

STRENGTHENING THE RAILWAY VEHICLES CENTRE

Ranko RAKANOVIĆ, Dragan PETROVIĆ, Zlatan ŠOŠKIĆ
rakanovic.r@maskv.edu.yu, petrovic.d@maskv.edu.yu, soskic.z@maskv.edu.yu

Prof. Dr Ranko Rakanović, Prof. Dr Dragan Petrović, Assoc. Prof. Dr Zlatan Šošković
Faculty of mechanical engineering Kraljevo, Dositejeva 19, Kraljevo,
SERBIA

Abstract: *This paper presents the project of the seventh framework programme for the purpose of strengthening the Railway Vehicle Centre of the Faculty of Mechanical Engineering in Kraljevo.*

Key words: *FP7, project, dynamics, fatigue, railway vehicles*

INTRODUCTION

This paper presents the latest events in the development of the Railway Vehicles Centre of the Faculty of Mechanical Engineering in Kraljevo that are in accordance with its defined goals and common development» within the RRTC.

The paper presents various activities financially supported by the European Commission through the project «SeRViCe».

IDENTIFICATION DATA

Name: «Strengthening the Railway Vehicles Centre of the Faculty of Mechanical Engineering Kraljevo»,

Official acronym: „SeRViCe“,

FP7 classification:

- Category: Capacities,
- Call: REGPOT-2007-1, «Unlocking and developing the research potential in the EU's convergence regions and outermost regions
- Topic: Sustainable Surface Transport
- Funding scheme: Coordination and Support Action (CSA),
- Grant Agreement No: 206929

The category «Capacities» means that the project is essentially infrastructural and that it can not finance research. The funding scheme «Coordination and Support Action» means that direct costs can be covered by the European Commission to the amount of 100%.

GOAL

The goal of the project „SeRViCe“ is to provide support to the strengthening of the Railway Vehicles Centre, research unit of the Faculty of Mechanical Engineering in Kraljevo, in order to make it a competitive and competent research centre and part of the integrated European Research Area (ERA).



Figure 1. Kick-off meeting

MAIN TASKS

The main tasks that should be realized within the project are:

- Improving knowledge of the present staff,
- Employment of experienced and young researchers,
- Provision of modern measuring equipment and construction of a test track, «S-curve».

PROJECT MANAGEMENT

The duration of the project is 36 months (1 May 2008 - 30 April 2011). The beneficiary of the project is the Faculty of Mechanical

Engineering Kraljevo, and the Project Coordinator is Prof. Dr Ranko Rakanović.

The beneficiary in this sense means the institution which is allowed to use the European Union intended for funding the project «SeRViCe». In this project, according to the requirement of the competition, there is only one beneficiary, and not a consortium, as usual.

The person in charge of the project, by the European Commission, is the Project Officer: Jozsef Mikita.

The total value of the project is 1,166,313.00 euros.

PROJECT CONCEPT

Vision

After achieving the project goals, the Centre will be able to participate as a partner in research programmes of the selected leading European research institutions in this area providing, at the same time, a response to the needs of railway vehicles industry in Serbia and the Balkan region.

Mission

Realization of the project goals will be performed through:

- Improvement of the knowledge of the present research staff
- Recruitment of new staff
- Modernization of research equipment
- Establishment of strategic partnerships.

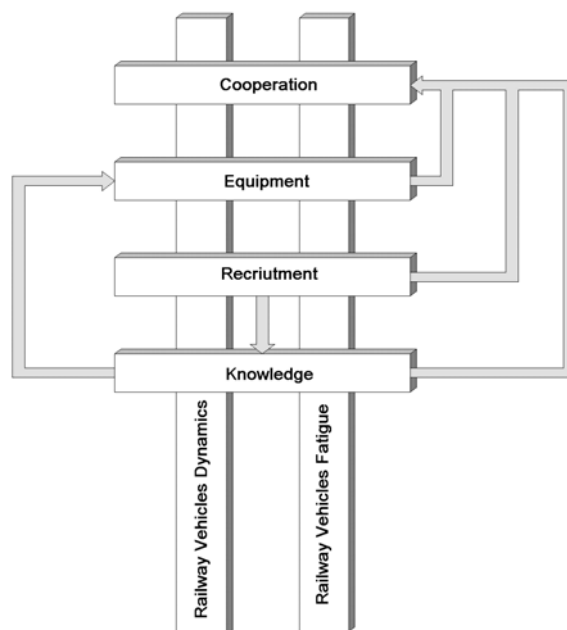
PROJECT OBJECTIVES

The project is elaborated in such a way that the activities on realization of 4 given objectives have parallel development in two directions of railway vehicles research, one being connected with railway vehicles dynamics, and the other one being connected with the fatigue of structures and components of railway vehicles.

The first objective is the improvement of knowledge of the research staff through the exchange of know-how and experience with

prominent research centres in Europe and organization of a series of workshops

The second objective is the construction of a test track for investigation of quasi-static properties of railway vehicles and purchase of equipment for measurement of forces in wheel-rail contact;



The third objective is the recruitment of at least two experienced and two young researchers whose future work will be primarily oriented towards the selected research area.

The fourth objective is the definition of common research programmes with the leading EU research centres in this area for the purpose of developing strategic partnerships with those institutions.

CONCLUSION

Successful realization of this project results in new knowledge and laboratory capabilities for the needs of wagon industry in the Balkans. The RRTC obtains new possibilities for cooperation in scientific projects within the European Community.

УКРЕПВАНЕ НА ЦЕНТЪРА ЗА ЖЕЛЕЗОПЪТНИ ВОЗИЛА

Ранко РАКАНОВИЧ, Драган ПЕТРОВИЧ, Златан ШОШКИЧ

проф. д-р Ранко Раканович, проф. д-р Драган Петрович, доц. д-р Златан Шошкич

Машинен факултет в Кралево, ул. Доситеева 1, Кралево,

СЪРБИЯ

Резюме: Този доклад представя проекта по Седма рамкова програма с цел укрепване на Центъра за железопътни возила към Машинния факултет в Кралево.

Ключови думи: 7РП, проект, динамика, умора, железопътни возила.