

*telematic,
railway, certification*

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IMPLEMENTATION TELEMATIC SYSTEMS TO EXPLOITATION FOR RAILWAY TRANSPORTATION

Assessment of compliance may be defined as a total of measures taken by the manufacturers, their clients or regulation authorities and third parties in order to assess whether the product complies with requirements set forth in the specific standard or regulation. References may be regulation, standards, specifications of public markets, company standards and private specifications. Actions related with compliance assessment may be carried out on three levels: assessment, accreditation and recognition.

WDRAŻANIE DO EKSPLOATACJI SYSTEMÓW TELEMATYK W TRANSPORCIE KOLEJOWYM

Ocena zgodności może być zdefiniowana jako ogół środków podjętych przez producentów, ich klientów lub władze regulacyjne i strony trzecie w celu oceny, czy wyrób spełnia wymagania ustanowione w danej normie lub przepisie. Odnośnikiem mogą być przepisy, normy, specyfikacje rynków publicznych, normy zakładowe i specyfikacje prywatne.

Działania związane z oceną zgodności mogą być prowadzone na trzech poziomach: oceny, akredytacji i uznawania.

1. GENERAL INFORMATION ON RAILWAY TRANSPORT OFFICE UTK)

The Railway Transport Office (UTK) was established by right of Law on railway transport dated 28th March 2003 (Dz. U. No 86 item 789 dated 17 May 2003).

In accordance with Art. 74, part 2 of the aforesaid Law the Railway Transport Office was established through a transformation of the hitherto Chief Inspectorate of Railways.

By right of Art. 76, part 2 of Law on railway transport the hitherto mandatory executive provisions remain in force till issue of new ones, but not longer that to the day of Republic of Poland's accession to European Union.

In accordance with Art. 75, part 1 financing of Railway Transport Office till the end of 2003 takes place from financial reserves allocated for operation of Chief Inspectorate of Railways and from budgetary part of Minister appropriate for transport issues to be assigned for tasks realized hitherto by the minister appropriate for transport issues in the scope as transferred to the scope of actions of UTK President.

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The scope of operation, principles and procedures of operation of President of the Railway Transport Office and organization of the office are prescribed in the aforesaid act of law.

The President of Railway Transport Office being a central governmental administrative body is appropriate in the following matters:

- Regulation of railway transport,
- Licensing of railway transport,
- Technical supervision over the operation and maintenance of railway lines and railway vehicles,
- Safety of railway traffic.

The tasks of President of UTK (in accordance with Art. 13 part 1. of Law on railway transport), in the area of railway transport regulation, include, but are not limited to:

1. Approval and coordination of charges for use of the agreed routes;
2. Supervision over the assurance of equal access of forwarders to infrastructure;
3. Supervision over equal treatment of all railway forwarders by the railway managers;
4. Supervision over the correct establishing of basic charges for use of railway infrastructure by the manager;
5. Decision on complaints of railway forwarders;
6. Cooperation with appropriate bodies in the area of counteracting the monopolistic practices;
7. Imposing penalties in money.

The tasks of President of UTK (in accordance with Art. 43 of Law on railway transport), in the area of licensing of railway transport include confirmation of the contractor's ability to perform the function of railway forwarder.

The tasks of President of UTK (in accordance with Art. 13 part 2 of Law on railway transport), in the area of technical supervision over railway line operation and safety of railway traffic include, but are not limited to:

1. Issuing of safety certificates
2. Issuing of certification of acceptance for operation of types of structures, railway vehicles and equipment to railway traffic management
3. Exerting control over the managers, forwarders and users in relation to fulfillment of their obligations concerning railway transport safety
4. Supervision over the maintenance of safety principles in the railway transport and appropriate maintenance and operation of railway lines and sidings.
5. Supervision over transport of dangerous substances
6. Granting authorizations to the advisers for transport of hazardous materials

2. ORGANIZATION STRUCTURE

The Railway Transport Office consisting of site divisions is an executory apparatus of the President of Railway Transport Office.

President of UTK perform its tasks with the support of:

1. Vice-president for Railway Market Regulation – TR,
2. Vice-President for Technology and Safety of Railway Traffic – TT,
3. General Director - TG,

The UTK (in accordance with Ordinance No 1 of President of Railway Transport Office dated 18 July 2003 on establishing the organizational regulations of Railway Traffic Office) consists of organization departments and autonomous positions:

1. Office of the President – TBP,
2. Administration and Budget Office – TAB,
3. Organizational and Legal Department – TOP,
4. Market Regulation and License Department – TRL,
5. Transport Economics Department – TET,
6. Supervision and technical and Operational Safety Department – TNB,
7. Certification and Product Control Department – TSK,
8. Officer for Protection of Confidential Information – TIN,
9. Officer for Internal Auditing – TAW,
10. Site Division in Warsaw – UTKO1,
11. Site Division in Lublin – UTKO2,
12. Site Division in Kraków – UTKO3,
13. Site Division in Katowice – UTKO4,
14. Site Division in Gdańsk – UTKO5,
15. Site Division in Wrocław – UTKO6,
16. Site Division in Poznań – UTKO7.

3. CERTIFICATION ON RAILWAYS IN THE ASPECT OF POLAND'S ACCESSION TO THE EUROPEAN UNION

3.1. CERTIFICATION IN EUROPEAN UNION

Quality requirements imposed by EU Directives take into account above all the safety of use of given products from the health point of view.

The system of tests and certifications in EU covers a voluntary and a mandatory (regulated) area.

The group of standards EN 45000 series describes principles of operation of certifying units and laboratories, while the requirements of standard group ISO 9000 concern quality management and contain requirements concerning production organization quality systems. These standards are applicable both in the area of voluntary and mandatory certification.

3.1.1. ASSESSMENT OF COMPLIANCE

Assessment of compliance may be defined as a total of measures taken by the manufacturers, their clients or regulation authorities and third parties in order to assess whether the product complies with requirements set forth in the specific standard or regulation. References may be regulations, standards, specifications of public markets, company standards and private specifications.

The basic constituents of compliance assessment infrastructure both in the regulated and non-regulated area are units responsible for tests, patterns, certifications (of products, quality systems, personnel) and control. Trust in technical competences and abilities of these units are basic issue for the functioning of mutual recognition on the market.

We may assume that the assessment of compliance covers four types of issues:

- First of them will concern declaration of manufacturer's compliance, covering assessment of quality of the product by its manufacturer, based upon his own laboratories and quality assurance mechanisms
- Second applies to the testing of products, subassemblies and materials by the independent laboratories on the customer's request
- Third constitutes certification or formal statement about the product's compliance with specific standards
- Fourth includes certification/registration of quality systems based on an independent audit.

The objective of actions related with assessment of compliance is gaining the trust of the client necessary at purchase, sale and/or introduction of product to the market.

Besides the first group issues, all actions are taken by a third party, independent from the manufacturer.

Actions related with compliance assessment may be carried out on three levels: assessment, accreditation and recognition.

At the first level, the products or processes are assessed by the manufacturers, research laboratories and certifying units. On the second level competences of research laboratories, certifying and registering units are being assessed. Third level includes agreements about mutual recognition. Whereas the assessment may be carried out by a second or third party, the accreditation is always carried out by third party, independent from the manufacturer, the supplier and the consumer.

In the European Union countries, the manufacturer, importer or other unit, before introducing the product to the trade it has to comply with the requirements specific for this type of product.

There exist three possibilities of product introduction to the trade:

- Issued certificate of origin for products not subject to an assessment within the regulated area on European or national level
- Issue of manufacturer's declaration for the products from European regulated area (new approach directives). For certain directives, necessity of product marking with CE mark.
- Compliance with national regulations requirements (for the area not harmonized with EU),

Fulfillment of administration requirements is a condition of introduction of products to the trade, however very often it is not sufficient for product to be sold. In this case we enter

the voluntary area, where the customers decide about purchase or making use of the offered services.

Very often the requirements of customers and requests for guaranteed high quality of product and services offered decide about the success

One of forms is subjecting samples of the products to assessment in independent units and obtaining appropriate certificates or marks of compliance confirming their high level.

Another important argumentation is implementation by the company of management system and obtaining approval in a form of certificate issued by an independent certification company that the system was implemented and it is used. The certification processes are performed by the competent units independent of the manufacturer and customer.

The new approach has entailed a necessity to make the procedures of compliance assessment more efficient in a way enabling the community's employer to estimate the consequences of application of various compliance assessment mechanisms. The flexibility of a compliance assessment system must be ensured over the entire duration of the production process in such a way as to make possible its application to the separate operations.

A global approach resulted in a modular approach, meaning division of the compliance assessment procedure into a sequence of separate operations, so called modules.

The modular approach to the assessment of compliance results for the decision of a Council No 93/465/EEC. In accordance with the decision, choice of compliance assessment procedures to be applied to the technical harmonization directives takes place from among the nine modules concerning assessment of compliance (A, Aa and B through H).

Actions related with assessment of compliance refer to the process of engineering and/or production.

4. RAILWAY QUALIFICATION IN EUROPE (Germany, France)

In the European Union countries three directives applicable to the railways exist, i.e.

- „Directive EWG 91/440 on development of Community's railways and access rights to the cargo railways”,
- „Council Directive UE 95/18 – concerning licensing of the railway undertakings”,
- „Council Directive UE 95/19 – concerning allocation of infrastructure capacity charging for the use of infrastructure”,

The aforesaid directives impose on the community's nations the requirements concerning not only the licensing of the railway undertakings transport but above all state the requirements concerning safety of its operation. Article 34 of the new directive 19 says::

„...The Member States shall provide that in addition a safety certificate in which the railway undertakings' safety requirements are set out be submitted in order to ensure safe service on the routes concerned.

In order to obtain the safety certificate, the railway undertaking must comply with the regulations under national law, compatible with Community law and applied in a non-discriminatory manner, laying down the technical and operational requirements specific to rail services and the safety requirements applying to staff, rolling stock and the undertaking's internal organization.

...The railway undertaking must also prove that the rolling stock comprising these trains has been approved by the public authority or by the infrastructure manager and checked in accordance with the operating rules applicable to the infrastructure used.

The safety certificate shall be issued by the authority designated for the purpose by the Member State in which the infrastructure used is situated...”.

For realization of the above provisions in June 1999 an Inter-Governmental Organization of International Railway Transport– OTIF” with residence in Bern, that has decided upon a convention on International Railway Transport – COTIF.

This convention contains, among others, Appendix H entitled. „Unified regulations concerning technical acceptance of railway equipment for use in international carriage of goods (TMF)”. This appendix lays out a procedure with which the rail vehicles and other railway equipment are approved for use in the international communication as well as governs the principles of granting, withdrawal, and recognition of acceptance by the States – Parties to the Convention.

The requirements contained in the documents quoted above are realized in the member states and applying for membership with a various level of advancement.

Germany is a leader in realization of these provisions. Since 1995, in Germany operates Federal Railway Office – EBA that operates in accordance with requirements of directives. It employs ca. 800 employees – specialists from various railway related disciplines. It has a list of specialized German research units that have been audited by EBA and have been recognized for performance of tests on products to be used on German railways.

A second state to initiate the actions aimed at implementation of provisions of the aforesaid directives is France. The materials obtained in December 1999 show that they are at the beginning of the road leading to organization of a center for performance of acceptances on French Railways that is appropriate and compliant with guidelines.

There was an organization named “CERTIFIER” but it had only 18 employees and was at the stage of preparing documents constituting a basis for its operation. In other countries the product classification is carried out by the railways itself, without taking into account the requirements laid out in the directives. Such activity takes place in Sweden, Norway, Czech Republic and Russia.

Having the above in mind we may state that the Union’s requirements in the area of performing acceptance of structures, equipment and types of railway vehicles in Poland are being realized and that only Germany precedes Poland in this respect.

Work is carried out aimed at implementation of new approach directives are implemented by Polish legal system before our country obtains a membership in European Union. This applies also to two directives concerning railways: Directive 2001/16/we of European Parliament and Council dated 19 March 2001 on interoperability of trans-European conventional railway system and Council Directive 96/48/EC.

5. MARK CE

All modules of the aforesaid directives lead to obtaining a possibility to mark the product with CE mark, put on the product by the supplier and indicating that the product complies with all the applicable directives and the product itself was subject to appropriate procedures of compliance evaluation. CE mark is not aimed at consumers, constitutes only a proof of compliance with the basic requirements of directives. These requirements refer to the product safety, protection of users’ health and environment

Mark CE is mandatory for the products introduced to the Community market and included into the new approach directives or other directives requiring such a mark. C mark has to be located on:

- all products manufactured in the Community and third countries,
- on second hand products manufactured in third countries,
- on products that have been modified,

Mark CE has to be put on the product by the manufacturer or an authorized representative in the Community and has to comply with the following:

- assume form and proportions in accordance with the Council Decision 93/465/EEC – CE mark has to be at least 5mm high,
- has to be located in a visible, easily readable and permanent way

If the production stage involves a notified unit, its identification number has to be put besides the CE mark.

6. LEGAL BASIS OF CERTIFICATION IN POLAND

Basis of certification may be constituted by requirements specified within the standards, normative documents or other branch technical conditions.

Polish system of compliance assessment, often referred to as system of tests and certification is based on an act of law on tests and certifications dated 3 April 1999 r. (Dz.U. No 55, item 250), subject to several revisions.

On 22 July 1999 an act of law was passed concerning revision of law on tests and certifications (Dz. U. No 70 item 776). Revisions introduced enabled issuance of a range of related regulations, and namely:

- Ordinance of Council of Ministers dated 9 November 1999 on a list of products manufactured in Poland and imported to Poland,
- Ordinance of Minister of Economy dated 13 January 2000 on the procedure of issuance of documents accepting for trade hazardous products or those that serve protection or saving of life, health or environment manufactured in Poland or originating from a country having with Poland an agreement on recognition of compliance certificate or compliance declaration issued by the manufacturer and type of these documents.
- Ordinance of Minister of Economy dated 10 March 2000 on product certification procedure,
- Ordinance of Minister of Finances dated 17 May 2000 on method of establishing charges for operations related with accrediting, tests and certification as well as verification.

These are important provisions governing the principles, scope of tests and certifications of products manufactured in Poland or imported.

Law on tests and certification assumes two types of certification:

- Voluntary certification,
- Mandatory certification.

7. ACCEPTANCE OF PRODUCT FOR OPERATION ISSUED BY THE RAILWAY TRANSPORT OFFICE

Establishing of Railway Transport Office is a result of actions aimed at Poland's fulfillment of European Union's requirements on organization and operation of railways and assurance of direct transport of cargo and passengers.

The Railway Transport Office (UTK) operates by right of Law on railway transport passed by RP Sejm on 28 March 2003 (Dz. U. No 86 item 789 of 17 May 2003r). It is a central body of governmental organization, appropriate for issues of railway transport regulation, railway transport licensing, technical supervision over operation of railway lines, railway vehicles and railway traffic safety (Art.10 part 1 Law on railway transport).

The tasks of UTK resulting from provisions of the aforesaid Law (Art. 13 part 1) include in particular:

- Approving and coordination of charges for use of assigned train routes, railway infrastructure from the point of view of these charges' compliance with the charge calculation principles;
- Supervision over assurance of an equal access of forwarders to the railway infrastructure;
- Supervision over equal treatment received by managers of all railway forwarders, in particular in the area of decisions concerning applications for availability of train routes and calculation of charges;
- Supervision over correct calculation by the manager of basic charges for use of railway infrastructure and additional charges for supplementary services;
- Analysis of complaints of railway forwarders;
- Collection and analysis of information concerning railway transport market ;
- Cooperation with appropriate bodies in the area of using monopolistic practices by the railway managers and forwarders as well as coordination of railway system operation;
- Imposing penalties on principles laid out in the law,
- Issuance of operational acceptance certificates for railway vehicle types, railway equipment and structures;
- Carrying out a record of these certificates;
- Inspection of compliance with the technical conditions and requirements ensuring traffic safety and environment protection;
- Inspection of railway vehicles
- Participation in investigations concerning railway accidents in order to make clear their causes,
- Taking actions aimed at increasing safety in the railway transport,
- Presenting periodical assessment of safety condition in the railway transport to a Minister appropriate for transport issues,

In accordance with administrative decisions, the President of Railway Transport Office:

- Stops the traffic or introduces partial restrictions on a part of railway lines in the case when a direct hazard to railway traffic safety or to safe transport of persons or cargo was stated;
- Excludes from operation any railway vehicle or restricts operation of a vehicle that does not comply with the requirements laid out in the provisions issued based on Art. 20, Art. 23 part 4 pt 1 and Art. 24 part 5.

From among the tasks of Railway Transport Office listed above, an important part is played by the activities related with acceptance (Art. 13 of law) of products designed to be

used on railways in Poland. It is realized by the Department of Product Certificate and Control whose basic tasks include, but are not limited to:

- Cooperation with railway managements, forwarders and manufacturers in the area of preparation of a program and test contractors necessary for issuing the operational acceptance certifications;
- Cooperation with research units and experts in the area of carrying out tests and issuance of technical opinions ;
- Carrying out characteristics compliance inspections of specific structures, equipment and railway vehicles with types being accepted or already accepted for operation;
- Issuance of operational acceptance certificates for structures and equipment for railway traffic management;
- Issuance of operational acceptance certificates for railway vehicle types;
- Keeping records of operational acceptance certificates issued and withdrawn specific structures, equipment and types of railway vehicles
- Cooperation with other organization functions in the area of assessment of railway transport safety, related with operated structures, buildings and vehicles,
- Supervision of site divisions in the functional scope of departments' activities

The department operates based upon the following legal acts::

– Law on railway transport (Dz. U. No 86 item 789 of 17 May 2003r) and issued ordinances:

- a) on operational acceptance certificates for structures and equipment designed for railway traffic management and railway vehicle types .

This ordinance will describe:

** conditions and procedure of granting and withdrawal of operational acceptance certificates for structures and equipment designed for railway traffic management and railway vehicle types ,

** organization units authorized to carry out tests for obtaining the operational acceptance certificate,

** sample documents related with operational acceptance.

- b) On activities of UTK to be charged as well as amounts of these charges and method of their collection,
- c) On the scope of tests necessary for obtaining operational acceptance certificate of structures and equipment designed for railway traffic management as well as operational acceptance certificate for any railway vehicle type – this ordinance will describe the scope of tests to be performed in order to issue an operational acceptance certificate for structures and equipment designed for railway traffic management and railway vehicle types on railways in Poland. It will also describe the construction of equipment and types of railway vehicles that have a mandatory obligation to obtain an operational acceptance certificate if they are to be operated on railways.

Based upon documents quoted above, the UTK's Certification and Product Control Department (organization symbol – TSK) has developed a procedure to carry out realization of each application for issue of certificate (Appendix 1)

Procedure of operational acceptance of structures and equipment designed for railway traffic management and railway vehicle types in its technical assessment scope is in line with the practice used in the European Union's states (Appendix 2)

As mentioned above, the acceptance certificate is issued for the products designed to be used on railways in Poland.

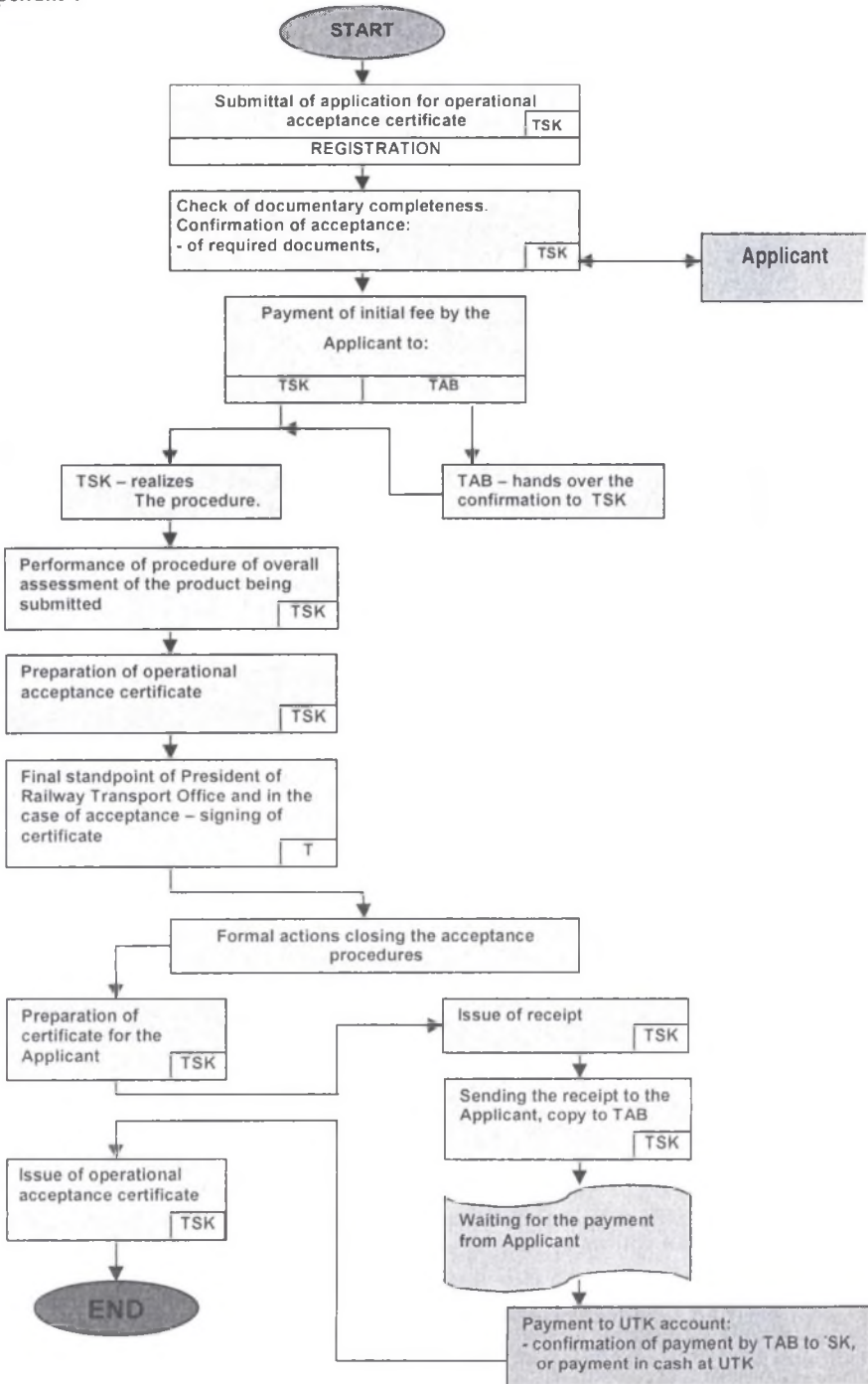
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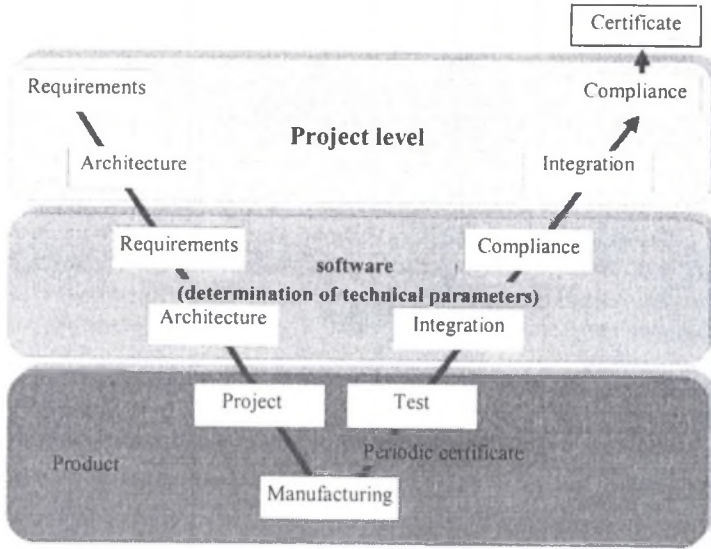
- Railway infrastructure separated from PKP – law on restructuring and privatization of PKP. (Dz. U. dated 28 September 2000 Dz. U. 84 of 12 October 2000 item 948),
- Rail vehicles,
- Passenger transport,
- Warsaw Underground ,
- Railway sidings of industrial works as separate subjects carrying out railway transport.

In accordance with provisions of Law on railway transport, UTK certificates are issued for an indefinite period of time. In the case of new product or those requiring additional verification the certificate is issued for a definite period of time after obtaining the positive test results confirming its compliance with necessary safety requirements.

President of UTK in the understanding of regulations on compliance assessment is a specialized body exerting supervision over the products introduced to operation and remaining in his inspection authorization scope.

Appendix 1





Appendix 2. Participation of unit accepting product for use in the railways (In accordance with EU requirements)

Reviewer: Ph. D. Jerzy Mikulski