New methodology to analyse and optimize maintenance

[by Elena Ilie]

The improvement of the rail infrastructure-related activities is strictly linked to the infrastructure maintenance activity and the railway industry is challenged by different problems, such as the intensification of specific requirements, traffic boost and the need to improve safety, bottlenecks, sustainability and cost

Augmented Usage of Track by Optimisation of Maintenance, Allocation and Inspection of railway Networks (AUTOMAIN) project, is led by PRORAIL, with the implication of representatives from the operators, the industry, the academic environment and having Deutsche Bahn as technical coordinator. The development project, estimated at EUR 3.8 Million, began in February 2011 and is due in 2014.

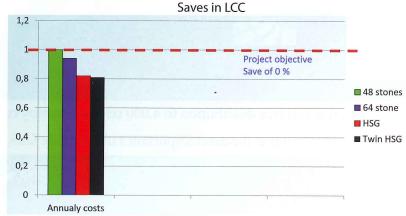
he AUTOMAIN project proposes to adopt the best practices from other industries for the optimisation of inspection and maintenance activities (for example, motorways or the airspace industry). The project will prove the way in which the reference time allocated for key maintenance tasks where all activity on that specific infrastructure is stopped can be reduced by up to 50%.

'The European Commission asks for a more sustainable transport system and therefore has asked the railway industry to facilitate the modal shift of freight traffic from motorways to railways via innovation", believes Henry Olink, project manager, ProRail.

The AUTOMAIN project aims at increasing the maintenance of infrastructure under operating conditions. This can be accomplished by reducing the time taken to install and maintain infrastructure, which is achievable by identifying tasks that lead them to automation and then developing and introducing appropriate technology.

The clear objective of the AUTOMAIN is to transform railway freight transport into a much more reliable transport than currently through availability and safety by generating new capacities on the existing network.

The objectives of the project Aug-



mented Usage of Track by Optimisation of Maintenance, Allocation and Inspection of railway Networks (AUTOMAIN) consist in the development of new methods for infrastructure inspection, both on freightdedicated routes, as well as on mixed traffic routes, improvement of the maintenance process efficiency and development of a new maintenance systematization and planning instrument.

The key innovations proposed by the developers of the AUTOMAIN research project include methods with increased infrastructure inspection and maintenance speed, development of new infrastructure components and improvement of the automated systematization and planning sys-

The benefits of this research will include reducing the maintenance preparation time, increasing the speed of the specific activity, programming maintenance only when useful and necessary, but also fewer routes to inspect.

The Association of the European Railway Industry (UNIFE) participates in this specific research project aimed to prove the possibilities of improving the infrastructure capacity. Of the EUR 3.8 Million, the European Commission granted a financing of EUR 2.5 Million through FP7, programme backed by EU's Research Department.



Новая методология для анализа и оптимизации обслуживания

Улучшение операционной деятельности железнодорожной инфраструктуры взаимосвязанно с работами технического обслуживания. Проект AUTOMAIN, направлен в особенности на исследование и развитие новых технологий, предлагает принятие наилучших методов работы с других сферах промышленности для оптимизации технического осмотра и обслуживания.

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