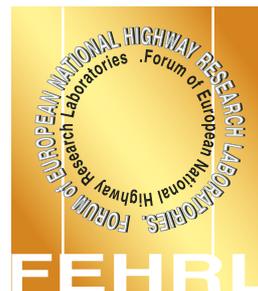


# FEHRL News

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**15 years as the European Network of Excellence in Road Research**

APRIL 2004

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The FEHRL vision that is expected to be published later in the year should inspire the implementation of our clustering programme and ensure consistency to our activities.

The vision entitled «Roads in Europe 2025» is being prepared by the Working Group under the leadership of Dr Rod Kimber of TRL. The developing FEHRL vision will be officially presented at the FERRM meeting in June.



*Leader of the FEHRL Vision working group  
Dr Rod Kimber (TRL)*

## Highlights

### Roads for the future

Building on the developments of 2003, this 15<sup>th</sup> year of FEHRL has seen some significant developments in FEHRL. Probably one of the most far-reaching is the launch of the roads for the future clustering.

This approach introduces some very novel elements and encompasses all areas of our activities: development of the vision of roads in the future, the definition of the associated research needs, better coordination of research activities and improved implementation.



The launch of the innovation project «New Road Construction Concepts» (NR2C) in early 2004 was also welcomed in FEHRL as an opportunity to further implement our clustering programme and identify potential synergies.

NR2C, co-funded by DG Research of the European Commission under the 6<sup>th</sup> Framework Programme, aims at providing future-oriented

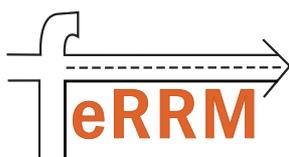
initiatives related to the road infrastructure. In this respect, the dialogue and steady cooperation with special interest groups, experts and users is of great importance. Together to work on long term vision and ideas linked to short-term actions.

There are all the ingredients and conditions to achieve satisfactory results and to establish close cooperation.

We would therefore strongly encourage you to participate to the upcoming FERRM meeting (see below), examine together new challenges and emerging needs and cooperate to deliver smart solutions for the roads of today and tomorrow.

## FEHRL key events

### FEHRL Road Research Meeting 2004



FEHRL is currently organising a clustering event, the FEHRL Road Research Meeting to be held from the 14<sup>th</sup> to the 17<sup>th</sup> of June 2004. On this occasion FEHRL will be co-ordinating a series of seminars and meetings bringing together researchers and stakeholders interested in road engineering issues. Held at the Belgian Road Research Centre's conference facility in Brussels, FeRRM will allow its participants ample opportunity to network with key players in the European road research field.

This event focused around seven major FEHRL-led research projects, is part of a clustering programme recently initiated by FEHRL that involves joint events for a growing portfolio of projects and monitoring potential synergies and links in order to achieve higher impact of results, improve efficiency and prepare the conditions for future exploitation.

More information about the conference and the programme will be soon available on the FEHRL web site or from your Research Coordinator.

## News from around FEHRL

### Intertraffic Innovation Award for RONCALLI telematics

Our Austrian colleagues Arsenal Research and their Consortium RONCALLI-telematics won the second place at the Intertraffic Innovation Award for its central platform for traffic related information and its digital co-pilot.



*Arsenal Director, Peter Maurer accepts the award*

The 2004 Award was supported by the Dutch Ministry of Transport, Public Works and Water Management. At the presentation ceremony it was explained that the products had been judged based upon their technological improvement, design and the expected efficiency.



*RONCALLI-telematics digital co-pilot*

Other important factors taken into consideration included the ease of application, the contribution made to a safer living environment and the products' feasibility in everyday practice.

<http://www.roncalli-telematics.at>

## Multiple Sensor Weigh-in-Motion System launched by DWW.



DWW in the Netherlands is currently working on the «WIM-Hand» project whose objective is to test the accuracy and the reliability of a Multiple-Sensor-WIM-system for future use in automatic enforcement of overloaded vehicles. This is important to reduce damage to roads and bridges.



The basic principle of a MS-WIM-system is to take numerous measurements from the dynamic load of the axles of trucks traveling over the road based system.

As part of the WIM-Hand project an instrumented vehicle was built by a consortium led by Kalibra Nederland BV for dynamic calibration.

The key specifications of the vehicle are that it is able to measure axle loads from 5 to 15 tons at speeds up to 100km/h with an inaccuracy of less than 5%.

The vehicle consists of a three axle tractor with a five axle trailer of which one axle is instrumented, four axles are steer-able and four axles are liftable.

The vehicle will be used not only for calibration but also for the testing of the WIM-Hand system.

## European Focus & Cooperation

### IPG, Noise Innovation Programme: an opportunity for cooperation

A substantial program of noise research, the Innovatieprogramma Geluid (IPG) has been recently initiated in the Netherlands under the leadership of DWW. The aim of the program is to reduce road traffic noise and, as a result, to improve the quality of life of inhabitants.

IPG is built around five research clusters, of which three are dedicated to specific parts of the noise generating and propagating process whereas the fourth and fifth cluster comprise topics of general importance such as the scientific infrastructure of the program and the framework for the implementation of the R&D products.

Noise reduction is a priority for other organisations in FEHRL. In this regard, the Danish Road Institute (DRI) has recently signed a letter of intent with DWW in view of a deepening cooperation in the area of porous road surface.

In parallel with this DRI has expanded its noise team with the recruitment of Hans Bendtsen and Bent Andersen from Atkins Danmark. Both are well known to their noise colleagues in FEHRL.

FEHRL itself has been contracted by DWW to organise the Scientific Board for the programme. This brings together a number of key experts from around FEHRL to provide an independent technical auditing function.



*Jorgen Christensen (Director General of DRI) and Luuk Bosch (Director General of DWW) signing a letter of intent in presence of Ruud Nyland, IPG manager in DWW*



Staying on the subject of noise, one of FEHRL's leading lights in the noise field, VTI researcher Ulf Sandberg, together with his long-term Polish colleague and co-author Jerzy Ejsmont, have been awarded a prize by the Polish Ministry of Education for their Tyre/Road Noise Reference Book. The prize, in the Monograph Class, is awarded annually to encourage the quality of book production for educational purposes.



Another of our noise experts has also been recognised for his contribution to acoustics research. Professor Greg Watts of TRL has been awarded the RWB Stephens Medal by the Institute of Acoustics.

This recognition of our noise experts underlines the central role held by FEHRL institutes in European road traffic noise research.

### **Towards the conclusion of the TREE project**

The TREE Thematic Network is a project in the Fifth-framework programme funded by DG Research, led for FEHRL by LCPC.

The network is focussed on bringing about more effective use of medium and large-scale road research facilities in Europe as well as facilities relevant to other modes. TREE brings together a consortium of facility operators and laboratories, with representatives of the Road Directors.

TREE began in early 2002 and has already established an on-line database for the cataloguing of Europe's key research and test facilities.

The TREE database is available on-line and all owners of specialist test facilities are encouraged to enter their details.

[www.tree-transport-facilities.net](http://www.tree-transport-facilities.net)



*Homepage of the TREE web site*

### **ERRVIN - European Road and Rail Vehicle Infrastructure Network**

The workshop organised by the ERRVIN project in Brussels last September brought together experts from a wide range of areas in the road and rail transport sectors to exchange opinions and discuss the environmental costs of road and rail traffic and future priorities and challenges.

ERRVIN has recently announced another workshop that will be held in Brussels on 26-27 May. Key issues will be brought on the table: can monitoring the vehicle-infrastructure interaction help us to understand wear and tear costs? Can it be done in an efficient way? What are the best practices in Europe?

The outcomes of this workshop will complement the results of ERRVIN study on dynamic interaction of a road or rail vehicle with its infrastructure.

This will allow agreeing solutions that contribute to reduce the environmental and economic impact of freight traffic. Environmental impact includes noise and vibration as well as damage to the infrastructure or the vehicle.

More information about the ERRVIN network and its past events is available at the following address: [www.errvin.info](http://www.errvin.info).

### **A safe and sustainable pan-European transport infrastructure - COST Action 341**

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Fragmentation of natural habitats has been recognised as a significant factor in the decline of biodiversity in Europe. The challenge is to adjust the existing and future transport infrastructure to produce an ecologically sustainable transportation system. This means extending the future infrastructure without further intensifying fragmentation. This major concern gave rise to the COST 341 action led by DWW on which many organisations across Europe with a stake in nature conservation and integration of transportation infrastructure have worked in close cooperation since 1998.

In spite of the effort made, it is recognised that there is still a long way to go before ecological tools are fully developed and implemented in transportation planning and management.

The outcomes of COST 341 action were presented in the project final European Conference held in Brussels in November 2003. On this occasion the Secretary General of FEHRL, Steve Phillips took the opportunity to welcome the promising results of the project and to call for a continuation of the work for a better integration of infrastructure into the landscape. The Conference proceedings and a detailed overview of COST 341 products are available online at <http://www.iene.info>.

### **Winter service strategies for increased European road safety - COST Action 353**

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The COST Action 353 recently initiated by FEHRL deals with research of different aspects of the winter service domain and it is built on the achievements of COST Action 344 that proved to be a useful platform for identifying the most important topics for short- and long-term winter maintenance research.

The COST 353 Action targets safety, environment and economy issues and the necessary optimisation of these in delivering a quality winter service. For example, freight traffic is particularly vulnerable to economic factors when road and rail surface conditions in winter are poor.

In a nutshell, one of the main objectives of this COST Action is to develop a framework for the management of winter traffic for maximised road safety. The definition of which technologies well advanced to qualify for winter maintenance management and the requirements of several components need to be established as well as their possible integration into a modular total system.

A network of winter maintenance experts has already been established. FEHRL member institutes appointed experts with long lasting experience in winter maintenance research to take part in the Working Groups.

### **COST Action 354: establishing performance indicators for road pavements**

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Mid-March saw the launch of COST action 354 which will build on earlier work by defining and assessing individual representative performance indicators and the development of combined performance indexes for road pavements taking into account the needs of road users and road operators.

In order to provide a framework for later improvement of the performance index beyond the life of this Action, it is envisaged to establish, in the context of environmental performance indicators, what information is available, and what would be necessary to include a factor describing the extent to which the road pavement includes recycled materials.

The potential benefits arising from this Action are substantial for road operators and road users. The main use of such indicators is for the comparison of different road networks and the identification of investment needs.

### **Strengthening the European Research Area**

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The European Commission sees so called Technology Platforms as a key aspect of the strengthening of the European Research Area. Many people in FEHRL are aware that we are one of the main contributors of the European Road Transport Research Advisory Council (ERTRAC) in the definition of an ambitious vision of an improved European road transport system for 2020 and beyond.

A Strategic Research Agenda defining priorities and roadmaps is being developed to support the achievement of this vision and will be used as a reference for the definition of future research plans. The vision along with the Strategic Research Agenda is expected to be published in June.

The new ERTRAC web site will be soon available at the address [www.ertrac.org](http://www.ertrac.org).

In addition to our activities in Road Transport, we are also supporting similar initiatives in the Built Environment. FEHRL is a long time member and supporter of the Council of Construction Research, Development and Innovation (ECCREDI). In this we have been working with colleagues in the construction sector towards the development of a platform to cover the important area of urban infrastructure.

## Brussels FEHRL Secretariat Update



### A new face in FEHRL

In recognition of the growing role of FEHRL's Brussels Secretariat in supporting its institutes, Sara Riso has recently joined as Communications Manager.

Sara will be responsible for the communications and dissemination activities in a range of European projects and she will provide assistance to the FEHRL institutes in events and meetings organisation as well as cluster-driven initiatives.

Sara was previously working in Brussels as communications manager for ELANET, the information society network of CEMR (Council of European Municipalities and Regions). The skills and know-how gained in her previous post will prove valuable to all of our institutes.

We are also taking this opportunity to remind FEHRL staff that our offices are also available for their use. We can provide them with a desk

when visiting Brussels. A quiet place to work, restock on brochures from their institutes, access to publications, printing and photocopying (for details please contact [miljaf@fehrl.org](mailto:miljaf@fehrl.org)).

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## Out and about with FEHRL

### FEHRL participation in PIARC 2003

The participation of FEHRL in PIARC - the World Road Congress - is seen by its member institutes as instrumental in identifying new stakeholders in a global economy and helping to develop a vision that takes into account a wide range of needs and priorities.

More than ever PIARC 2003, which was held in Durban, South Africa in October provided a unique opportunity to review the state of the art and practices implemented across the world and to have forward-looking discussions by addressing not only technical road matters but also economic and environmental issues, road safety and road infrastructure financing.

The wide range of issues discussed reflect the complexity of the challenge that organisations with a stake in road research are called to face in the years to come.

FEHRL staff made a substantial contribution to the Congress, chairing many of the sessions.



*James Quick, Victoria Moreland and Matthew Wilson picking up their award. (Brian Magee is not present)*

On the occasion of the conference, TRL's James Quick, Victoria Moreland and Matthew Wilson and Brian Magee were awarded the PIARC 2003 essay prize for young professionals for their contribution «2030: A Transport Odyssey».

### **Annual POLIS Conference: opportunities to work together**

FEHRL made a substantial contribution to 18<sup>th</sup> annual POLIS conference held last December in Cologne, Germany.

BRRC's Wanda Debauche presented the results of her team's recent work in Brussels on improving freight delivery.

Steve Phillips presented an overview of FEHRL's extensive work into urban traffic noise reduction. Rounding up the conference, Steve moderated a round table discussion on urban road safety.



*Round table discussion within POLIS Conference moderated by Steve Philips*

BASt staff made a substantial contribution to the success of the FEHRL exhibition stand.



*POLIS's Marshall Poulton (Glasgow City Council) and Steve Phillips prepare for the Urban Road Safety Round-table*

The participation of FEHRL demonstrated our interest in working closely and cooperating with a wide range of stakeholders and networks of users.

## **Events & dates to remember**

### **24-26 May 2004**

ERTICO Conference: «Moving Towards an Integrated Europe», Budapest

### **10-11 May 2004**

FEHRL Board Meeting, BASt, Bergisch Gladbach

### **12-13 May 2004**

IBDiM conference, Warsaw

### **14-17 June 2004**

FEHRL Road Research Meeting, Brussels

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Further events and details available online in *KC>Publications*

## **Our recent activities**

### **19-25 October 2003**

PIARC 2003, Durban

### **6-7 November 2003**

E-core Workshop «FP6 & Construction Research in the Enlarged European Union», Warsaw

### **4-5 December 2003**

Annual POLIS Conference, Cologne

### **3 February 2004**

Workshop «The road of the future», Brussels

### **24 March 2004**

Tiretechnology EXPO, Stuttgart

### **25 March 2004**

E-Safety Forum, Brussels

### **26 March 2004**

EARPA Conference, Brussels

### **22 April 2004**

Road Infrastructure Safety, the European Roundtable (ERF), Brussels

## FEHRL contact details

FEHRL is governed by the Board which consists of the 25 directors of our institutes and is chaired by our President. Currently our President is Peter Reichelt from BAST in Germany.

Day-to-day management of FEHRL is carried out by the Executive committee, chaired by Dr Govert Sweere of DWW. The permanent Secretariat in Brussels provides a central contact function and support for the FEHRL network. For more information about FEHRL and the services available in your country please contact your local representative.



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