

## UEEIV-SYMPOSIUM in Brussels at 09/28/2006

### New trends and models for the funding of TRANS- and PAN-European railway networks



*View to the participants*

High speed traffic of the railways in Europe is developing increasingly in many European countries. In Germany the newly built line from Nuremberg to Ingolstadt, allowing speeds up to 300 km/h is only the most recent achievement, which shortens the travel time from Berlin, Hamburg and Cologne to Munich substantially. In the bordering states equal successes to initiate a new start for the railways are also imminent. The European Union assumes the role of a locomotive in this regard. She has established ambitious objectives in order to support the economy by providing modern communication networks for a national market extended to all of Europe. As a starting point for the necessary extension and reconstruction of the communication networks of Europe a guideline-plan was initiated, which was based on national lines and contained the Trans-European networks. The enlargement of the EU in Eastern Europe led to the Pan-European network with the 10 so called Crete-Corridors. The networks required a few hundred billion Euros of investments. Support programs of the European Union like ISPA, PHARE and SAPARD as well as

December 2006

#### Topics:

**Symposium in Brussels**

**Meeting of the Board 2006**

**Seminar in Veliko Tarnovo**

**UEEIV-Events 2007**

**Maglev 2006 Germany**

**Excursion to Vienna, April 2007**

structure and cohesion funds led to substantial movement in the extension of the communication networks besides national funds. In the meantime the programs had to be adjusted more and more in the direction of reductions, since funds were lacking. The planned measures to provide fair conditions of competitions have failed. No inclusion of external costs (environment, health), no general regulation of way costs, no taxation of jet-fuel and no adequate social minimum standards have been established. This led to only minimal progress of the TEN-V-Projects. Only 3 of 14 TEN-V-Projects (Decision Essen 1994) have been implemented, TEN-long distance roads 80 %, TEN-rail 20 %. 1996 the TEN-Guidelines have been finalized, 2001 these were being extended onto international projects. In the year 2003 came the Van-Miert-report with the 30 priority projects, 22 of them rail-projects, the increase of the quota of support from 10 to 20 % and the installation of European coordinators. Due to a lack of funds, the concentration on 6 central projects has been decided in 2005. This has been in general the situation and the reasons that led to the initiative of the Union of European Engineer Associations – UEEIV – for the above mentioned symposium. The objective has been to discuss and explore how the funding of the railway projects of the EU could be optimized. On an invitation of UEEIV more than 60 important persons of EU, from railway- and economic associations, politics and supporting members of UEEIV convened at the 28<sup>th</sup> September 2006 at the symposium at the office of the Belgian Railway SNCB in Brussels.

## Opening of the symposium

The president of UEEIV, Director **Heinrich Salzmann**, welcomed the speakers as well as the participants from all over Europe. Afterwards the president of the co-organizing UEEIV-membership-organization in Belgium URPIC, **Ivan Thielemans**, welcomed the participants also. In his opening remarks, **Salzmann** pointed out the necessity of setting the funding of railway projects in Europe in motion once again. It seems as if the conditions for new projects had more and more deteriorated in stead of improved in the last few years. UEEIV is watching this development with great concern. The time has come to discuss the actual status and the perspectives together with the political institutions, the leaders of the railway administrations, banks and the railway industry with the objective in mind to explore new ways of an improved funding. As an opener he named the cost for the completion of the 30 priority projects which are being taxed by the commission at approx. 225 bill. Euros. Approx. 20 % of the overall cost can be raised by the private sector, hopes the commission. The rest must be contributed by the member-states and the common budget of the Union. As it is heard, the projects shall be initiated by 2010 at the latest and should be completed by 2020.

The speeches have been divided into two sessions, which have been led by one facilitator each. The 1<sup>st</sup> session had been taken over by **Prof. Dr. techn. Klaus Rießberger**, TU Graz. The 2nd session was chaired by **Pierre Dupriet**, president of the French membership association AFFI, Paris.

## European Commission: PPPs are needed

The first speaker has been, for the European Commission the deputy general director for traffic and energy (TREN), **Zoltan Kazatsay**, who spoke about the topic „Strategy for TEN- and PAN-railway corridors“. At the beginning of his remarks he mentioned the general aspects of the railway sector. The funding of railway projects is a difficult venture, **Kazatsay** pointed out. It would be important for engineers to master the art of financing as well. Transport engineers assume a key function for the shaping of the future. It cannot be mentioned enough how high the impor-

tance of engineers for the railway sector really is. In this regard the ability to withstand competition is of crucial importance, as the transport engineers assume a special responsibility for the society as a whole.

Going into detail concerning the funding he pointed to the treaty of Rome, which gives a special importance to the transport policy and especially the connections between the EU and its membership states. 2004 the guidelines for transnational connections and the integration of the networks have been enacted. The funding of these projects poses a great challenge. Some time ago a working group chaired by Mrs. **Loyola de Palacio**, the former commissar for traffic, has been organized, which is tasked with the problems at hand. Especially the European neighbors of the EU are facing great difficulties in connection with the funding of the extension of their transport connections. As long as these problems have not been solved, these countries cannot participate adequately in the world trade. „Public Private Partnerships – PPPs –“ are of a special importance for such projects.



*Deputy General Director for Traffic and Energy, Zoltan Kazatsay, Prof. Dr. techn. Klaus Rießberger, TU Graz and UEEIV-President Heinrich Salzmann (from right) during their speeches*

So far railway projects were funded by the public only, said the speaker. This is no longer possible during times of shrinking budgets. At the same time the transport sector is not attractive for private investors, since the return on invest is too low and investments are extremely risky. A way to reduce such difficulties would be the possibility of EU-guarantees for the starting phase of such PPP-projects of big dimensions. Altogether EU provides substantial funds, but the amount of capital needed for the projected railway projects

is very high. This is the reason, why PPPs are absolutely necessary and should be supported from 2007 onward by the EU more and more. The past is not encouraging and so one must look into the future with this spirit, **Zoltan Kazatsay** concluded his speech.

## CER/GEB: Increase of funds necessary

The next speaker was **Dr. Johannes Ludewig**, Executive Director of CER/Brussels, the association of the European railways, with the topic „Suggestions and possibilities from the viewpoint of CER“. CER represents the railways of



Several speakers in the first row: Zoltan Kazatsay, Ivan Thielemans, president of URPIC, Dr. Johannes Ludewig, CER, Wolfgang Roth, EIB and Drewin Nieuwenhuis, UNIFE (from the right)

Europe, private, semi-public and fully public, as he stated at the beginning of his speech. He presented the three pillars of the European traffic policy: 1. Open markets, 2. competition and 3. modern infrastructure. During the last years, progress has been made most of all in the area of the transport of goods, he stated. The level of investment is below one percent of the gross national product and is declining in the last years. This development leads to risks transcending the transport sector for the economy as a whole.

He referred to the Public Private Partnership as they have already been mentioned by **Kazatsay** as a antidote against shrinking investment of the public sector but also pointed out to the legal ramifications that are still not as clear as they should be and the lacking guarantees for a sufficient ROI (Return on Investment). Overall the question about the funding of infrastructure pro-

jects must yet be answered. In spite of a nominally high EU-Budget the lions' share of the necessary investment must be contributed by the national budgets.

In this regard the necessary commitment of the governments responsible is still lacking. A new structure and coordination of these initiatives is essential. This has been realized also at the EU. Europe-wide EU-coordinators have therefore been appointed by the governments. In this context have agreements concerning the investment in infrastructure on a European level been reached, **Dr. Ludewig** continued his speech. In this regard the EU-funds available should be concentrated on cross-border projects. The governments of the member-states are allowed to raise funds for direct costs only via vignette or similar devices. Indirect and external costs are sometimes even higher and may not be financed this way. He sees a demand of the legislature to straighten out the so far unfair competition between road and rail. With an appeal to those in charge in the political arena for an increase of funds made available for the railways and a quote from a decision of the EU-Council „We have to get the prices right!“, which means on the other hand that the prices as they are today are not appropriate, concluded **Dr. Ludewig** his speech.

## Statements of UIC and Belgian Railway

**Dr.-Ing. Gunter Ellwanger**, from 1991 until 2004 long-term director for high-speed traffic and environment at UIC in Paris, newly appointed chairman of the society for rational traffic (GRV), has been the speaker about the topic „Perspectives for the European High-Speed-Traffic“. He compared the European High-Speed-Traffic network HGV of 2004 with 2020 and highlighted the lines that are being implemented step by step and are developing further and are consolidating into a network. Whereas the HGV-net in 1990 included 900 kilometers, it grew until the year 2000 to 3000 kilometers, and will include in the year 2010 at least 6000 kilometers. Compared to the construction of motorways the numbers are far from sufficient, since the numbers here show for 1990 already 40000 kilometers, and are growing until 2010 to 70000 kilometers. In quantity the French SNCF and the German DB are responsible for the greatest



Dr. Gunter Ellwanger, UIC, Prof. Rießberger, TU Graz, Heinrich Salzmann, UEEIV (from the right)

share of new HGV-lines and kilometers per person. As a significant example for the tremendous growth of railway transport of passengers he named the 471 kilometers long HGV-line Madrid-Seville, which has been in 1991 only 14 % and in 2000 already 54 %. This is something to be happy about, said the speaker, but it is not representative for a general trend towards the railway. On the contrary, the modal split is getting worse in all of Europe more than the other way around. In order to get more and more traffic to the rail, **Dr. Ellwanger** demanded in his concluding remarks a better infrastructure policy for railways because otherwise the desired effects will not be realized.

From UIC Paris **Ignacio Barron de Angoit**, Chargé de Mission Grande Vitesse, was the next speaker with the topic „Funding of high-speed lines – some original considerations“. He presented a few cost-calculation examples which provided insight into the line projection of some states.

An insight into the regional circumstances is given with the example of Belgium by the speech of **Marc Smeets**, CFO of Infrabel/Brussels with the topic „Alternative funding of railway-network by PPPs“.

## Contribution of the European Investment Bank

Great expectations have been placed in the speech of **Wolfgang Roth**, vice-president of EIB (European Investment Bank) Luxembourg. He spoke about the „The role of EIB“. In the past years the EIB has supported the European banks

in



Ignacio Barron de Angoit, UIC

their provision of loans in a substantial amount. He also mentioned the Essen-decisions of 1994, which have achieved a fundamental importance. There is much criticism in the public about the bigger commitment towards road construction to the disadvantage of the railway.

This situation is based on the fact that the railway is not initiating enough projects, according to the speaker. It is a fact, said he, that the railway sector is shrinking and the investment in railways is shrinking with it. Since the decision of Essen 24 billion Euros have been invested in railway projects, of which 6,5 billion have been invested in high-speed lines, 3,5 billion in infrastructure and 6 billion in metropolitan and commuter traffic. 4,2 billion Euros have been invested during the last 4 years in rolling stock.

Roth let it be known that there are great differences between individual countries in the draw-down of funds of EIB, on the top of the list is Denmark, whereas Germany is last on this list. Big problems occur not only in funding but also in the projection and implementation due to topics like protection of the environment a.s.o. The standard loan of EIB for public institutions is quick and easy to implement and focused on a period of up until 25 years. EIB has a lot of experience with PPPs said Roth. The bank is the biggest partner of PPPs in Europe. The main obstacle for private investors is the low ROI (Return on Investment). The Euro-Tunnel, which is more or less bankrupt today, would be the best example for that fact. The gap



Wolfgang Roth, EIB (right)  
Prof. Dr. Rießberger, TU Graz

between the expectations of the private and public sector towards infrastructural projects and the projected ROI is simply too big and so a lot of difficulties are arising during the creation of PPP.

A further example is the project of the Brenner-basis-tunnel (ROI negative). This project is nevertheless of the greatest importance because of the ecological and economic interest involved. EIB would only be willing to participate in the financing if a coherent transport policy existed, which would include as an integral part the project of this Brenner-basis-tunnel. Regulatory political principles must exist, which would lend sense to projects like the Brenner-basis-tunnel. Such a project would not make sense if it would also be possible to drive from Rotterdam to Verona by car without any problems and rather quickly. The meaning of PPPs is not alone in the substitution of the public funds by private investors but should be an intelligent supplement of it. Each working PPP needs competent partners in the private sector and stable, as well as reliable, financial funding from the area of the public sector. The conclusion of all this would be the fact that the PPPs are no panacea but can be, in singular situations, a useful complement of the public authorities.

## Point of view of the European Railway Industry

An important contribution was made by **Drewin Nieuwenhuis**, General-Director of UNIFE (Union of the European Railway Industry), Brussels, with his speech „Impact of the TEN-T-Projects on the Railway-Equipment and –machinery industry “.

He represented one of the private sectors of the industry which has been mentioned very often during the course of the symposium, as he pointed out in the beginning and which „should solve all problems“, as he said jokingly. The organization of the European Railway industry represents at present 70 % of the railway sector worldwide in the areas rolling stock, infrastructure, signal technology and control-systems. Four major trends are imminent in the industry worldwide: 1. Globalization, 2. Standardization, 3. Concentration and 4. Innovation. In the competition of the continents, the European market-leadership is getting more and more under pressure (e.g. from Japan). The federation of European track-construction will join UNIFE shortly.

Basically the decision to invest in traffic infrastructure (road and rail) is still a political one and this will be so in the future. The contribution of the private economy can consist of three components mainly:



Drewin Nieuwenhuis, UNIFE

1. Expertise, 2. Innovation and 3. Funding. The following examples for point 1. have been named by the speaker: Cross-border High-Speed connections, interoperability, standardization of the rolling stock and noise reduction. As examples for 2. he gave: As could be seen at the In-

noTrans, new methods of infrastructure have been developed. Cost is the main obstacle in this regard. Railway must be viewed and judged as a coherent system and may not be subdivided into operation and infrastructure. Life-cycle cost must be in the focus and not only the one time investment needed to construct a railway Interoperability of the different control-systems in Europe is the objective. Funds of the EU have already been acquired. Lastly, examples for 3. were given, like PPPs. The benefit of this institution is the availability of substantial funds, optimization of life-cycle cost, encouragement of innovation and the compelling of the customer to evaluate specifications clearly which leads to a higher level of specialization and financial discipline. Risks of PPPs are: expensive capital, high risk (see Euro-Tunnel: under a technological aspect a sound project but an economic and financial catastrophe). As a conclusion of his speech the general-director of UNIFE said: Investments in the area of infrastructure are absolutely necessary. Public investment in the area of infrastructure is essentially important and can never be fully substituted by private capital.

PPP's are possible and useful in certain well defined and clearly characterized cases but will never be the standard.

## Hints from the European Railway Unions

About the „Railway infrastructure development in Europe as a trendsetting area for a consistent and humane traffic system“ spoke **Manfred Kehr**, on behalf of the board of TRANSNET and vice-president of UEEIV. His issues were the importance of the infrastructure development for the traffic-political objectives of the EU in the White-Book 2001, the status of the development and the problems that are emanating during the implementation of the TEN-V- and corridor-projects, the implementations of the infrastructural policy for jobs and the requirements towards a consistent and humane strategy of infrastructural development. His leading argument was: The traffic-political program of the White-Book of the EU will fail, if it cannot be achieved to increase investment in infrastructure substantially.

In the meantime he called to our memory the traffic political objectives of the White-Book: Creation of a balanced relationship between traffic providers, revitalization of rail-transport, aboli-



*Manfred M. Kehr (right), Pierre Dupriet, Heinrich Salzmann*

tion of capacity-bottlenecks, strengthening of traffic providers which are not consuming a lot of resources, interconnection of traffic providers by supporting combined traffic and the creation of fair and balance conditions of competition. At least for the priority projects with an overall volume of 225 billion Euros, 16 billion Euros must be provided yearly until 2020 for investments. For the TEN-V-Projects alone approx. 370 000 jobs would be created and if the 30 priority projects are implemented about 500 000 jobs will be created. As a requirement Kehr named the consistent and long-term innovation- and investment offensive for the implementation of the TEN-V-Projects as planned, for the facilitation of installations of intermodal traffic and for the facilitation of modern control- and security-systems. In order to do that we would need financial instruments with a substantial increase of the EU-Support-Quota, a coordination of the support-programs and financial resources and the opening of the EU-Budget for credit based infrastructural investment.

With the demand for a binding and standardized way-cost-regulation and a cause-related calculation of external cost as a basis for the refinancing of the traffic infrastructure he ended his speech.

## Suggestions of the London Bank

The next speaker was **Dr. Dirk Jandura**, CFA, DEPFA Bank plc London. With his topic „The share of the private sector for the provision of railway infrastructure in Europe“, he represented as a director the leading private bank in Europe

on the infrastructure-sector. He divided the areas of participation in 1. existing infrastructure and 2. new infrastructure.

To 1. existing infrastructure he pointed out: It is mostly outdated and in need of modernization which will require a tremendous amount of capital as well as the modernization of signal- and control-systems. The amount of money needed for the conservation of the quality of the existing infrastructure is more than often higher than the amount of money provided by the public sector. More detailed have been the statements to 2. New Infrastructure: TEN-Networks (High-Speed- and Freight-Lines) as well as the increase of capacity in regard to existing bottlenecks. During the next years more than 100 billion Euros are needed. For



*Dr. Dirk Jandura, DEPFA Bank, London*

the maintenance and renewal of the existing infrastructure, roughly 200 billion Euros are being calculated, this equals appr. 200 000 km and 100 000 Euro pro km/per year. For freight networks: Approx. 10 000 km new lines are amounting to an investment of 50 billion Euros, for ERCS/ERMTS migration appr. 500 billion Euros within the next decades.

The structural weakness of the public sector concerning investments can only be supplemented but never be substituted by the private sector. The funds provided by the private sector is never cheaper (more to the contrary) but provides a lot

of advantages since it leads to a greater degree of transparency and efficiency.

The banking expert declared further: For a participation of the private economy a number of different instruments are available: Outsourcing, operation of lines, concessions, leasing and sale and privatization (in part or in toto). Important for a participation of the private sector is the consolidation of debt or the risk management by the state respectively. A high demand risk exists in railway projects!

**Dr. Dirk Jandura** summarized his speech in five points: 1. The lack of investment capabilities in the public sector demands a substantial increase in participation of the private economy in order to provide the necessary funds for the investments needed by the railways. 2. Different possibilities of participation by the private economy exist. Outright privatization is not always the best solution. 3. The private economy is willing to take over certain well defined risks. In general it is essential that the state takes over the risks inherent in such projects, which can in most cases not be assessed properly in order to ensure the participation of the private economy in railway infrastructure projects. 4. Long term agreements (long period of validity) are essential for the success of the participation of the private sector of the economy. 5. The participation of the private economy may lead to the overcoming of traditional thinking in national categories. The transferring of responsibility for a PAN-European Corridor to the private economy may lead to a coherent infrastructure management.

## EIM offered cooperation

**Michael Robson**, Secretary General of EIM, European Rail Infrastructure Managers, Brussels, explained in his speech with the topic „contribution of EIM for TEN- and PAN-Issues“ at first the organization of EIM, which has been founded in 1992 and represents at present railway infrastructure objectives in 11 European states. Interconnection and interoperability are the keys for TEN-T networks and their projects and for a realistic policy which is essential in this area. Essential for success is the funding. In this context the speaker went into detail about the necessary budget of the EC in the years 2007 until 2013, the nation states, the necessary guarantees, PPPs, the Euro-Vignette-Guideline and new financial resources for the transport infrastructure of railways. EIM is ready for a close cooperation in order to ensure the necessary further development to-



*Michael Robson, EIM (right), Pierre Dupriet, AFFI*

gether with the European Union, the member-states and the European financial institutes like EIB and EBRD.

## TU Dresden compared cost with Transrapid

The speech of **Prof. Dr.-Ing. Peter Jehle** of the Technischen Universität Dresden about „Maglev – Transrapid in Europe“ with different cost-comparisons of individual traffic providers concluded the conference.



*Prof. Peter Jehle, TU Dresden, (right)  
Pierre Dupriet, AFFI*

## Summary

It has been positive to hear so many and important voices in regard to the topic at hand, said UEEIV-President **Heinrich Salzmann** in his summary. The pressing issue of UEEIV, to become involved in the necessity of the improvement of the financial basis for the continuation of the TEN- and PAN-railway corridors, has been mentioned adequately. In order to get the development of the renewal and modernization of the railways going again, a good cooperation with the European Commission, national governments, railway associations, railways and the railway industry all over Europe is needed at the present time. Thanks to both the facilitators, the speeches have been accompanied by well funded discussion, so that the round table talks that have been planned according to the agenda may be cancelled. **Heinrich Salzmann** thanked the speakers for their contributions, the participants of the discussion and all other participants for their great interest in an issue which is of the utmost importance for the railway and the railway industry. UEEIV would be ready and able in the future to represent the interest of railways in Europe to the fullest extent. The speeches may be ordered at the secretariat general of UEEIV per E-Mail : [ueeiv@t-online.de](mailto:ueeiv@t-online.de)

## UEEIV-Session of the Board in Brussels



*View of the UEEIV-Session of the board 2006, with the presidency and the chairman and representatives of the national offices all over Europe.*

The annual session of the board of the Union of European Railway Engineer Associations – UEEIV – took place at the 27<sup>th</sup> September 2006 in the central office of the Belgian Railway SNCB in Brussels. President **Heinrich Salzmänn/ÖVG** was able to welcome the representatives of the national associations, mainly their presidents, in person, from Belgium, Bulgaria, France, Great-Britain, Germany, Ireland, Italy, Croatia, Netherlands, Austria, Romania, Switzerland, Spain and the Czech Republic and delivered a substantial and successful activity report of the UEEIV-Presidency. Since the session of the board in 2005 in Plovdiv/Bulgaria the activities of UEEIV regarding the number of events has developed very positive. This development has also been documented at [www.ueeiv.com](http://www.ueeiv.com) in the internet as well as in the UNION-Reports. A number of events, seminars among them, have been organized and implemented by UEEIV itself, other events of the national membership associations were co-organized by UEEIV, so conferences and events in Italy France, Belgium and Germany. At „iaf“ of VDEI in Munster certification-documents for EURAIL-ING were being awarded publicly. Moreover a well attended conference with supporting members took place. The continuation of certification for EURAIL-ING during the period of the report has been the topic for further considerations. In this regard the change in the chair of the steering com-

mittee from **Prof. Corazza/CIFI** to **Wilfried Lorenz/VDEI** has been mentioned as well as the new edition of the certification handbook and the list of fees. The chairman of the central certification office **Josef Windsinger** supplemented this report. He pointed out that the publication of the EU-regulation for professional qualification, which stipulates a minimum of five years of practical experience as a minimum prerequisite for any activity in the area of planning of railways, is already included in the prerequisites for the certified EURAIL-ING. This regulation of EU therefore helps UEEIV, to successfully continue the qualification process. Treasurer **Sebastian Rutz** reported about the financial situation. The balance of the year 2005 and the budget for 2007 were approved as presented. Regarding the board of advisors, two meetings have taken place. The chairman of the board of advisors **Dick Hasselman/Netherlands**, former member of the board of NS, had stepped down from his post due to his advanced age. President **Salzmänn** awarded him with a book present under great applause for his reliable and effective long-term cooperation. **Prof. Ostermann** of the TU Vienna and the former treasurer of UEEIV **Reto Danuser** have been appointed newly to the board of advisors. Representatives of each national membership association reported about railway-political and association-related activities in their states in a quite substantial topic. President **Heinrich Salzmänn** concluded the well attended session of the board 2006 in Brussels with a preview to UEEIV-events 2006 / 2007 – especially the seminars that are still to come as well as the two/day excursion in April 2007 to Vienna and the UEEIV-General Assembly at the 24th October 2007 in Strasbourg, jointly organized with AFFI and VDEI.



*Dick Hasselman, (right), former member of the board of advisors, was being awarded with the book present 'History of the railway' for his many years of active cooperation in the board of advisors and the steering committee of UEEIV by President Salzmänn under the applause of the audience.*

## UEEIV Railway-Forum 2006 - Seminar in Bulgaria



*During the opening of the seminar: WTVV-President Kiril Ermenkov, chairman of the traffic committee Prof. Dr. Jordan Mirtschew, mayor Dr. Rumen Raschew, minister of traffic Dipl.-Ing. Petar Mutaftschiev, UEEIV-president Heinrich Salzmann, UEEIV-honorary president Josef Windsinger and NGRSTE-president Dr. Mario Galabov (from left to right)*

The international seminar „Railway-Forum 2006“ of the Union of European Railway-Engineer-Associations – UEEIV – at the 9<sup>th</sup> and 10<sup>th</sup> of October 2006 in the former capital of Bulgaria Veliko Tarnovo has been the most important railway event for more than 260 participants. Already the day before the event, a special train, provided by both of the Bulgarian railway companies - operation and infrastructure, rolled along the approx. 300 km from Sofia to the scenic former capital. It was on this onward journey that the Vice-General-Director of the AG infrastructure, **Vesselin Kojuharov**, made himself available to the participating railway industry companies for talks about investments. At the same day a special reception by the minister of traffic took place in the evening. After the opening of the seminar under the general-topic „Infrastructure, technologies and travel comfort for the transport of passengers in Bulgaria“ by both presidents of the Bulgarian railway engineer associations WTVV and NGRSTE, **Kiril Ermenkov** and **Dr. Mario Galabov**, **Heinrich Salzmann**, president of UEEIV, **Prof. Dr. Jordan**

**Mirtschiev**, chairman of the committee for traffic of the Bulgarian parliament and **Dr. Rumen Raschew**, mayor of the city of Veliko Tarnovo, welcomed the international participants. After this the minister of traffic **Petar Mutaftschiev** held a speech under the topic „The traffic system of Bulgaria – its place and role on the Balkan peninsula and in Europe after joining the EU“. His comments were well received in the press-conference afterwards. Press, radio and television reported about the event. According to the reports, in the future more than a billion € will be invested in railways. After this **Josef Windsinger**, honorary president of UEEIV, spoke about „Infrastructural priorities of the Trans- and Pan-European traffic-corridors and achievements in the area of transportation of passengers and goods in Europe“. Speeches of both general directors of the Bulgarian railways, **Dimitar Gaidarov** of NG railway infrastructure, under the topic „The extension of the railway infrastructure – main task during the preparation for the connection to the European railway network“ and **Oleg Petkov**, of BDG EAG (BDZ) with the topic „The technical and technological restructuring of the Bulgarian Railways – a decisive factor for the successful entrance in the market of the international and national traffic systems“.

After the speech of the rector of the traffic college „T. Kableschkov“, **Doz. Dr. Nentscho Nenov**, about the „European standards during the preparation of leading- and operational staff for railway



*View of the opening and visitation of the photo-, model- and Video railway-industry exhibition. In the foreground Kiril Ermenkov, Josef Windsinger and translator Elli Maneva*

traffic“ **Josef Windsinger** and **Kiril Ermenkov** declared the photo-, model- and video exhibition of railway industry companies open. The seminar continued with the railway industry companies. The topics were „Components for the maintenance reduced track construction“ of the company Schwihag/Switzerland, „Planning and construction supervision for railways“ of the EPG railway- and planning society Erfurt/Germany, „Signal-technological installations in secondary lines of railways and low cost components for main- and secondary lines“ of the signal-construction company Tiefenbach/Germany, „Modern track systems – System Rheda“ of the company Rail.One – Pfeiderer -/Germany, „New technologies in the railway traffic“ of the company Wiebe/

Niederlassung Bulgaria and „Volker Rail Germany – an information“ as well as „Superweld – Ab-brennstumpfschweißung“ of the company Volker Rail/Niederlassung Germany from the Netherlands. A number of further speeches of the Bulgarian side enriched the knowledge and the technology of the world of railways. During the speech of **Peter Brinkmann**, member of the presidency of UEEIV, „Certification EURAIL-ING“ it became known that Bulgaria has applied for and received the second highest number of certification after Germany so far. At the evening of the first day of the seminar a society event with folkloristic show took place which offered also the opportunity for contact meetings.

## Preview UEEIV-Events in the year 2007

15th and 16th March 2007	Prague / Czech Rep.	UEEIV-Seminar with CS VTS-SD/CD
19th and 20th April 2007	Athens / Greece	UEEIV-Seminar with SEMS/OSE
April 2007	Vienna / Austria	2-day Excursion „Visitation of technical Infrastructure-Projects “
10th and 11th May 2007	Budapest / Hungary	UEEIV-Seminar with UWW/MAV
24th and 25th May 2007	Durres / Albania	UEEIV-Seminar with SIH/HSB
21st and 22nd June 2007	Bucharest / Romania	UEEIV-Seminar with AIFR/CFR
12th and 13th Sept. 2007	Zilina / Slovakia	UEEIV-Seminar with EIVS/ZSR
11th and 12th October 2007	Sofia / Bulgaria	UEEIV-Seminar with NGS RTE/ WTVV/BDZ
24th October 2007	Strasbourg / France	UEEIV-General Meeting
24th and 25th October 2007	Strasbourg / France	Railway-technical Colloquium of AFFI-VDEI under patronage of UEEIV „German-French Railway-Engineer Competence - leading the way for Europe’s Railways“

## MAGLEV 2006 Germany

### 19th International conference for magnetic-levitation systems and linear propulsion

For three days Dresden has been the centre of the world for rail bound transport systems of our times. More than 350 specialists from 17 countries of all continents (with the exception of Australia) have met from the 13th until the 16th of September 2006 at the congress-centre of Dresden, in order to report about the newest level of research and development of the different Maglev-Systems, like the German TRANSRAPID and the Japanese HSST, - but also to receive information.

The International Steering committee was chaired by stand **Prof. E. Masada** / Japan and **M. Witt** / Germany.



**Prof. E. Masada** voiced his believe in his opening statement that the **MAGLEV-Systems** are the leading traffic systems that are in line with the social prerequisites of the 21st century.

Organization on location was the responsibility of **Prof. Rainer Schach** and his team from the Technischen Universität Dresden, which made the congress, as the recent five expert meetings of Dresden, into a great event for all participants and their companions.

The tutelage was taken over by the Federal Minister of traffic, construction and city development (BMVBS), **Wolfgang Tiefensee**. Greetings were offered by his Parliamentary Secretary **A.**

**Grossmann**, the Secretary of the State of the Ministry of the interior of Saxony **Dr. J. Staupe**, the member of Parliament and chairman of the Discussion Group of the Bundestag **H. Eichel**, the Director of Invest-Coordination traffic routes in the BMVBS, **M. von Randow**, as well as the project director of the Shanghai Transrapid and honorary doctor of the Technischen Universität Dresden, „**Commander**“ **X. Wu**. All contributions shared a great believe in the essential use of modern Maglev-System, while assigning an important role to protection of the environment and efficiency.

The exchange of the experts took place in seven sessions:

- Development, projects and operational experiences
- New Ideas
- Vehicles and levitation/control
- Safety and operational control techniques
- Propulsion, linear motors and energy supply
- Tracks and infrastructure
- Economy, Planning and feasibility-studies

The expert audience was able to choose from 124 contributions during three days. It was essential to master the English language since only the plenary speeches during the morning of the first day were translated simultaneously. The number of speakers from the Technischen Universität Dresden (with is competence centre for high-performance trains and maglev systems - KHM) underlines clearly their leading role in the field of Transrapid-research in the university sector of Germany.

The university Braunschweig alone was able to contribute two more lectures, three other universities were present with three listeners each.

The honorary member of the Union of European Railway Engineer Associations – UEEIV **Dr. B. Neumann** spoke about the topic: „Use of the TRANSRAPID in Europe“.

During the concluding session the relay staff of the international Maglev-conferences has been given to representatives of the University of San Diego/ USA.

All lectures were compiled in two conference publications (aprox. 800 pages, English) and on CD. These items can be ordered as a package for 49 EUR (excl. postage) at the institute for construction of the TU Dresden,

Tel. 0351-46 33 42 42 oder

[gudrun.radloff@tu-dresden.de](mailto:gudrun.radloff@tu-dresden.de)

On the last day an excursion was offered to visit the TRANSRAPID research site Emsland and the new main station of Berlin.

At the fringes of the conference 12 little stalls of the BMVBS and Dornier Consulting, the KHM of the TU Dresden, the DB Magnetbahn GmbH, as well as the Systems- and construction industry

informed about their involvement in the matter of TRANSRAPID. VDEI was also present and at the same time represented the interest of UEEIV.

„The railway engineer“ will report comprehensively in one of its next issues about the congress.

## ***2-Day Excursion of UEEIV to Vienna, April 2007***

UEEIV will, for the first time, organize a 2-day excursion to Vienna, scheduled for April 2007.

This excursion will take place under the topic

### **„Visitation of technical Infrastructure-Projects “**

Scheduled focus points of the program are:

#### **The Wienerwald-Tunnel**

This is a circumnavigation of Vienna. The head works are progressing under difficult geological conditions.

#### **Visitation of the most modern wind-channel**

For railway rolling stock as well as the climate-channel

#### **Visitation of the permanent track-system of ÖBB at the newly constructed line in the Vienna area**

The participation-form will be sent separately in short time

Furthermore a program for the first evening is planned - you will receive detailed information together with the participation form



*to all our member associations and supporting members  
from the presidency of UEEIV*

## Impressum

**UNION EUROPÄISCHER EISENBAHN-INGENIEUR-VERBÄNDE**  
**UNION OF EUROPEAN RAILWAY ENGINEER ASSOCIATIONS**  
**UNION DES ASSOCIATIONS EUROPÉENNES D'INGÉNIEURS FERROVIAIRES**

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**To our member associations and supporting members**

Please keep us updated about changes of contact as soon as possible.  
We welcome suggestions and contributions for our Union Report.