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INLAND TRANSPORT COMMITTEE

Working Party on Rail Transport
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agenda item 10)

RESEARCH PROGRAMMES FOR RAIL TRANSPORT

Rail transport projects funded under the European Commission's Growth Research Programme

Transmitted by the European Commission (EC)

Rail projects selected for financing from the First Call for Proposals (March 1999) of the EC's Growth Research Programme are briefly described below. Further details may be found at the Growth Research Programme web site (<http://www.cordis.lu/growth/>). It must be noted that contract negotiations may not have finished yet for some projects.

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Title :

OPTIMISATION OF RAIL TRAFFIC ON EUROPEAN CORRIDORS THROUGH ERTMS/ ETML
(Working out of System Requirement Specifications)

Key action :	KA2	Duration :	15 months
Proposal Reference	GRD1-1999-10778	Project Acronym	OPTIRAILS II
Contract Reference	2000-RS.10778	EC Project officer	Emmanuel Parent de Curzon

Abstract :

The deployment of unique harmonised train command/control and telecommunication systems and the creation of trans-European traffic management facilities constitute crucial elements towards the achievement of a real integrated rail network. The work foreseen herewith addresses the extension of the current developments, centred on the command/control (ERTMS/ETCS) and telecommunication (GSM-R) systems, towards the traffic management layer at the high level. This implies a supervisory management facility, built upon the different national traffic management systems, aimed at the control of railway traffic along major European rail corridors. In addition, the core set-up should constitute the basis for the creation of an associated information infrastructure to support transport management activities, including customer value-added services for door-to-door transport. The present study shall participate first to the completion and the consolidation of the Functional Requirement Specifications of those supervisory management facilities already worked out by the OPTIRAILS project under the 4th Framework Programme. Secondly, the study will define the System Requirement Specification of the new traffic management system including all sub-systems and interfaces.

Title :

RELIABILITY CENTRED MAINTENANCE (RCM) APPROACH FOR THE INFRASTRUCTURE AND LOGISTICS OF RAILWAY OPERATION

Key action :	KA2	Duration :	24 months
Proposal Reference	GRD1-1999-10810	Project Acronym	RAIL
Contract Reference	2000-RS.10810	EC Project officer	Jens Olsen

Abstract :

Safety for the travelling public on railways is essential. Coupled with this are train delays. These delays can occur despite the extensive and very costly maintenance effort required under national programmes. An organised technique to develop maintenance strategies based on the awareness of the nature and causes of malfunctions is called Reliability Centred Maintenance (RCM). The proposed research and development will concentrate on developing a structured RCM approach to railway infrastructure. This area gives the greatest potential for improvement in safety and train delays. In particular, the RCM analysis will focus on:

- all various types of track circuitry,
- axle counters,
- point machines,
- the signals themselves,
- interlocking such as position of points, signals to clear etc.

Title :

INTEGRATING LOCAL AND REGIONAL RAIL, INCLUDING CROSS BORDER ASPECTS

Key action : KA2

Duration : 16 months

Proposal Reference GRD1-1999-10843

Project Acronym CROSSRAIL

Contract Reference 1999-RS.10843

EC Project officer Uwe Huisman

Abstract :

In European cities there is a great potential for improving public transport in the urban areas by integrating tram/light rail systems with conventional rail. A vehicle suitable both for tram operation and for conventional rail has to be developed and the corresponding operation rules has to be set up. A successful solution is seen within national context, but only a European standard can secure a potential big market for the vehicles, resulting in substantially reduced unit cost. The industry will benefit from a larger market. In a few cases this also involves crossing the borders between two conventional railways, requiring a 3 systems solution. There is a potential for using such a vehicle to introduce new services in cross border rail. CrossRail provides an analysis of existing situation and a FRS accepted by the interested parties will be the result of the research.

Title :

Integration of interoperable intermodal horizontal transshipment techniques in intermodal transport

Key action : KA2

Duration : 36 months

Proposal Reference GRD1-1999-10927

Project Acronym IN.HO.TRA

Contract Reference 2000-CM.10927

EC Project officer Patrick Mercier-Handisyde

Abstract :

The proposal aims at promotion of specific transfer technologies in intermodal transport. By this improved systems, the transfer of loading units between different modes shall be executed with less costs and improved reliability. Furthermore, new operational approaches in road-rail intermodal transport are introduced by such horizontal transfer technologies, mainly the possibility to organise economic road-rail transport on shorter distances. Furthermore the integration of such systems in existing operational systems shall be examined. The influence of these technologies on the design of current intermodal transport equipment and loading units will be furthermore evaluated. Additional recommendations will be given on how intermodal policy can support such systems.

Title :

PROGRESS IN EUROPEAN MAINTENANCE AND MANAGEMENT OF RAILWAY INFRASTRUCTURE

Key action : KA2**Duration :** 48 months**Proposal Reference** GRD1-1999-10991**Project Acronym** ProMain**Contract Reference** 1999-TN.10991**EC Project officer** Uwe Huisman

Abstract :

The network ProMain is designed to enhanced performance through the application of new tools and methodologies for infrastructure maintenance and management, thereby using available RTD developments and knowledge in EU- and other projects-bringing together related users and developers in a flexible network for knowledge management- applying and testing new CENELEC safety approaches -concentrating on the enhancement of new European railway lines,-concentrating on the enhancement of new European railway lines- identifying needs for further actions. The applications are carried out for lines selected from EU priority programmes and projects 54 TEN projects for high speed lines, 3 freight freeways, 2 corridors)? The problems in these groups of lines are representative for a wide sector of present and future rail transport crossing national borders

Title :

Thematic Network on Rail Freight Services

Key action : KA2**Duration :** 48 months**Proposal Reference** GTC1-1999-10025**Project Acronym** RAILSERV**Contract Reference** 1999-TN.10025**EC Project officer** Uwe Huisman

Abstract :

The main goal of this project is the revitalisation of rail transport. It reflects the importance of an effective and efficient freight transport system within the European unification process. Railways have the potential to contribute much to sustainable development. It is far from being realised yet though. As a means to assist in achieving this, it is necessary to identify areas where research and development can lead to measures than enhance rail's competitiveness in providing freight transport services. The first phase which is research-oriented looks for consensus on the completed and ongoing tasks from a user and societal perspective and the second phase which is market oriented provides a realistic insight into the feasibility of the proposals in the preliminary masterplan. The strategies are adjusted to meet the requirements of the customer (the shippers) .

Title :

Semi trailers in advance intermodal logistics

Key action : KA2

Duration : 24 months

Proposal Reference GRD1-1999-10277

Project Acronym SAIL

Contract Reference 2000-CM.10277

EC Project officer Patrick Mercier-Handisyde

Abstract :

The project SAIL intends to improve the intermodal transportation of semitrailers in Europe. There is a need for this project because the European road transport is dominated by semitrailers on average for 60 % to 85 % of total road volume, whereas the percentage of semitrailers transported by rail has decreased down to 10 % of the intermodal transport volume. Recent tunnel accidents in Austria enforce the need for alternative freight transportation modes. This project intends to increase the percentage of semitrailers transported by rail. It will analyse and assess semitrailers transported by road and rail using an integrated systems approach. Technical and operational aspects will be regarded. The optimisation potential will be identified with a special emphasis on the interfaces of the system's elements. The worked out solutions will be practically demonstrated and evaluated on a relevant typical route in Europe.

Title :

STRATEGIES AND TOOLS TO ASSESS AND IMPLEMENT NOISE REDUCING MEASURES FOR RAILWAY SYSTEMS

Key action : KA2

Duration : 36 months

Proposal Reference GRD1-1999-10442

Project Acronym STAIRRS

Contract Reference 1999-RS.10442

EC Project officer Jens Olsen

Abstract :

The project contains three Work Packages:

- WP1: Development of a tool for a common European scale cost benefit study of different options for implementing low noise solutions, leading to industrial development and implementation of optimal solutions on a local, national and international level .
 - WP2: Refinement of assessment of noise from railway systems, using advanced procedures to prevent the need to duplicate measurements for interoperable vehicles, and thus reduce testing costs. by providing values applicable to various countries, by a single operation. Such methods will also allow separation of vehicle and track contributions to rolling noise .
 - WP3: presentation to strategy makers using results from WP1 and WP2.
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