Three main issues that spoil the image of the statistics presented above are transport's actual and potential impacts on safety, energy consumption and environment, not to mention that the years to follow will be sworn in amid a global economic crisis and depending concerns about Europe's ability to safeguard its own future prosperity.

As far as safety is concerned, transport is responsible for numerous fatal accidents on a daily basis and much more minor accidents that are simply unacceptable.

In a nutshell:

- 42,955 people have lost their lives in *road* accidents in Europe in 2006 alone. The number is expected to drop by 5% by 2008, but still the number is painfully high.
- With demand for *air* travel increasing at 5–6%/year, accident rates must decrease, since the goal will always be zero accidents. The interim target is to reduce the industry rate to 0.49 accidents million flights per in Europe in 2008—a 25% improvement.
- Fatalities exist in *railway* transport too, and an indicative number in Europe for 2006 is that 2,762 fatalities and injuries occurred on 9,309 total accidents. However, accidents in railway transport are not always directly evolving around fatalities of individuals, since the majority of derailments and collisions occur to cargo trains often with immeasurable side effects to the environment and public health.
- As far as *maritime* statistics are concerned, 528 accidents took place resulting on 98 fatalities during 2006 in Europe, but again with significant side effects to the environment, often irreversible.

Clearly, among all the transport modes, road transport seems to be a dominant player. Being continuously used by the general public, it is the sector of transport with the

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higher human lives safety concerns, since it is the one that results into more fatalities annually.

Environmental wise, the numbers speak for themselves. A 1–2% increase of the number of vehicle registrations, coupled with the average consumption of a private car being 8.5 L of fuel over 100 km, suggests an ever-rising demand for oil and a constant CO₂ emission that can not be contained. In fact, if numbers are assessed, the situation gets even worse.

For instance:

- 34.5% of the total energy needed for a country's everyday needs is currently consumed for transport, while 79% of this is consumed by non-public transport;
- 40 million barrels of oil are consumed daily for transport purposes, while the 70% of them is used to power non-public transport;
- 26% of the CO₂ and 63% of NO_x emitted daily come from transport related sources.
- As of September the 25th 2008, mankind went through the breakeven point of oil supplies. This means that from that point on, we consume more than nature can provide.

If we combine the facts above, it is clear that transport is one of the main reasons that drive the planet to exhaustion. Energy-wise, transport is a very demanding sector, and the fact that it appeals to all individuals and markets, makes it even harder to control and contain.

Having such challenges and opportunities ahead, the need for facilitating a sustainable balance between individual, economic, societal and environmental aspects in Europe's transport R&D become more and more evident, and various measures are taken, even worldwide, to sustain transportation benefits, while reducing its side-effects to a minimum. Examples of those actions are the white papers produced by the European Union, aiming at a reduction of fatal accidents by 2010 (targeting a 50% reduction to the figure of 1998) and, regarding the uptake of renewable energy in transport (targeting a 10% of the total renewable energy assigned to the transport sector by 2010). Those goals do set a guideline and a clear target that serves as a direct incentive for all entities, individual or institutional, to follow and support.

Under the light of the above, and as part of its vision to promote the establishment of "an efficient, integral European transport system that provides completely safe, secure and sustainable mobility for people and goods", the *European Conference of Transport Research Institutes* (ECTRI¹) recognises Europe's need to face the gaps

currently standing in between the various transport stakeholders and to promote open communication and integrating R&D efforts among the leading industrial forces in and the foremost multimodal transport research centres across Europe.

The above facts led ECTRI to inaugurate the *European Transport Research Review* (ETRR), as an independent, open access, multidisciplinary, human-centred journal, which endorses an all-inclusive approach towards the themes it covers, and towards its intended audience. Thus, the mission of the Journal is to provide an open access publication channel for high quality scientific results covering a broad range of research themes that underpin transportation, and for new ideas and developments that originate in, or are of interest to, the European transport research community. Despite the fact that this is an ECTRI initiated journal, it is considered to be independent. It may be now in its first issue, but it has already been adopted by the wider scientific and research world, as proven by the official support of FERSI (the *Federation of European Road Safety Institutes*), as well as by the numerous renowned independent experts that agreed to participate in the Journal's Editorial Board.

There are three aspects of the Journal's policy that mark a distinct difference to other journals in the field: its open access configuration, that makes it easily and widely available through the internet to all researchers with a minimum of constraints and costs; the fact that it recognises European diversity and focuses on issues of special interest to European transport research, its funding bodies and supervising organisations; and its interdisciplinarity, stretching across different transportation sectors and key actors interests. However, although it is dedicated to European transport research, it shall also cover transport research work from any other continent, provided that it is generic enough to provide best practices or technologies to be adopted in Europe. Overall, the Journal is organized in nine tracks, although any transport related issue is eligible to be published in it, even if not obviously corresponding to one of its tracks.

The tracks are:

- freight transport and logistics,
- safety and security,
- mobility and transport behaviour,
- transport and economics,
- transport and the environment,
- transport infrastructure,
- transport planning and policy,
- transport system management,
- vehicle technology.

In addition to original research papers, the Journal shall also host: special issues book reviews and letters to the editor; news from the industry and standardization

¹ European Conference of Transport Research Institutes: an association of 20 major Transport Research Institutes from 17 different countries in Europe. For more information, please refer to: <http://www.ectri.org/>.

and regulatory bodies; announcements of conferences, seminars, presentations, exhibitions, education and curricula, awards, new research programs, etc.; and commentaries, e.g., about new legislation.

Closing, I would like to thank wholeheartedly all those without whom this Journal would not have been realised: Prof. G. Giannopoulos who proposed me for the position of the Journal's Editor; the ECTRI President, Dr. Guy Bourgeois, and the other ECTRI Members who trusted me; the Members of the Journal's Advisory and Editorial Boards, and especially my five Associate Editors. I would also like to thank Springer-Verlag for providing the best today available technology for the electronic management of the ETRR and for the exceptional commitment of the production team. Above all, however, I must thank the real driving force of the journal, Dr. Christian Piehler, Head of the Advisory Board, my alter ego in the Journal, Mr. Alexandros Mourouzis and our good fairy and initiator of the journal, Mdm. Marlène Choukroun.

I would like to extend my heartfelt and grateful appreciation to all of you who have submitted your manuscripts (over 30 manuscripts) further to the initiating call announced back in July 2008, and to all of those who provided thorough reviews of the manuscripts submitted to the ETRR over the past few months. The ETRR is open to all bona fide scholars in transport research and your manuscripts and feedback are vital to the success of the Journal, thus are more than welcomed.

I ask the readers of the ETRR for your help in making a great potential even greater—by writing articles and letters to the editor, by communicating with me directly (at abek@certh.gr) about your opinion, and continuing to be discerning readers and sharing the best of the ETRR with your colleagues. I hope that with your help the ETRR can be established as a major medium for advancing transport research and development in Europe.

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