Newsletter

European Federation of Railway Trackworks Contractors

EFRTC

N° 2 - 2002

CONTENTS

ADDRESS

EFRTC
Secretary Office
A.N.I.A.F.
Via Guattani 16
I - 00161 Roma
ITALY
Tel.:+39 06 4423 2974
Fax:+39 06 4423 2832
aniaf.99@flashnet.it
http://www.efrtc.org

Published by UNIFE
221, Avenue Louise Bte 11
B - 1050 Brussels

EDITORIAL

One of the main targets that the European Federation of Railway Trackworks Contractors has set is to promote the harmonisation of rail track quality and maintenance requirements by the Infrastructure Managers, of procurement procedures of utilities operating in the transport sector, the qualification system for trackworks contractors and the interoperability of the machines for railway construction and maintenance in accordance to the European Directives. Outsourcing all the trackworks to private contractors, under the management and quality check of the Infrastructure Manager, is another important objective of EFRTC.

The different initiatives promoted by EFRTC, since its constitution in 1997, start to reap the harvest of their effort. In fact the proposal to elaborate a European Standard, presented by EFRTC to the CEN - European Committee of Standardization, has been approved and a working group WG 34 of the technical committee for railway application TC 256/SC1, has been constituted and work is already underway.

We should not forget an other important achievement thanks to the efforts of EFRTC. The pre-standard for the circulation of machines for track construction and maintenance which had been elaborated by the TC 256/SC1/WG5 has now been elected to become a European Standard. This new standard, by which the national conditions are considerably reduced in favour of greater harmonisation, will facilitate the interoperability of these machines within the EU.

Finally, the EFRTC is working in conjunction with the SKB – Organisation of Procurement Directors of the European Railway Companies in order to harmonise the procurement procedures.

Althoug the time required to reach these objectives is particularly long, EFRTC shall carry on his efforts in collaboration with the Infrastructure Managers, in order to optimise the management and maintenance of the infrastructure.

Attilio Rossi, President EFRTC

EFRTC NEWS

SKB – ORGANISATION OF PROCUREMENT DIRECTORS OF THE EUROPEAN RAILWAY COMPANIES

SKB was founded in the mid eighties after the UIC decided to cancel their activities on procurement. The German and French Railways took the initiative to set up the SKB. The SKB has now 14 members (Finland, Sweden, Norway, Ireland, UK, The Netherlands, Germany, Belgium, France, Switzerland, Austria, Portugal, Spain, Italy). For most of the countries two representatives are present; one of the rail infrastructure manager and one of the operator. At present NS Reizigers (operator) of The Netherlands holds the chairmanship of the SKB. The purpose of the SKB is to constitute a platform to mobilise purchasing power in the global market of rolling stock and railway infrastructure, to stimulate innovation and standardisation and to be an influential adviser of legislative European institutes such as the EC. The general assembly of the SKB meets twice a year (up to now 33 conferences have been held). Some 10 Working Groups are active. Subjects vary from procurement of electricity and rolling stock up to track materials and contract clauses.

One of the topics that are being processed by the SKB (in co-operation with EFRTC) at this time is a joint qualification system for rail track works contractors. The main purpose of such a system is to limit the administrative burden for both the contractors and the rail infrastructure managers. Such a system should naturally fulfil the requirements set by Directive 93/38/EC [the utilities directive]. The working group, which is setting up this qualification system, is aiming for the following characteristics:

- One single qualification process will be sufficient to qualify for all rail infrastructure managers who participate in the qualification system;
- One single set of exclusion requirements is applicable;
- Where required by national work processes or national law individual rail infrastructure managers may ad qualification requirements, assuming that these requirements are objective and non-discriminating;
- For each project, requirements based on project characteristics may be added in the tendering process, assuming that these requirements are objective and non-discriminating.

In order to ensure that a sound qualification system will be set up, representatives of both SKB and EFRTC agreed to inform and support each other. A co-operation that is also extended to the participation of SKB and EFRTC in CEN TC 256/SC 1/WG 34, a working group setting up requirements for qualification systems.

SKB on the Internet:
http://www.skb-vademecum.org

Address: SKB
P/a NS Reizigers Afd Inkoop
P.O. Box 2025
3500 HA Utrecht
The Netherlands

PROTECTION AT FIXED AND MOBILE RAILWAY WORK SITES

One of the main objective of EFRTC is to reduce the risks of work related accidents at work sites. As the European Directive 92/57/CE for the safety and health prescriptions on temporary or mobile worksites, does not address specific railway problems, EFRTC considers essential to elaborate a European Standard for the protection at fixed and mobile railway work sites. The scope of this standard is to establish supplementary technical prescriptions in order to minimise the risks on a railway worksite, especially when trains are circulating on the sidetrack. The necessary requirements are to establish the:

- List of railway risks;
- Criteria for the protection of fix and mobile worksites with trains circulating on the side track;
- Methods to be applied and their use;
- Formation of the agents responsible for the worksite protections;
- Authorised bodies for the railway worksite protection

EFRTC has presented this proposal to the technical committee for railway application TC 256/SC1 of the European Commission of Standardisation and decision on this matter should be taken very soon.

SCAM
AUTOMATIC CONTROL SYSTEM FOR RAILWAY MACHINERY

SCAM is a unique and revolutionary system specially designed and developed by the company KNOSOS to help technical, production, and maintenance departments to get the best of their fleets of heavy-duty railway machinery.

SCAM combines the best of the state of the art technologies, such as GSM communications and GPS positioning. SCAM goes far beyond a classical tracking and positioning system with all the data acquisition and monitoring functionality's added to it. Several parameters regarding the production and maintenance of each machine are acquired and stored by the embedded equipment, and afterwards all data is transmitted via GSM to be analysed at a control centre, either in real time or delayed time.

The SCAM equipment in each machine consists of an autonomous control unit and an industrial touch-panel PC computer as the user interface. The control unit includes a GPS receiver, a GSM data modem and a data acquisition module, which is connected to the electrical signals of the machine. All of the production parameters of the machine are controlled and stored by the control unit and displayed by the computer. The computer also informs about the maintenance schedule tasks that have to be carried out periodically.

The information of each particular unit is transmitted to a control centre where a communication server stores it in databases. This information can be then analysed by the SCAM client software tools, connected to the server by LAN, WAN or the Internet. This application, called MicroNAV, consists of two main modules:

A GIS (Geographical Information System) module displays in real time the position of each unit. Machinery convoys movements can also be tracked back and forward in time from a specified starting point. Zooms, pans and many others are standard tools.

A second module analyses the production and maintenance data coming from each individual machine. Among other features it provides: production graphics and figures of each machine; daily text reports; all kinds of alarms concerning production, or mechanical break downs; the state of the maintenance schedule of each train unit…

SCAM is nowadays a completely functional system, in daily use by a fleet of over 40 machines of the Spanish company COMSA, working in Spain, Portugal and Italy. With this system COMSA is ahead in the area of the information technology, applying all their benefits to the railway construction and maintenance market.

KNOSOS on the Internet: http://www.knosos.es
Address:
Knosos S.L.
c/ Álava, 140, 7°
08018 Barcelona – Spain
Tel. +34 933 208 305
Fax. +34 933 208 306
e-mail: knosos@knosos.es

IMPROVERAIL IN A GOOD TRACK SETTING MANAGEMENT TOOLS DIRECTED TO THE INFRASTRUCTURES MANAGERS

IMPROVERAIL project lieder, Tis Portugal, presented in Sofia last June, its mid term work assessment to the Project Advisory Board, clustering Railway Industries, represented by UNIFE and the Infrastructure Managers and rail Operators, represented by UIC. The aim of the project is to produce a "Handbook for Railway Infrastructure Capacity and Access Management" to be published late 2003, developing management tolls for railway infrastructure managers. In this line the project covers the different management aspects, from the organisational structure and functional procedures to the operational performance. The project has the direct involvement of the industry and the authorities. In general terms supports the establishment of the railway infrastructure management in accordance with the Directive 91/440 and other newly issued railway infrastructure directives, by developing the necessary tools for the modelling of the railway infrastructure and access management, by providing improved methods for capacity and resource management; indicators for the performance of the railway infrastructure managers and re-engineering for business processes; improving data background in support of harmonised charging for use or of railway infrastructure; improving the Life Cycle Cost (LCC) calculation methods in every aspect covered by the LCC methodology.

EFRTC thought UNIFE is given the chance to promote infrastructure contractors involvement and interests in such important research work.
For more information on the IMPROVERAIL Project see
www.tis.pt/improverail/improverail.htm

MEMBER NEWS

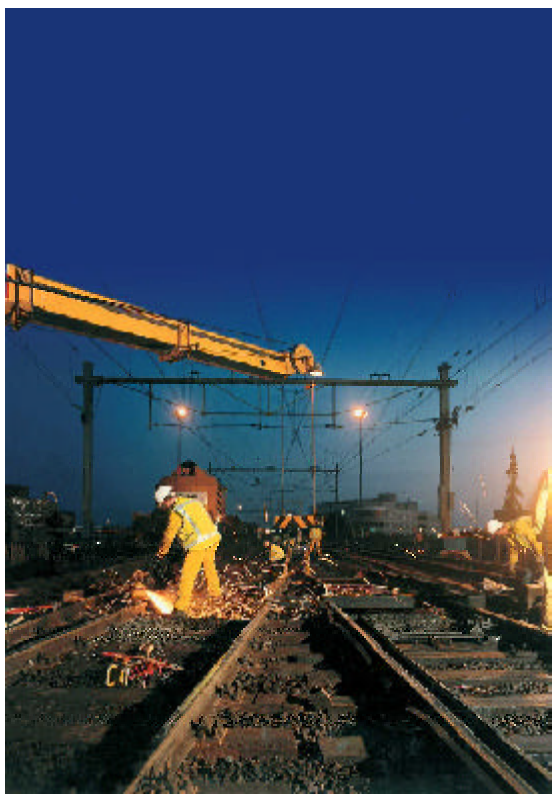
BAM NBM

Royal BAM NBM n.v. is the result of an agreement signed in late 2000 which merged the Royal BAM Group and the construction, civil engineering and rail infrastructure divisions of NBM Amstelland n.v.
This new organisation is the largest construction company operating in the Dutch market, with a turnover of EURO 2.5 billion and a workforce of more than 13,000.

BAM NBM Rail b.v., which represents the rail construction industry in the Netherlands, is a long-term contractor for the Dutch railway industry, focusing on track construction and replacement as well as electrification and signalling systems for railtrack, tramway and light rail. BAM NBM Rail is particularly experienced when it comes to maintenance, thanks to its scope of service and long-term rail maintenance for the Breda, Eindhoven, Rotterdam, The Hague and Leiden regions.

This public-private partnership contract has a construction term of five years covering the design, building and financing of the superstructure for the line, followed by a twenty-five-year maintenance period. BAM NBM Rail will supply the track system and the noise barriers.

Royal BAM NBM n.v. works with Fluor Infrastructure bv and Siemens Nederland BV in INFRASPEED. This consortium signed a contract with the Dutch Ministry of Transport, Public Works and Water Management and the Ministry of Finance to provide and maintain the superstructure of the new high-speed rail link between Amsterdam and the Belgian border (the "HSL Zuid" Line).



For more information visit web-site
www.bamnbm-rail.nl

FIRST HIGH-SPEED TRACK SECTION WITH THREE RAILS

The GIF(railway infrastructure managing organism in Spain) has constructed a test section of track with three rails between the towns of Olmedo and Medina del Campo (200 km NE from Madrid) . This section allows vehicles to travel at 220km/h, thanks to its 10 km straight alignment.
The type of section used is traditional ballasted track, although two small sections have also been constructed with track sections set in ERT concrete slabs from Balfour Beatty and Edilon Corkelast.

The turnouts has been designed for traffic at 220km/h on straights and 100km/h at junctions. This equipment has the characteristic that, for each gauge, the junction can only be at one particular side of the main track, which can condition the establishment of sidings and parking track as well as points for two-way working. The predetermined side can be reversed, for each length, by installing a "third rail side changer". This track equipment only affects the passage of vehicles of UIC gauge, as it is equivalent to a conventional switch.
Three-rail track might be suitable for narrow stretches where the shape of the land does not allow the construction of two tracks or for lines where the construction of double track cannot be economically justified.

Track laying on ballast

The type of rail used is 60 E1 of 260 quality (equivalent to UIC 60 of 900A quality). A new type of monoblock sleeper has had to be designed, called a GIF AM-00, which allows the three rails to be housed and stands up to the asymmetry of the loads generated by traffic on both sides. This sleeper allows the passage of 22.5-tonne axles at a maximum speed of 250km/h. The elastic fastening used is DSA by Stedef, which can be placed in the 233mm gap between the two contiguous rails.

To construct this ballasted track, an auxiliary track has been used, fixed with caterpillar gantries, that allows the unloading of rails on the main track and on the secondary ones. Then some replacement gantries, running on the unloaded rails, removed the auxiliary rail and unloaded the sleepers along the route. A light positioner fixed the rail on top of the sleepers. Alignment and levelling were carried out using successive unloads of ballast and tamping processes.

Assembly of sections of slab track

For the construction of the Balfour Beatty section, preassembled reinforced bars specially designed for three-rail track was laid and the concrete slabs were made using a concrete slip former. Then the three Balfour Beatty rails, with a thick web and half-head of profile 60-E-1 were laid in the channels. Small levelling gantries were used for fixing, aligning and levelling them. Finally, the channels were filled with cement.
The Edilon Corkelast section was also built to a special reinforced and formed design. A hydraulic crane laid out the three rails in the channels, where they were aligned and levelled with the insertion of pieces of corkelast. Finally, while the rail was placed in traction to stress relief, the elastic material was poured.

Turnout assembly

After a preassembly in the workshop, each piece of turnouts was taken apart and its parts moved by lorry and rail platform to its location along the route. There they were unloaded, with special care being taken in the handling of points and crossovers to prevent them suffering too much deformation. The assembly and fitting of each turnout was carried out on the perfectly levelled ballast bed. Finally, the necessary adjustments were made to comply with the established tolerances.

EU News

LAUNCH OF THE ITALY-TURKEY PAN-EUROPEAN CORRIDOR THROUGH ALBANIA, BULGARIA, FORMER YUGOSLAV REPUBLIC OF MACEDONIA AND GREECE

On 09 September took place a ministerial ceremony with the participation of Ministers of Albania, Bulgaria, Former Yugoslav Republic of Macedonia, Greece, Italy and Turkey in order to sign a Memorandum of Understanding (MoU) on the intermodal pan-European corridor VIII, in presence of the European Commission. This corridor links Italy to Turkey via these various countries.

Loyola de Palacio, Vice-President of the European Commission, in charge of Energy and Transport, welcomed this step ahead: "*The development of the corridor will positively contribute to the stabilisation process in the Balkans, the forthcoming enlargement of the EU and the strengthening of co-operation between the European Union and Eastern Europe. All these corridors which are being built are crucial to vertebrate the whole European continent: we are bridging the gap with our neighbours"*

COMMISSION APPROVES AID FOR RAILTRACK

The European Commission has approved a Euro 37.5 billion financial aid package aimed at comprehensively restructuring Britain's rail network. The aid, which was approved on July 17, will enable the newly created company, Network Rail, to take over ownership of the insolvent rail infrastructure operator Railtrack and pull it out of government administration. It will also ensure that Network Rail has sufficient finance to manage Britain's rail network in the short term. The Commission does not consider that the proposed money constitutes State aid.

Railtrack was set up on May 20, 1996, following the privatisation of Britain's railways. The company took over ownership and control of the track, signalling and major stations.
But, in 2001, it became clear that Railtrack's operations were becoming financially unsustainable, and on October 7 of that year it was placed under government administration.

On November 28, British authorities notified the Commission of a series of aid measures intended to rescue Railtrack, and to ensure the continued safe operation of the rail network pending transfer of the company out of administration. On February 13, the Commission approved the aid, which amounted to Euro 8.78 billion, for the period October 7, 2001, to September 30, 2002.

Although the company is in administration, Railtrack's shares are still owned by its parent company, Railtrack Group, so potential buyers were invited to bid for the company. However, the only bid that was received for Railtrack was from Network Rail. Network Rail entered into a legally binding agreement to purchase the company on May 3, on condition that it received from the government a grant of Euro 466 million. This was so that Network Rail would have "a sufficiently financially sound and secure basis to attract commercial debt finance to manage the main railway network of Great Britain in the short term."

A series of other measures also make up the weighty financial aid package. Essentially, the money will provide for public support for Network Rail's acquisition of Railtrack, operating the Channel Tunnel Rail Link and St Pancras station, and making it easier for Network Rail to raise commercial funding for rail management in Britain.
The Commission is satisfied that the purchase price does not amount to an over-compensation for Railtrack Group and that the price paid is within the range that a commercial investor would have been prepared to pay. The Commission therefore considers that the UK Government's funding package does not involve any State aid to Railtrack Group and that Network Rail is the sole beneficiary of the financial support in question.

COMMISSION ADOPTS TECHNICAL SPECIFICATIONS FOR INTEROPERABILITY

A string of decisions concerning technical specifications for interoperability (TSIs), applying to the trans-European high-speed railway system, have been adopted by the European Commission. They have been approved in keeping with Directive 96/48/EC, which seeks to ensure the interoperability of all national railway systems. This is to be achieved by creating TSIs designed to even out technical standards in various areas. The areas (subsystems described in annex II of the Directive) referred to by the aforementioned decisions include maintenance, infrastructure, command/control and signalling, energy, operations and rolling stock. After the TSIs have been applied, any new rail equipment for the high-speed network will have to meet the joint technical specifications in all EU Member States. The aim is to remove any technical or operational impediments to the free movement of trains throughout the EU. The TSIs are being developed by a representative common organisation: the European Association for Railway Interoperability.

PORTUGUESE TGV IS FINALLY A REALITY

The TGV connecting Portugal to the rest of Europe will be a reality. Mr. Valente de Oliveira, Portuguese Minister for the public works, is keen in launching the project. A set of meetings are therefore schedule, namely with the Spanish authorities, in order to reach a consensual rail track that will link both courtiers; with REFER, to complete the technical studies on the Portuguese railway network; and with the Commissioner Loyola Palacio, DG TREN, for funding. This project is a priority for the recent elected government, especially when the Ota airport and the third bridge crossing Tejo river are far from being a reality.

EUROPEAN PARLIAMENT SUPPORTS CO-FINANCING RATES FOR TRANS EUROPEAN RAILWAY NETWORKS.

Sitting in plenary session on July 2, the European Parliament adopted the report by Francesco Turchi (UEN, Italy) on the proposal for a Regulation laying down general rules for the granting of Community financial aid in the field of trans-European networks (COM(2002) 134). The plenary backed the Commission's amended proposal which seeks to increase the EU's contribution for TEN projects, which are designed to remove bottlenecks on cross-border rail routes which have to cross natural barriers, such as the Alps and the Pyrenees, as well as local bottlenecks at frontiers with the candidate countries by between 10% and 20%. TEN telecommunications projects are also covered by this proposed increase in co-financing. MEPs nevertheless warned against exceeding the existing financial perspectives as the proposal also provides for an additional Euro 100 million for cross border rail projects over the period 2003-2006. In order to deal with recurrent delays in the implementation of TEN projects, MEPs adopted an amendment providing for the reimbursement of Community aid where actions are not completed ten years after the allocation of aid.

EFRTC GENERAL ASSEMBLY 2002

The latest EFRTC General Assembly was held in Kent, England, on the 7th June 2002, organised by the Railway Industry Association of UK.

During the EFRTC General Assembly, the study groups had the opportunity to present the progress and results of their working groups.

A positive result has been obtained by the Study Group 5 who promoted the elaboration of a European Standard for the qualification of trackworks contractors. The technical committee for railway applications of the CEN has taken the decision to constitute the working group TC 256/SC1/WG34, which will be in charge of elaborating this standard.

Further more the following new actions will be taken by the study groups:

- Study Group 1: Turn key project for track maintenance;
- Study Group 3: Harmonisation of procurement procedure;
- Study Group 4: Harmonisation of rail track quality and maintenance requirements.

Another important action, promoted by UNIFE, is a joint seminar with the UIC Infrastructure Commission in a meeting that will be held in Budapest in November 2002, with the subject of optimising management and maintenance of infrastructure.

The General Assembly was followed by an address by Mr. James Evans, Secretary General of EIM – European Rail Infrastructure Managers - who presented this new trade association which was launched in Brussels on December 2001. EIM represent the particular interests of the rail infrastructure management sector in relation to the EU legislative developments affecting the rail industry. The objective of EIM is to contribute to the development of the European transport policy based on sustainable mobility through the efficient use of the infrastructure.

This first contact between EIM and EFRTC shall lead to a common work in order to reach the harmonisation of the working methods and conditions to ensure efficient economic and appropriate implementation of the interoperability process.

After the General Assembly a visit to the work site of the first section of the Channel Tunnel Rail link took place, organised by the Railway Industry Association and Amec Spie Rail Systems Ltd. This section of 74 km., which will provide a high-speed route between the channel tunnel and North Kent, should be completed in 2003.

EFRTC WEBSITE
http://www.efrtc.org

EVENTS

INFRASTRUCTURE TRACK CONTRACTORS AT INNOTRANS

With more than 1,000 exhibitors, this year's InnoTrans rail transport technology exhibition in Berlin laid claim to be the world's largest event of its type. Some 25,000 trade visitors were estimated to have attended the event, which took place in the German capital from 24-27 September. Participants included most of the market's leading suppliers and many used the event as a launchpad for new products, partnerships and projects. EFRTC was no exception. As an associated member of UNIFE, EFRTC marked its presence at UNIFE stand (Hall 02.2b). Visitors from all different fields, European institutions, public bodies, railway infrastructures managers, railway operators and general public, acknowledge EFRTC activities.

CONFERENCES & SEMINARS

October 22 2002 – Madrid Spain
UNIFE General Assembly

October 23-25, 2002 – Madrid, Spain
Eurailspeed 2002: 4th World Congress on High Speed Rail

November 11 2002 – Budapest
EFRTC General Assembly

November 12 2002 – Budapest
Infrastructure Managers Seminar

November 12-13 2002 – Barcelona, Spain
European Commission 2nd Conference on Energy and Transport
«Building Energy and Transport Infrastructure for Tomorrow's Europe»

November 13 2002 – Budapest
ProMain Project workshop

November 26-28 2002 - Birmingham
Railtex 2002 MackBrooks

March 25-26 2003 – Lille
3ème Salon International de L'Industrie Ferroviaire

April 2003 The Netherlands
Rail-Tech Europe