

## PROTECTION OF FREIGHT IN THE RAILWAY TRANSPORTATION

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Improvement of freight traffic and commercial operation control systems with application of advanced information technologies is stipulated during a period of branch reforming. In this context, it is very important to provide a high technology for freight protection in transportation by the railways of Ukraine. One of the main factors, which have influence on the protection of freight in the railway transportation, is a state of the rolling stock in technical and commercial terms [1].

Graphic display of the service ability of a railway carriage to operate under load depending on the service life of a railway carriage is as follows (figure1).

To support the service ability of carriages to operate under load at a desired level it is necessary to keep permanently a carriage in a functional state.

Railways of Ukraine have a system of repair and maintenance for carriages that is based on the application of a combined test for assigning carriages to scheduled repair.

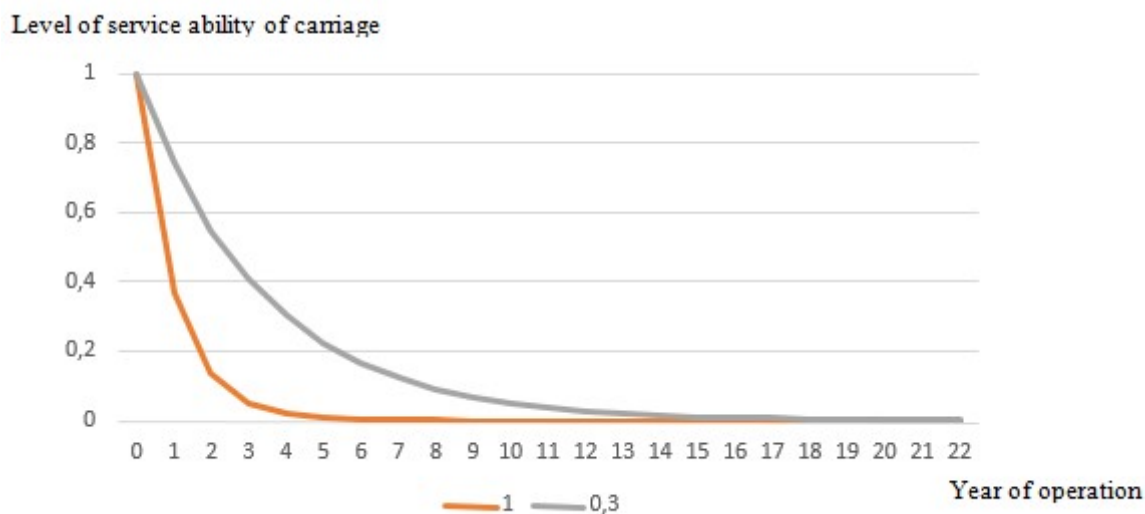


Figure 1. Dependence of service ability of a carriage to operate under load on the service life of a carriage

In connection with the above the rolling stock has a possibility to restore a level of service ability to operate under load of certain freight and, according to the known data, the dependence of this index is as follows (figure 2).

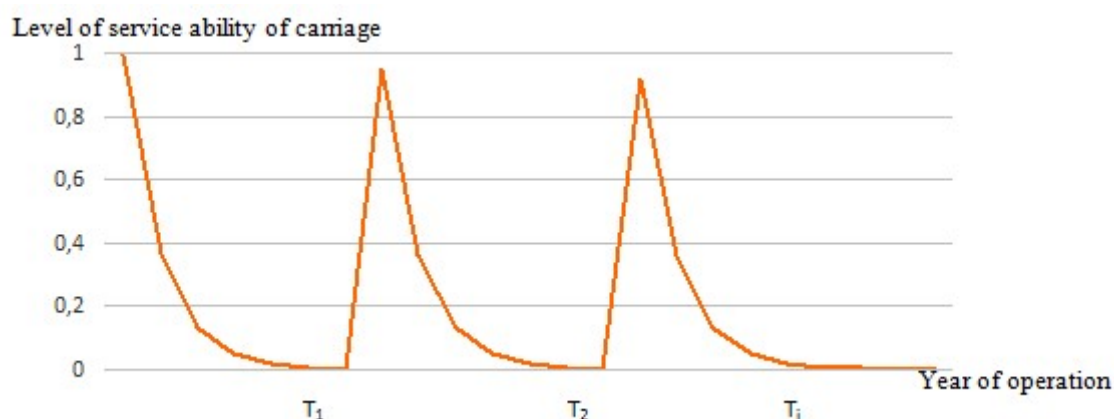


Figure 2. Dependence of the level of service ability of a carriage to operate under load on the service life of a carriage and carrying out appropriate repair and maintenance

Thus, taking into account the above-mentioned information and carrying out well-timed necessary repair and maintenance it is possible for any carriage to determine its service ability to operate in commercial terms for loading certain freight.

[1] Ломотко Д. В., Ковальов А. О., Ковальова О. В. Formation of fuzzy support system for decision-making on merchantability of rolling stock in its allocation //Eastern-European Journal of Enterprise Technologies. – 2015. – Т. 6. – №. 3 (78). – С. 11-17.

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## ORGANIZATION OF CONTAINER RAIL TRANSPORT USING LOGISTIC COGNITIVE TECHNOLOGIES

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The basis of the infrastructure of EU policy is the transformation of the national transport systems into a single trans-European transport network (Trans-European Transport Network, TEN-T). This can be done with the use of cognitive technologies. The global trend is associated with an increase in the volume of container shipments and the formation of large container shipping companies.

In the process of shipping containers, national supply chains are limited to one country, and international ones to several countries. Therefore, organizers, suppliers, customers, and all parts of a supply chain can be located within one or more countries. Due to the complexity of such transnational systems, the processes of managing container flows should be based on the principles of Supply Chain Management (SCM)