

ANNUAL SAFETY REPORT

GREEK REGULATORY AUTHORITY FOR RAILWAYS



ρυθμιστική αρχή σιδηροδρόμων

regulatory authority for railways



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A. INTRODUCTION

A1. Purpose, scope and other addressees of the report

Article 18 of the Railway Safety Directive (RSD) requires National Safety Authorities (NSAs) to publish an annual safety report concerning their activities in the preceding year. This report covers Greek NSA's activities from 1 January to 31 December 2016. The information given through this report has the purpose to fulfil the requirements of Article 18 of RSD and to inform the different actors in the railway field on Member State level, as well as the other NSAs.

The Report has been produced in accordance with the Template "Annual safety Report ", version 1.2, date 05/09/2013 and was written by the Regulatory Authority for Railways (RAS).

The scope of this report is the entire Greek railway system.

This report will be available to the European Railway Agency (ERA), Greek Ministry of Infrastructure, Transport & Networks/Department of Railway Safety and Interoperability, the Railway Accident Investigation Body (NIB), the operating Railway Undertakings (RUs) TRAINOSE, STASY and RCLG, the Infrastructure Manager (IM) OSE and Entitiy in Charge of Maintenance (ECM) EESSTY. Furthermore, it will be available to any interested party through RAS website <u>http://www.ras-el.gr.</u>

A2. Significant organisational changes affecting the NSA

There were not any significant organisational changes affecting RAS in 2016.



B. OVERALL SAFETY PERFORMANCE AND STRATEGY

B.1 Main conclusions on the reporting year

The effort for a systematic & reliable measurement of the key safety indicators and safety improvement is in progress.

B.2 National safety strategy, programmes and initiatives

Greek Ministry of Infrastructure, Transport & Networks approved the proposal of RAS to start reforming the railway safety regulatory framework, setting out as priority the Traffic Rule Book issued by the national Infrastructure Manager. A relevant working group was established under the coordination of the IM and started working on this project. The members of this group are representatives from the Ministry of Transport, RAS, the IM, the operating RUs and the Rolling Stock Maintenance Company (ECM). In accordance with the project schedule, the reform is expected to be completed until the end of 2017.

B.3 Review of the previous year

- 1. RAS in October 2016 carried out the second audit to **OSE** (IM) regarding the implementation of its SMS (according to 1077/2012/EU).
- RAS issued safety certificates (Part A and Part B) for STASY RU in 28-06- 2016 according to Commission Regulation 1158/2010. Furthermore, RAS on October2016 RAS carried out the first audit to STASY according to 1077/2012/EU and produced the audit Report, which was send to STASY.
- 3. During 2016, RAS carried out two audits to the RU **TRAINOSE** regarding the implementation of its SMS. The first audit was in March 2016 and the second in November 2016. The audit Reports were send to TRAINOSE.
- 4. The new entrant RU Rail Cargo Logistics Goldair (RCLG) submit on February 2016 a Part A Safety Certificate application to RAS. RAS after an assessment period using the criteria of the CSM 1158/2010/EU, issued a Part A safety certificate on September 2016. Then RCLG submit on September 2016 a Part B Safety Certificate application to RAS which at the end of 2016 was under assessment.
- The new entrant RU PIRAEUS EUROPE ASIA LOGISTICS SA (PEARL) submit on June 2016 a Part A Safety Certificate application to RAS. RAS after an assessment period using the criteria of the CSM 1158/2010/EU, issued a Part A safety certificate on December 2016 for PEARL.
- 6. As ECM Certification Body, RAS conducted in 2016 the third surveillance audit to ECM EESSTY regarding the implementation of its Maintenance Management System (according to 445/2011/EU). The first phase of the audit took place at the at the maintenance factory in Volos and the second phase of the audit took place at the main offices of EESSTY in Athens.
- 7. The OSE (IM) ECM Certificate is still under suspension from September 2015 because OSE could not meet the requirements of Commission Regulation 445/2011/EU.



B.4 Focus-areas for the next year

- To issue and grant Safety Certificates Part B for the newcomer RU RCLG.
- To issue and grant Safety Certificates Part B for the newcomer RU PEARL.
- To supervise the safety authorization for the IM OSE, by performing audits, inspections and conducting relevant meetings.
- To supervise the safety certification for the RU TRAINOSE and RU STASY by performing audits, inspections and conducting relevant meetings.
- To supervise the safety certification for the RU RCLG by performing audits, inspections and conducting relevant meetings.
- To perform audits and inspections concerning the Maintenance Management System of the ECMs EESSTY.



C. DEVELOPMENTS IN SAFETY PERFORMANCE

C.1 Detailed analysis of the latest recorded trends

Taking into account the CSIs reported from 2006 to 2015 the following trend analysis was conducted:

Number of accidents:

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
53	40	34	39	24	18	14	23	25	13

The total number of accidents in 2016, after the increased values of 2014 & 2015, had a significant reduction. We are not sure if this reduction is due to structural effort and will continue the next years.

Number of fatalities:

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
18	17	22	29	13	18	9	9	14	10

The number of fatalities the last four years are reduced (except for 2015). The decrease between 2015-2016 is due to the less level crossing accidents (1 against 8). In contrast, the accidents to persons caused by RS in motion are doubled in 2015 & 2016 compared to 2014.

Number of suicides:

ſ	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
				2	4	1	5	4	7	4

Since 2011 the number of suicides remained relatively stable (apart from 2012 and 2015).

Number of injuries:

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
36	29	22	20	14	5	6	11	11	4

The trend in number of injuries is similar to the trend in number of accidents. In 2016, number of injuries were remarkably reduced to 4. We are not sure if this reduction is due to structural effort and will continue the next years.

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Number of precursors to accidents:

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
271	335	266	189	174	21	160	140	134	127

The trend of number of precursors to accidents is firmly downward, apart from year 2012 which is out of range.

Cost of significant accidents:

The value of "Economic impact of significant accidents" for the year 2016 decreased significantly compared to the previous year mainly due to the reduction at the number of fatalities.

2013	2014	2015	2016
9,96	1,54	37,53	10,86

Values in millions

Technical safety of infrastructure and its implementation, management of safety: Number of level crossing by type:

	2011	2012	2013	2014	2015	2016
Active	723	806	779	760	749	749
Passive	527	781	721	693	656	656
Total	1250	1587	1500	1453	1405	1405

Since 2012 there is a slow but steady decrease in the number of Passive level crossings.

C.2 Results of safety recommendations

The National Investigation Body has not addressed RAS any safety recommendation.

C.3 Measures implemented not in relation to safety recommendations

No further measures have been taken.



D. SUPERVISION

D.1 Strategy and plan(s)

RAS has been entrusted with the tasks of NSA since October 2013 so there is no supervision strategy developed yet. The preparation of a supervision plan is expected to be completed and applied for the year 2018.

RAS shall collect, analyse and shall make use the information from a variety sources. These include: audits of management systems, meetings with the RUs and the IM, accident-incident statistical analysis, investigation reports, RU's and IM's annual reports, inspections etc.

D.2 Human resources

In 2016, the actual number of staff employed by RAS was 11:

- o 6 Engineers,
- o 2 Economists,
- o **1 Lawyer**,
- 1 Legal adviser
- 1 Administrative staff

From the above-mentioned staff, six (6) were involved in NSA activities, four (4) in Regulatory activities and the legal adviser with everything.

D.3 Competence

No documented competence management system has been in place yet. However, the staff of RAS had already experience in railway projects before they were transferred to RAS in November 2011. RAS was originally appointed as the regulatory body for railways only. Our personnel come from the national Infrastructure Manager's subsidiary company ERGOSE which is responsible for the management of the railway infrastructure projects. The range of projects included earthworks, civil structures, trackwork, tunneling, bridges, station buildings, electromechanical installations, signaling, electrification and ERTMS.

In addition, all RAS stuff has successfully completed:

- the course "Auditor/Lead Auditor (OHSAS 18001:2007 Series Standards) under the International Register of Certificated Auditors scheme (TUV Hellas- 5 to 9 December 2016).
- the course "technical inspection of management systems in accordance with the standard ISO 19011" (TUV Austria- 15&16 March 2016).

D.4 Decision-making

- RAS has not established and published any decision-making criteria yet.
- No complaints received by RUs and IM.



D.5 Coordination and cooperation

There were no agreements in force during the reporting year with NSAs from other MS.

D.6 Findings from measures taken

In 2015 RAS carried out audits to the IM OSE and RU's TRAINOSE and STASY regarding the implementation of their SMS (according to 1077/2012/EU).. Acting also as ECM Certification Body, RAS conducted surveillance audits to ECM EESSTY regarding the implementation of its Maintenance Management System (according to 445/2011/EU)..

Several non-conformities (major and minor) arose during the above mentioned audits and corrective actions (measures) were requested to be taken by the auditees. The auditees took the recommended corrective actions (measures) so the majority of non-conformities were closed. For the year 2016 RAS didn't carry out any evaluation of measures taken.



E. CERTIFICATION AND AUTHORISATION

E.1 Guidance

All information on the issuing, publication and possible update of guidance by the NSA on how to obtain Part A/B certificates and authorisations are available to any interested party through the website of the Ministry of Infrastructure, Transport and Networks:

http://www.yme.gov.gr/?getwhat=1&oid=842&id=&tid=869

Since October 2013, RAS has taken over the responsibilities of NSA in Greece and all the above-mentioned information is also available in RAS website:

http://www.ras-el.gr/el/page/Safety

E.2 Contacts with other NSAs

No requests from / to other NSAs asking for information on a Part A certificate have been send during 2016.

E.3 Procedural issues

During 2016, RAS :

- issued a Safety Certificate Part A (EI 11 20160001/15-7-2016) and Part B (EI 12 20160001/15-7-2016) to the RU STASY.
- issued a Safety Certificate Part A (EI 11 2016 0002/30-9-2016) to the RU Rail Cargo Logistics Goldair (RCLG).
- issued a Safety Certificate Part A (EI 11 2016 0003/19-12-2016) to the RU PIRAEUS EUROPE ASIA LOGISTICS SA (PEARL).

E.4 Feedback

- RUs or IMs can express opinions on issuing procedures/practices or to file complaints to RAS through its e-mail (<u>info@ras-el.gr</u>) or letter by mail.
- Also, RAS welcomes meetings with RUs or IMs representatives for any issue. During the Safety Certificate assessment period RAS consults with the applicant companies through meetings or emails and letters trying to solve as soon as possible problems or shortages.
- During the year 2016 RAS held many meetings and exchange many letters and emails with IM OSE and RU TRAINOSE and the Safety Certificate applicants STASY, RCLG and PEARL.



F. CHANGES IN LEGISLATION

F.1 Railway Safety Directive /1/

1. Legislation in force transposing the RSD /1/

a) Directive 2004/49/EC was transposed in Greek Legislation by Presidential Decree 160/2007 "Harmonization of Greek legislation to the provisions of Directive 2004/49/EC of the European Parliament and the Council, about the safety of the European rail system, amending the Directive 95/18/EC of the Council concerning licenses of Railway Undertakings and the Directive 2001/14/EC of the Council concerning capacity allocation of railway infrastructure and the levying of charges for the use of railway infrastructure and safety certification"

2. The status of the transposition of the amendments to the RSD /1/ at the end of the reporting year (table 1 of annex B).

b) Directive 2007/57/EC was transposed in Greek Legislation by Presidential Decree 104/2010 "Harmonization of Greek legislation to the provisions of Directive 2007/57/EC of the European Parliament and the Council, about the interoperability of the European rail system and of Directive 2009/131/EC amending of annex VII of Directive 2007/57/EC"

c) Directive 2008/110/EC and Directive 2009/149/EC was transposed in Greek Legislation by Presidential Decree 71/2010 "Modification of PD 160/2007 for the adjustment of Greek legislation to the provisions of Directive 2008/110 / EC of the European Parliament and the Council of 16 December 2008 amending Directive 2004/49 / EC safety on the Community's railways (EE L 345/62 23.12.2008) and Directive 2009/149 / EC of 27 November 2009 amending Directive 2004/49 / EC of the European Parliament and of the Council as regards Common safety Indicators and common methods calculate accident costs (EE L 313/65 28.11.2009). "

d) Directive 2014/88/EC was transposed in Greek Legislation by Ministerial Decision $A\Sigma4.1/60964/3095/19-11-2015$ "Harmonization of Greek legislation to the provisions of Directive 2014/88/EC of the European Parliament and the Council, amending Directive 2004/49/EC of the European Parliament and of the Council as regards common safety indicators and common methods of calculating accident costs".

F.2 Changes in legislation and regulation

See table 2 of annex B.



G. APPLICATION OF THE CSM ON RISK EVALUATION AND ASSESSMENT

G.1 NSA experience

- 1. No decisions by the proposers on the level of significance of a change were taken during 2016.
- 2. No applications of the risk management process by the proposers were done during 2016.
- 3. There was no involvement of ABs during 2016.
- 4. There was no interface management during 2016.

G.2 Feedback from stakeholders

There were no such procedures in operation during 2016.

G.3 Revision of NSRs to take into account the EC regulation on CSM on risk evaluations and assessment

There were not such revisions of NSRs.



H. DEROGATIONS REGARDING ECM CERTIFICATION SCHEME

So far no alternative measures have been taken from the Greek Ministry of Infrastructure, Transport & Networks and consequently no derogations have been granted by Greek NSA in accordance with article 14a (8) of Directive 2008/110/EC /2/.



ANNEX A

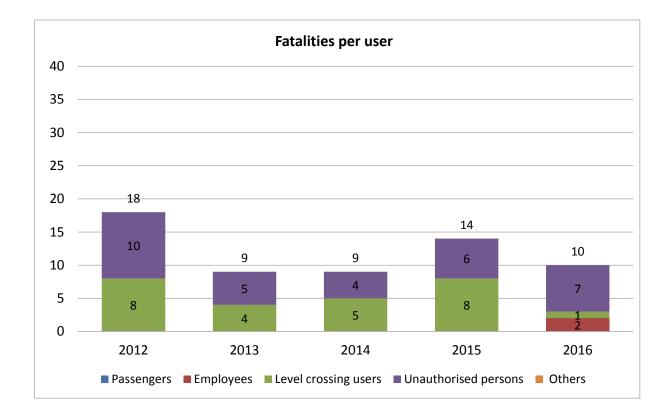
COMMON SAFETY INDICATORS

CSIs data charts

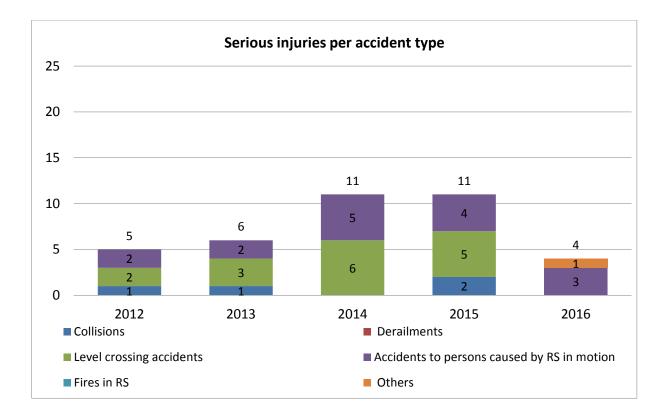
NSAs may use a predefined set of CSIs charts that may be downloaded from ERAIL system.

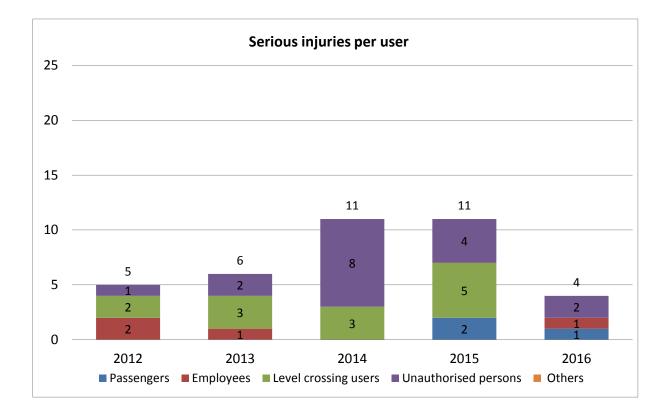




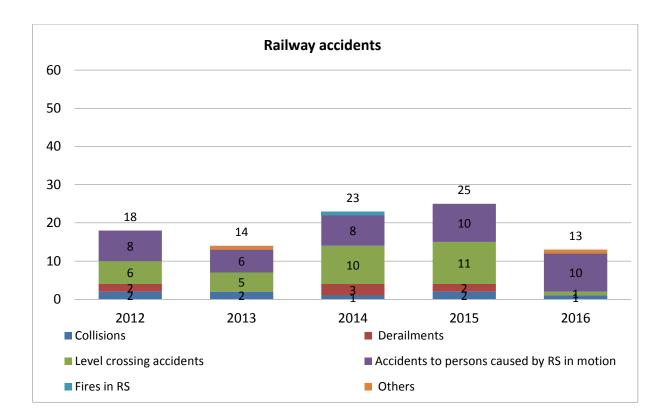


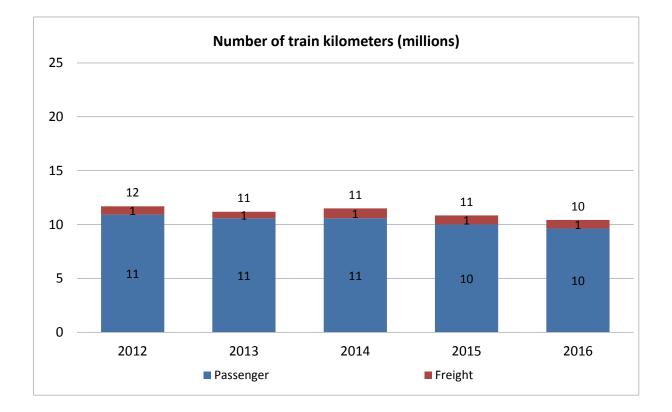




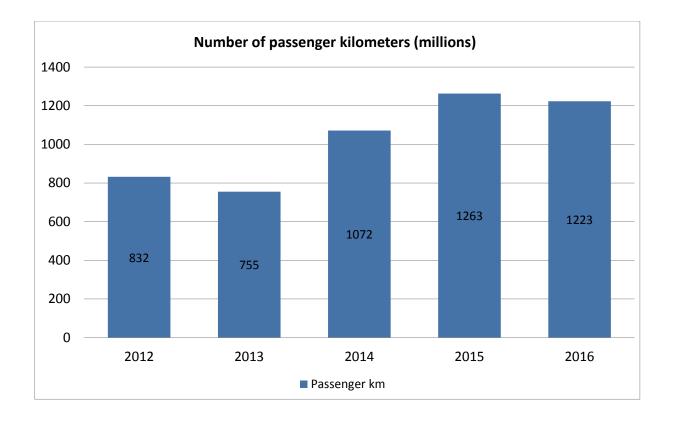


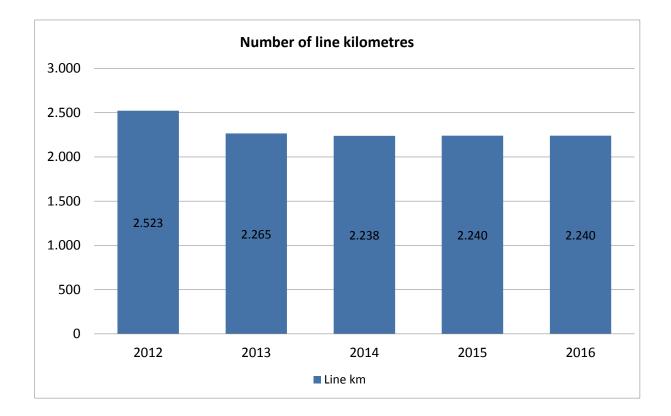




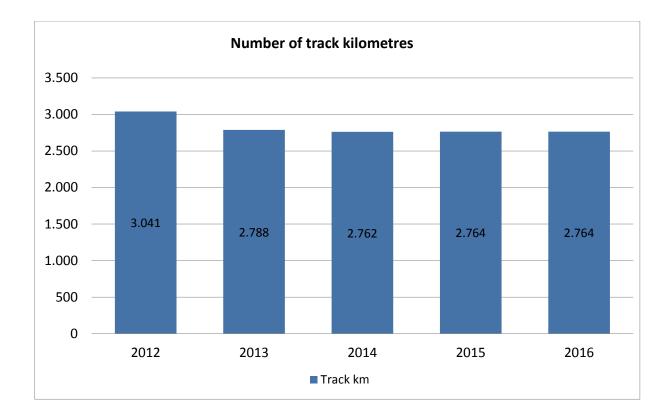


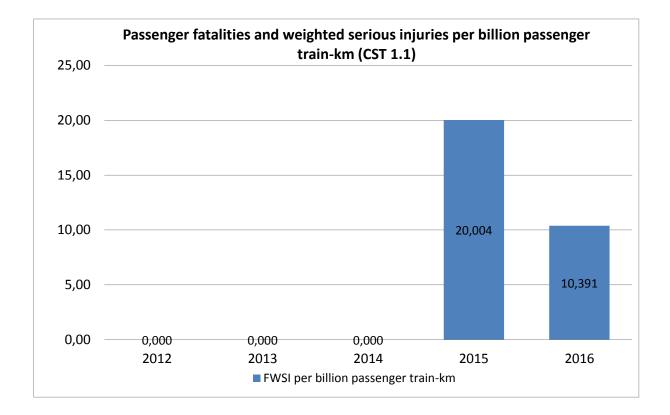




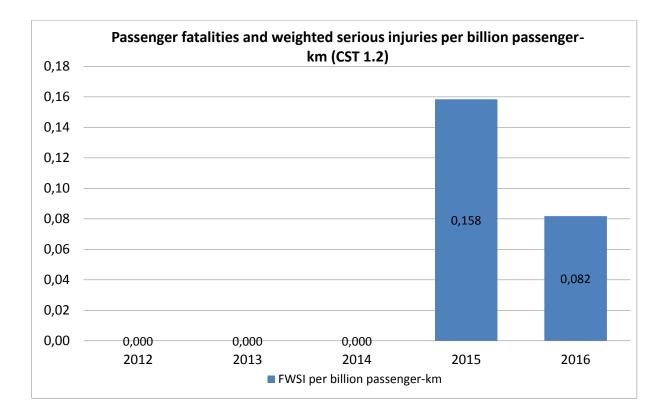


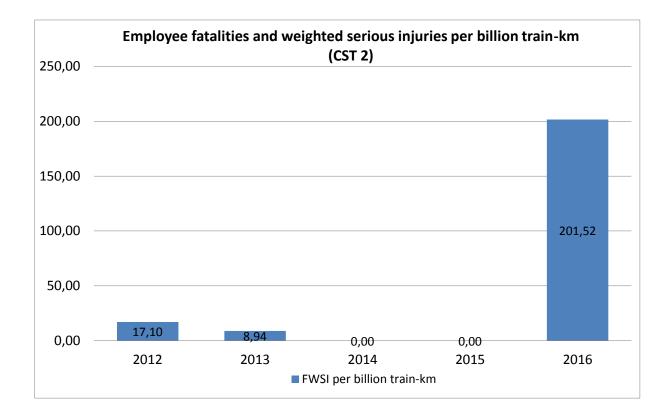




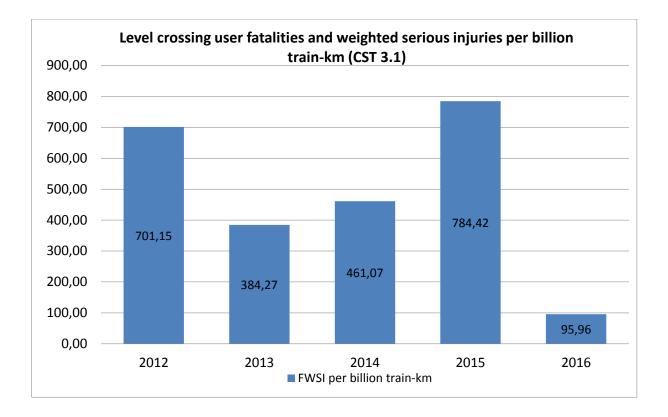


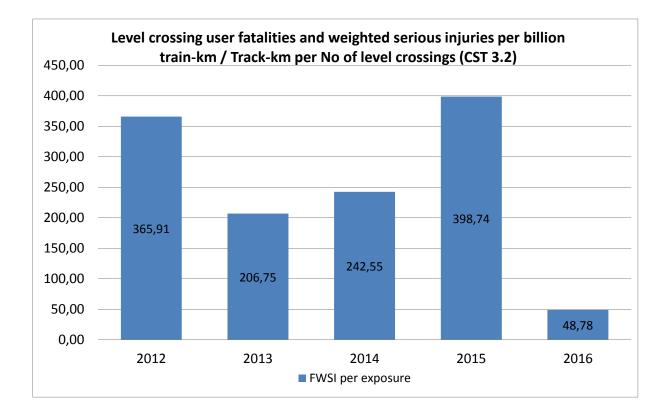




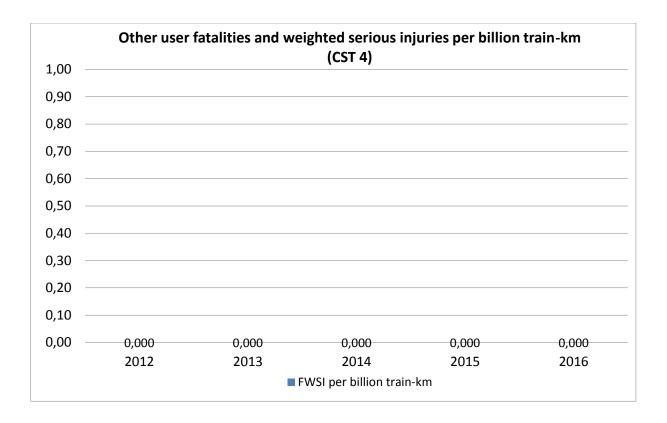


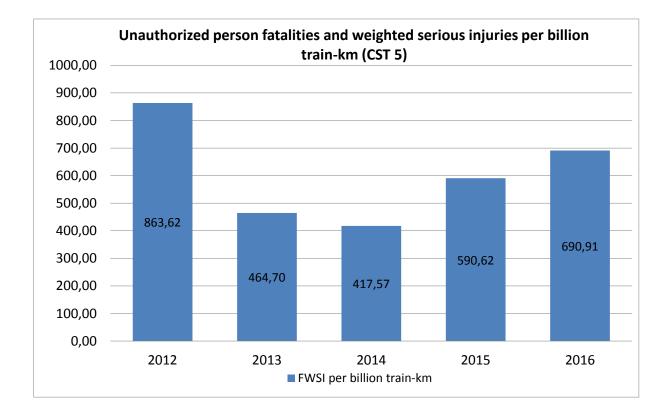




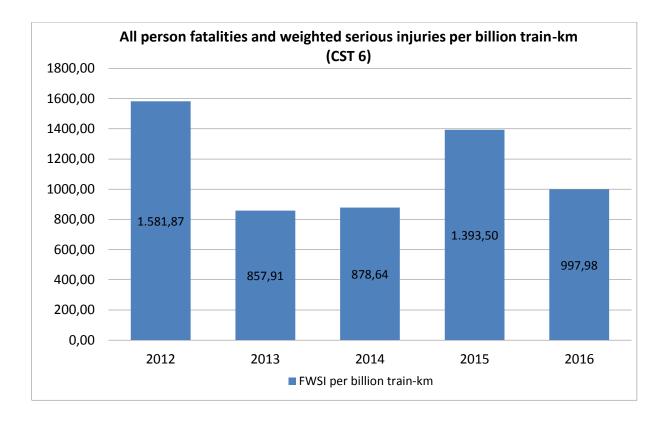


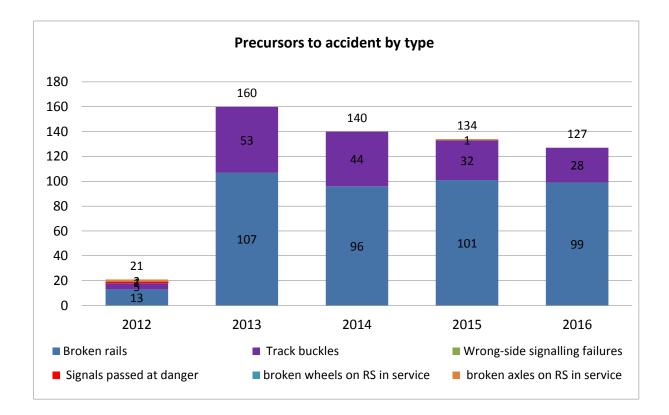




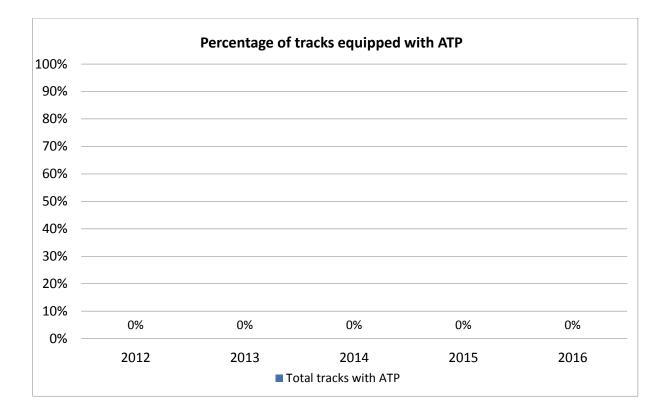


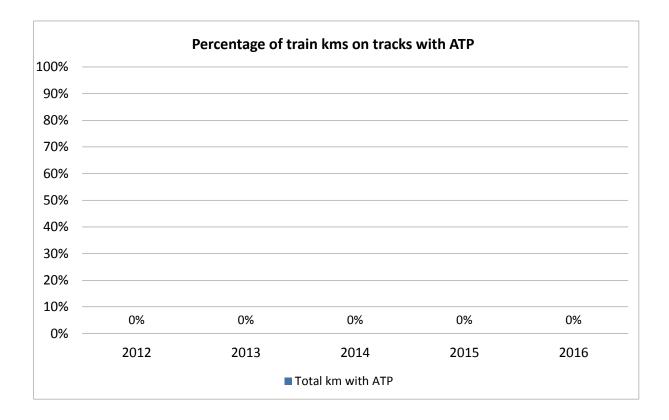




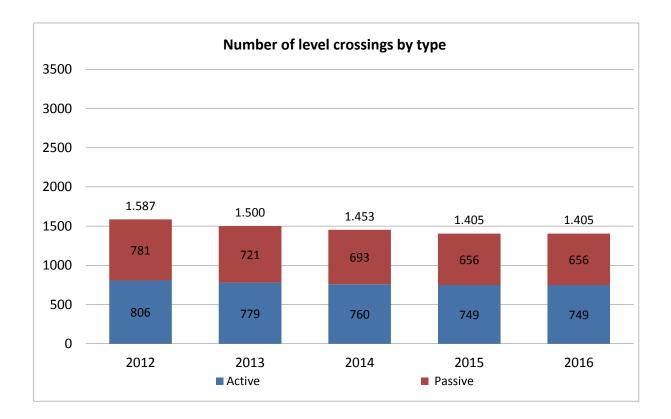














ANNEX B

CHANGES IN LEGISLATION

Table 1

AMENDMENTS TO RSD	Transposed (Y/N)	Legal reference	Date of entry into force
Directive 2008/57/EC	Y	Presidential Decree 104/2010	12/10/2010
Directive 2008/110/EC	Y	Presidential Decree 71/2010	3/8/2010
Commission Directive 2009/149/EC	Y	Presidential Decree 71/2010	3/8/2010
Commission Directive 2014/88/EU	Y	Joint Ministerial Decision AΣ4.1/60964/3095	19/11/2015



Table 2

LEGISLATION AND REGULATION	Legal reference	Date of entry into force	Description of change	Reasons for the change
Concerning the NSA				
Concerning NoBos, DeBos, ABs, third party entities for registration, examination, etc.				
Concerning RUs/IMs/ECMs	National Law 4408 (Official Gazette of the Hellenic Republic A' 135 / 27-7-2016)	27-7-2016	Harmonization of legislation with the Directive 2012/34 / EU of the European Parliament and of the Council Decision of 21 November the creation of a single European railway (OJ L343 / 32 of 14.12.2012) and other provisions	
Concerning RUs/IMs/ECMs	Joint Ministerial Decision AΣ19/38259/1879 (Official Gazette of the Hellenic Republic B' 3242/10-10- 2016)	10.10.2016	Set up medical issues certification of candidate train drivers and train drivers (Official Gazette of the Hellenic Republic A' 135 / 27-7- 2016).	To clarify medical matters of Law 3911/2011 (Government Gazette 12 A) "Certification of train drivers and other provisions» harmonization with the



LEGISLATION AND REGULATION	Legal reference	Date of entry into force	Description of change	Reasons for the change
				Directive 2007/59 / EC (OJ L 315/51 of
				3.12.2007)
Implementation of other				
EU requirements (if concerning railway safety)				