

FOURTH RAILWAY PACKAGE – NEW CONCEPTS IN THE FIELD OF SAFETY AND INTEROPERABILITY AND THEIR TRANSPOSITION INTO THE LEGAL FRAMEWORK OF THE REPUBLIC OF SERBIA

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***Abstract** – In 2016, the Fourth Railway Package in the EU brings the new Safety Directive (2016/798) and Interoperability Directive (2016/798). They introduce several important new concepts comparing to the previous directive, such as: new competences of ERA which used to be the competences of National Safety Authorities (issuing of authorisations for placing in service, issuing of safety certificates), preauthorisation of the control-command and signalisation subsystem – track side, extension in the field of ECM certification, definition of the “area of use“ of railway vehicles as a precondition for issuing of authorisations for placing in service, etc. The biggest problem of transposition of the 4th package into the legislation of the RS are the new competences of ERA, especially those related to the issuing of authorisations for placing in service and safety certificates because ERA is not authorised to accept applications coming from non-EU countries. It is also necessary to solve the problem of access to the register of approved types of vehicles and establishment of the infrastructure register, to extend the scope of application of TSIs to the entire railway network of the RS and all newly constructed vehicles, and procedures to meet the requirements from TSIs shall be prescribed by railway undertakings and infrastructure manager through their safety management systems. At the same time, it is necessary to „clean-up“ national rules, i.e. to reduce them to a minimum. Consequently, drafting regulations that will transpose the provisions of EU regulations from the 4th Railway Package into the national legislation, taking into account that we are not an EU member state, represents a huge challenge for the Ministry of Construction, Transport and Infrastructure and Directorate for Railways. This paper will elaborate on the new concepts brought by the 4th package and offer the possible solutions for their transposition into the national legislation of the RS.*

Keywords – 4th Railway Package, new concepts, transposition, challenges

1. INTRODUCTION

The Fourth Railway Package is one of the main segments of the European Union’s policy to support of the development of the railway sector. The aim of the legal norms from this package is to remove the remaining obstacles in the establishment of the Single European Railway Area. They are divided into two segments: market and technical which is related to the legal norms in the field of safety, interoperability and future competences of the European Union Agency for Railways (ERA).

Within the technical part, new interoperability and safety directives were adopted, which entered into force in May 2016 and repealed the old directives:

Directive 2016/797 on interoperability of the railway system within the European Union and Directive 2016/798 on railway safety. Regulation 2016/796 on the European Union Agency for Railways (ER) was also adopted, which gave ERA a new name and defined its new competences.

2. NEW CONCEPT OF THE DIRECTIVE ON INTEROPERABILITY OF THE RAILWAY SYSTEM 2016/797

The most important innovations in the new interoperability directive, which are elements of a new concept in this field, relate to:

1. contents of technical specifications of interoperability (hereinafter referred to as: TSI);

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2. issuing of authorisations for placing in service, i.e. authorisations for placing on the market;
3. introduction of a European Vehicle Register (EVR).

2.1. Contents of TSI

A new chapter in the TSI is a list of parameters of vehicles and fixed subsystems which must be checked by the railway undertaking and the procedures to be followed to verify these parameters after the authorisation for placing in service and before the first use of the vehicle in order to ensure the conformity between the vehicles and train paths on which they will operate.

Even before, it has already been the obligation of the railway undertaking to assemble the train so that the train and all the vehicles in it are consistent with the infrastructure, and now, for the first time, it is prescribed in detail what needs to be checked for that purpose.

As our laws cannot prescribe the content of TSIs, this novelty will not be transposed, but the application of the TSIs will oblige the railway undertaking to check the defined parameters.

2.2. Authorisations for placing in service of railway vehicles

Authorisations for placing in service of railway vehicles intended for use in international traffic are issued by the EU Agency for Railways (hereinafter referred to as: the Agency) and authorisations for placing in service in internal traffic are issued either by the Agency or by the national safety authority, at the choice of the applicant.

There are no longer any provisions relating to the issuance of the first authorization for placing in service for TSI compliant vehicles, the issuance of an complementary authorisation for such vehicles, the issuance of the first authorisation for non-TSI compliant vehicles and the issuance of an additional authorisation for such vehicles.

Instead, the so-called “area of use of a vehicle“ has been introduced. It means a part of network or the whole network of one or more states. The applicant applying for an authorisation for placing in service, in addition to the previously known documentation, shall enclose documented evidence that the concerned vehicle is technically compliant with the intended area of use. The compliance is determined according to the relevant TSIs and, if necessary, national rules, registers of infrastructure and common safety method for risk assessment. If necessary, additional tests and test runs may be requested.

The authorization specifies the area of use, and if the vehicle keeper wishes to extend it, he submits to the competent authority (the Agency or national safety authority) a proof that the vehicle is technically compliant with the new part / parts of the network and

the competent authority updates the authorisation in the area of use.

The mentioned method of issuing of authorisations for placing in service cannot be applied in the Republic of Serbia. The Agency is not authorized to issue authorisations to entities from third countries. The scope of application of TSIs in the Republic of Serbia is limited.

An authorisation for a vehicle intended for international traffic issued by the Directorate for Railways, in which the networks of other countries would be specified in the area of use, would not be recognized, because only the Agency has such an authorization.

This problem can be solved by keeping the existing principle of issuing the first and complementary authorization in the law, which is in line with the Appendix of COTIF ATMF where the same principle is still applied. The same principle was also prescribed by the previous Interoperability Directive 2008/57. Authorisations issued in this way will be recognized in the EU because according to the agreement on the accession of the EU to OTIF, EU member states apply COTIF in relation to third countries.

Maintaining this principle will enable railway undertakings to continue to procure used and previously approved vehicles, which are not compliant with TSIs, from abroad and to use them in the Republic of Serbia after obtaining a complementary authorisation.

2.3. European Vehicle Register (EVR)

The current principle of registration of railway vehicles is based on national vehicle registers (NVR). Each state kept its own vehicle register and this database was linked to a virtual vehicle register (VVR) in the Agency which functioned as a search engine. The inquiry about a vehicle went to the VVR and from there, according to the country code number (3rd and 4th digits in the 12-digit vehicle number), to the national register of a certain state. This method of vehicle registration was defined by COTIF and by Interoperability Directive 2008/57 and the Directorate for Railways keeps the NVR according to the OTIF regulation.

As of June 2021, NVR and VVR will stop to operate in the EU and the support for the software package used to operate the NVR will not be available any more. From that date, the European Vehicle Register will start operating (EVR).

The EVR represents a centralized database of all vehicles, i.e. data from national registers will be transferred to the EVR which will be kept by the Agency. This register is mandatory for all the EU member states.

The adoption of the OTIF document Vehicle Register Specification, which is based on the vehicle

register specifications defined in the European Commission Decision 2018/1614, is expected by the end of September 2020.

The following options are available to the non-EU countries:

1. to continue to keep a NVR based on their own software and to inform about how this register can be accessed by the interested parties, both from the Republic of Serbia and from other countries;

2. to use the EVR for the registration of their vehicles or

3. to establish and keep a common register with other interested parties.

For the Republic of Serbia, the simplest solution from the organizational and technical aspect is to use the EVR. The financial conditions for the use of the EVR would be regulated by bilateral agreements between the Agency and the interested countries. In that case, it is likely that the vehicle registration fee will be significantly higher than today (100.00 dinars per vehicle, once for the entire life cycle of the vehicle until it is withdrawn from service).

In any case, before amending the Law on Interoperability of the Railway System, one should have a clear position on the issue of keeping the vehicle register and amend the provisions on the vehicle register accordingly.

3. NEW CONCEPT OF THE SAFETY DIRECTIVE 2016/798

The most important innovations in this directive relate to:

1. two new common safety methods (hereinafter referred to as: CSM);
2. new concept of issuing of a single safety certificate;
3. extension of certification of entities in charge of maintenance (hereinafter referred to as: ECM).

3.1. Common safety methods

Safety Directive 2016/798 provides for the following CSMs:

1. CSM for risk evaluation and assessment;
2. CSM for assessing conformity with requirements in safety certificates and safety authorizations;
3. CSM for supervision to be applied by national safety authorities and CSM for monitoring to be applied by railway undertakings, infrastructure managers and ECMs;
4. CSM for assessing the safety level and the safety performance of railway operators at national and Union level and
5. CSM for assessing the achievement of safety targets at national and Union level.

CSMs from points 1-3 are already known but CSMs from points 4 and 5 are new.

The Regulation 402/2013 on CSM for risk evaluation and assessment amended by the Regulation

2015/1136 is still in force. The Republic of Serbia applies the OTIF's CSM for risk evaluation and assessment which is equivalent to the mentioned EU regulations.

A new Regulation 2018/762 on CSM related to the requirement to establish a safety management system has been adopted. The previous Regulations 1158/2010 and 1169/2010 on CSM for assessing conformity with requirements in safety certificates and safety authorizations will be in force until 16.06.2025 and they apply on certificates issued according to the Safety Directive 2004/49. The transposition of Regulation 2018/762 into a bylaw should not be considered before 2024.

A new Regulation 2018/761 has been adopted for supervision by national safety authorities after the issuance of safety certificates or safety authorisations, which has repealed the Regulation 1077/2012. The Regulation 1077/2012 was transposed in 2015 into the Rulebook on CSM for assessing safety performance after the issuance of a safety certificate or safety authorisation and, therefore, a new Rulebook base on the Regulation 2018/761 should be adopted. It is not necessary to change the existing legal basis for this.

The Regulation 1078/2012 on CSM for supervision to be applied by railway undertakings, infrastructure managers and ECMs is still in force. This regulation was transposed in 2015 into the Rulebook on CSM for monitoring of the efficiency of safety management during exploitation and maintenance of the railway system so nothing needs to be changed in that sense.

CSM for assessing the safety level and the safety performance of railway operators at national and Union level has not been adopted yet, so it is not known what will be written in it and what will be transposed into a bylaw.

CSM for assessing the achievement of safety targets at national and Union level has also not yet been adopted. The term safety targets is known from the previous Safety Directive 2004/49. Those targets are defined by the European Commission for the member states so it is not purposeful to transpose this CSM in a bylaw.

3.2. Single safety certificate

There is no part A and part B certificate any more but a single safety certificate.

The application for issuance of the certificate shall be accompanied by documentation containing documented evidence:

1. that the railway undertaking has established its safety management system which meets the requirements defined by TSIs, CSMs and common safety targets and by other relevant legislation in order to manage the risks and ensure safe operation of transport services on the network and

2. that the railway undertaking, if applicable, meets the requirements defined by the relevant national rules.

The Agency issues a safety certificate to railway undertakings operating in international traffic and before that it assesses the fulfilment of conditions from point 1. and submits the documentation from point 2. to national safety authorities for assessment. The certificate states the area of operation of the railway undertaking.

For the issuance of a safety certificate in internal traffic, the railway undertaking can apply to the Agency or to a national safety authority.

The Agency cannot issue safety certificates to railway undertakings from the Republic of Serbia.

Issuance of a single safety certificate in our country is possible for internal traffic, however, we should take into account the Treaty establishing the Transport Community (TC) which provides for the opening of the railway markets of the member states.

The degree of harmonization of the laws of these countries with EU regulations is very different. The Republic of Serbia has gone the furthest in that, not only in terms of harmonization but also in implementation.

It is necessary to agree on the type of safety certificate at the level of the TC, which will be mutually recognized. At the level of the TC, there is no "supranational" body such as the EU Agency that could issue safety certificates valid in two or more countries.

It is not possible for the competent authority of one member state of the TC to issue a safety certificate stating that it is also valid in another state.

The solution is to keep the old concept in the form of a part A certificate that would be recognized by all member states of the TC and one or more parts B certificate that would be issued by the competent authorities of each state.

3.3. ECM certification

According to the previous Safety Directive 2004/49, only ECMs for freight wagons had to be certified.

Article 14, paragraph 4 of the Safety Directive 2016/798 lays down that in case of freight wagons, and, after the adoption of the implementing act from paragraph 8, in case of other vehicles, all ECMs must be certified and obtain an ECM certificate.

The implementing act has been adopted in form of the Regulation 2019/779 on the system of certification of entities in charge of maintenance of vehicles.

Amendments to the Law on Railway Safety should prescribe the obligation for all ECMs to be certified and as far as the manner of their certification is concerned, reference should be made to the relevant OTIF regulation, as is the case in the applicable law.

The OTIF document Certification of Entities in Charge of maintenance base on the Regulation 2019/779 is expected to be adopted by the end of September 2020.

4. CONCLUSION

The Interoperability Directive 2016/797 and Safety Directive 2016/798 from the 4th Railway Package bring several important innovation in relation to the relevant directives from the 3rd Railway Package and new concepts that assign new roles to the Agency and to some extent to national safety authorities.

It is generally not possible to transpose these innovations into the regulations of the Republic of Serbia (content of TSI, authorisation for placing in service with the definition of the area of use, CSM for assessing the achievement of safety targets, single , safety certificate for international traffic), and some of them are not required to be fully transposed for the moment thanks to the application of the equivalent OTIF regulations (vehicle register, CSM for risk evaluation and assessment, ECM certification).

The planned amendments to the Law on Interoperability of the Railway System and Law on Railway Safety will generally not make it possible to harmonize with the 4th Railway Package for the reasons mentioned in this paper. Therefore, the best solution at the moment is to pay the greatest attention to eliminating the shortcomings and inaccuracies of these laws detected during their application.

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