

## **ANNUAL REPORT | 2018**

**Greek National Safety Authority** 



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## **INTRODUCTION**

- 1.1 Purpose, scope and addressees of the report
- 1.2 Main conclusions on the reporting year





#### 1. INTRODUCTION

This is the Annual Report of the Greek NSA (Regulatory Authority for Railways / «RAS») for the year 2018, prepared by the Railway Safety and Interoperability Unit (RSIU). It has been produced in accordance with the Guide "Issuing the [yyyy] NSA annual report" (GUI\_MRA\_002 V 2.0) published by the European Union Agency for Railways («Agency») and addressed to the National Safety Authorities («NSA»). The report covers all the activities undertaken by RAS in the fields of the railway safety & interoperability from 1 January to 31 December 2018 and is available in English on the following webpage: http://ras-el.gr.

If you may need any further clarification, feel free to contact us at: info@ras-el.gr.

#### 1.1 Purpose, scope and addressees of the report

Article 19 of the Railway Safety Directive (EU) 2016/798 («RSD») requires NSAs to publish an annual report each year concerning their activities in the preceding year and send it to the Agency by 30<sup>th</sup> September.

This annual report shall contain information on:

- a) the development of railway safety, including an aggregation at Member State level of the Common Safety Indicators («CSIs»), in accordance with Article 5(1) and Annex I of the RSD;
- b) important changes in legislation and regulation concerning railway safety;
- c) the development of safety certification and safety authorisation;
- d) the results of, and experience relating to, the supervision of infrastructure managers and railway undertakings, including the number and outcome of inspections and audits;
- e) the derogations decided in accordance with Article 15 of RSD; and
- f) the experience of the railway undertakings and infrastructure managers on the application of the relevant Common Safety Methods («CSMs»).

This report is intended to provide evidence of Greece's ongoing efforts to a wider audience and a harmonised approach on the following topics:

- Improvement of safety performance;
- Progress on the development of interoperability.

Consequently, the purpose of this report is to inform the public and the Agency on RAS' activities and on the development of railway safety & interoperability, demonstrating how RAS promotes the EU rail regulatory framework, monitors the development of railway safety



and the interoperability of the railway system in Greece, communicates its main safety messages and objectives to the stakeholders, highlights problems and good practices.

The structure and the content of this report are based on the Agency's Guide mentioned in the Introduction.

As provided in article 9 (6) of the RSD, before 31 May of each year, all Infrastructure Managers («IM») and Railway Undertakings («RU») shall submit to the NSA an annual safety report with specific information, concerning the preceding calendar year. These safety reports are an important source of information for the present report

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

This report is available to:

- The Agency;
- Other NSAs;
- The National Ministry of Infrastructure & Transport;
- The National Railway Accident Investigation Body («NIB») (not active for the time being);
- The railway sector acting in Greece, as follows:
  - Active RUs (TRAINOSE, STASY, RCLG and PEARL);
  - IM (OSE);
  - Entity in Charge of Maintenance («ECM» (EESSTY);
  - o Assessment Bodies (Notified Bodies («NoBos»), Designated Bodies («DeBos»), Risk Assessment Bodies («AsBos»);
- Any other interested party (i.e. passenger associations, e.t.c.)

The availability of this report is ensured through RAS website at <a href="http://ras-el.gr">http://ras-el.gr</a>. An official transmission to the Minister of Infrastructure & Transport, to the Undersecretary and to Secretary General is also carried out.

#### 1.2 Main conclusions of the reporting year

At the end of 2018 the Internal Rules of Procedure of RAS was adopted by a joint ministerial decision. RAS obtained its first organisational structure since its establishment in 2011. This structure, among others, provides for the adoption, the operation and the staffing of a Railway Safety and Interoperability Unit, consisted of two Departments: the Railway Safety Department and the Interoperability Department. More information about the organisational context of RAS is available at the section 3.4 of this report.



The new 5-member Management Board of RAS, appointed in July 2017, continued the performance of its tasks during the year 2018.

RAS continued its cooperation with the Ministry of Infrastructure & Transport, with particular emphasis on the preparation for transposing the EU 4<sup>th</sup> Railway Package.

In 2018 RAS continued performing its monitoring role, undertaking a range of supervision activities in accordance with the relevant annual Supervision Plan, despite the lack of adequate resources.

By the national law 4530/2018, RAS was entrusted with the new tasks of:

- Recognising the training centres for the train drivers and candidate train drivers;
- Recognising the examiners of the train drivers and candidate train drivers;
- Certifying the competence of the trainers of the train drivers and candidate train drivers.

In August 2018, RAS granted the first Train Driver Training Center Recognition to the Training Center of IM OSE. In the same month, the first Train Driver Trainers Register was published on RAS website.

In November 2018, a dissemination workshop on the 4th Railway Package was organised in Athens, focused on Single Safety Certificates and Vehicle Authorisation.

In relation with important CSIs, the number of the significant accidents was 24 in 2018 while the average of the last five years was 20,6. Furthermore for 2018, there were 17 fatalities while the average of the last five years was 14,2.

Analysing the CSI's trends, the main reason for this upward trend is the massive migration crisis that Greece faces as the first host country. Many migrants, while trying to cross the country and reach the frontiers to Europe, are moving on the railway tracks, or sheltering in railway installations, resulting in many accidents. From the above mentioned 17 fatalities, 9 of them are related to immigrants who have been hit by rolling stock in motion, while walking on the line or sleeping on it. In only one accident held on 27/11/2018, there were 3 migrant fatalities.

It is understandable that these accidents are not easy to deal with for the Greek rail system because they are exclusively due to immigrant risk ignorance and unpredictable behaviour. If we subtract the number of accidents and deaths related to immigrants in the numbers for 2018, there will be only 17 accidents and 8 deaths (4 in LC, 2 in train collision and 2 hit by RS



in motion), which shows a clear trend of improving safety in Greece. So, the real picture for safety in Greek railways is much better than the CSI's are indicating.

Other causes of railway accidents in the Greek network are:

- An epidemic of copper theft incidents combined with the financial problems of Greece leading to the destruction of signaling equipment along all main railway corridors. Large parts of the corridors and stations work without interlocking and block systems.
- Therefore, the train protection system (ETCS-L1-installed in the previous decade) cannot function.
- Ongoing construction projects require continuous modifications to station layouts, disabling of signaling installations e.t.c., aggravating the previous problems

The good news for 2018 is that many railway network upgrade projects in Greece are expected to be completed soon. In particular, the section "Tithorea – Lianokladi" of the new Double High-Speed Railway Line Athens -Thessaloniki was delivered at the beginning of 2018. The delivery of the whole new Double High-Speed Railway Line Athens -Thessaloniki was planned to be delivered in January 2019 and the estimated trip duration is expected to be dropped from 6 hours to 4 (something that has already been achieved now). Furthermore, when all the modern railway safety systems (centralized traffic control, ETCS, GSMR etc) will be completed, a reduction of accidents is expected.



## **ENGLISH SUMMARY**





## 2. ENGLISH SUMMARY

Not applicable, because the whole report is in English language.



# **NSA SAFETY STRATEGY,** PROGRAMS, INITIATIVES AND **ORGANIZATIONAL CONTEXT**

- 3.1 Strategy and planning activities
- 3.2 Safety Recommendations
- 3.3 Safety measures implemented unrelated to the recommendations
- 3.4 Safety Organisational context





#### 3. NSA PROGRAMS, INITIATIVES, SAFETY STRATEGY, ORGANIZATIONAL CHANGES

#### 3.1 **Strategy and planning activities**

One of the most important objectives of the national Ministry of Infrastructure and Transport is the continuous improvement of the safety level in Greek railways. Towards to this objective, the main concerns are the completion of the new infrastructure projects including modern systems (i.e. ERTMS), the development of a safety culture, the reduction of the serious and significant accidents, the safety investments in level crossings, the adoption of the technical pillar of the EU 4<sup>th</sup> Railway Package, the reform of the IM's Traffic Rulebook e.t.c.

In this context, RAS planned and performed the following activities / initiatives for 2018:

- Strategy development and dissemination of the safety culture and information on the changes introduced by the EU 4th Railway Package in the fields of safety certification and vehicle authorization. This was achieved by organizing in cooperation with ERA and under the auspices of Greek Ministry of Infrastructure & Transport, a workshop "4th Railway package-dissemination and information" in Athens on 6&7/11/2018 in order to inform all stakeholders and their executives mainly on the safety culture, the requirements, the new roles and the changes brought by the implementation of the technical & market pillar of the 4th Railway Package.
- Greek Ministry of Infrastructure & Transport approved the proposal of RAS to start reforming the railway safety regulatory framework. The first outcome was the Traffic Rule Book, issued by the national Infrastructure Manager at the end of 2018 and planned to be published in the Official Gazette of Hellenic Republic in the first semester of 2019.
- As the train over-speed remains a main cause of the rail accidents, RAS continued the monthly statistical processing of data on compliance of the train drivers from the RU TRAINOSE with the provided train speed limits.
- RAS developed an integrated "System for the recording and monitoring of railway incidents on the national rail network". The system at first enables the extraction of detailed statistics on incidents in the national rail network. Secondly, RAS intends to draw conclusions on the overall safety of the national railway system, which it will be recorded in annual reports. Finally, actions will be taken for RAS by drafting



- proposals for corrective / improvement actions to stakeholders and companies in the railway system. The first annual report was issued on 11/2018 and deals with the period 2015-2017 accidents and incidents.
- RAS, in collaboration with IM OSE started executing an informational program on the prevention of accidents on the rail network entitled: "Safe student co-existence with the railway network". The main audience of this program are students of primary and high schools located in areas near the rail network.

#### 3.2 Safety recommendations

No safety recommendations were issued by the NIB, as there is no active NIB in Greece at present.

#### Safety measures implemented unrelated to the recommendations 3.3

Measures adopted by RAS and monitoring of their implementation status during 2008:

- On 19/7/2018 RAS officially has requested OSE (IM), that measures should be taken regarding the fencing of the line and the pruning of trees at the St. Placenta- St. Airport line. OSE responded on 13/8/2018 with a letter grating that he had already repaired the fence and cut down the trees on the above-mentioned line section.
- On 10/2017 RAS officially has suggested OSE (IM), to place warning plates for the risk of electric shock from overhead power lines at railway stations. After onsite inspection RAS found that the plates were placed at all stations except Athens and Piraeus Stations. So, on 25/9/2018 RAS addressed to OSE a new reminder letter for these two stations.
- On 13/10/2017 RAS officially has requested OSE (IM), to take protection measures (Station fence and warning plates) in Station Mezourlo, due to the fatal accident of a 15 years old child by electric shock. After onsite inspection RAS found that the measures were taken by OSE. On October 2018 RAS received a letter by a resident who reported that children continued to violate the fence and enter the station. On 11/10/2018 RAS reiterates its recommendation to OSE to take additional protection measures for underage children.
- In September 2018, due to the repeated non compliance of the train drivers of RU TRAINOSE to keep the train speed limits, RAS issued a recommendation, with a warning of imposing administrative sanctions, addressed to RU TRAINOSE regarding the implementation of its Safety Management System (SMS), particularly on strict adherence to the specified speed limits for trains.



On 26/10/2018 RAS officially has requested TRAINOSE (RU) to take measures (strict guidelines) for train drivers to maintain speed limits, due to a near miss incident at St. Adedro (13/10/2018). TRAINOSE answered (8/11/2018) has already undertaken detailed control of the event and measures for its train drivers to meet their speed limits.

#### 3.4 **Safety Organizational context**

The railway organisational context in Greece appears below:

- The Ministry of Infrastructure & Transport is the legislative authority, responsible for the railway sector in Greece.
- RAS is an Independent Administrative Authority performing, among others, the duties of Greek NSA.
- Greek NIB is an Independent Authority, not active at the moment.
- OSE is the sole national railway IM, holder of a valid safety authorization, operating in Greece under the supervision of the Minister of Infrastructure and Transport. OSE is also the owner of the only one recognized Train Driver Training Center.
  - ERGOSE S.A. is a subsidiary company of OSE, responsible for the execution of its Investment Program, performing the management of the new railway infrastructure projects.
- Five (5) licensed RUs exists, four (4) of which holds a Part A and a Part B safety certificate, as follows:
  - o URBAN RAIL TRANSPORT S.A. (STASY S.A.), public RU providing Passenger Services, Safety Certified (SC), Operating;
  - TRAINOSE S.A. Member of the Group Ferrovie Dello Stato Italiane S.p.A., private RU providing passenger and freight services, SC, Operating;
  - o Rail Cargo Logistic GoldAir, private RU providing freight services, SC, Operating;
  - o PEARL SA, private RU providing freight Services, SC, Non Operating;
  - MAKIOS S.A. private RU providing Freight Services, Non SC, Non Operating;
- EESSTY S.A. is the sole private Rolling Stock Company Entity in Charge of Maintenance (ECM), holder of a valid ECM certificate, recently bought by the RU TRAINOSE.
- GAIAOSE S.A. is a public enterprise, keeper of the existing national rolling stock, under the supervision of the Ministry of Finance.



Greek NSA was initially established in 2007 under the Presidential Decree (P.D.) 160/2007. Thus, the Department of Railway Safety of the Ministry of Transport was initially entrusted with the duties of Greek NSA, including also the duty of Certification Body responsible for the certification of Entities in Charge of Maintenance (ECM), on the basis of the criteria in Annex II of Regulation (EU) 445/2011 and the duty of issuing train driving licenses in accordance with Directive 2007/59/EC.

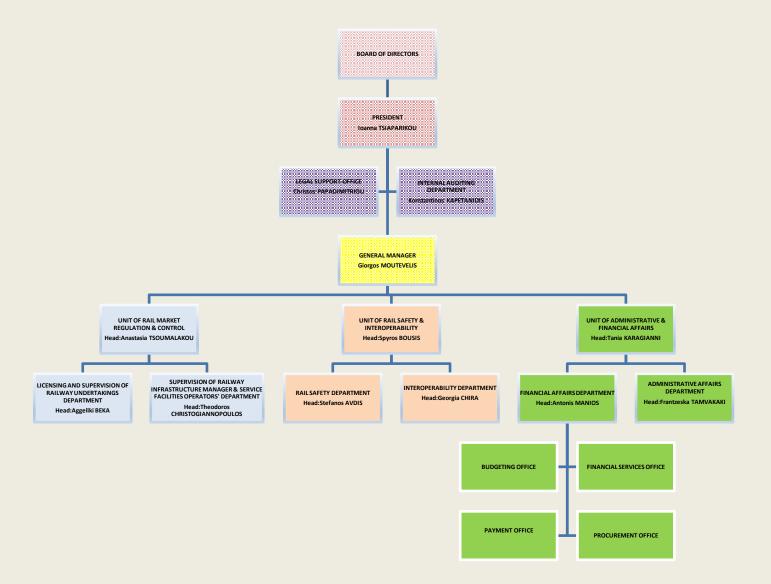
In October 2013, all these above-mentioned duties were transferred to RAS by the national Law 4199/2013. RAS had already been established since November 2011 by the Law 3891/2010, initially undertaking the tasks of Regulatory Body in rail transport, the Licensing Authority for RUs and the National Enforcement Body («NEB») of the Regulation (EE) 1371/2007 on rail passengers' rights and obligations. RAS is an Independent Administrative Authority, having close and operational cooperation with the Ministry of Infrastructure & Transport.

The Internal Rules of procedure of RAS was published on the Official Gazette of the Hellenic Republic on 21/12/2018. It provides for thirty-two (32) positions for the staff of RAS. Eleven (11) positions are provided for the Railway Safety & Interoperability Unit of RAS. For the time being, the total number of RAS staff, having already been covered, is seventeen (17), four (4) engineers of which have been exclusively working for the Railway Safety & Interoperability Unit. Also, there are six (6) persons from the Finance & Administration Unit and the Legal Councilor who support, among others, the NSA activities and two (2) staff members with technical background from other Units who participate in supervision activities.

Please see below the organisational chart of RAS and a table with information on the personnel of the Rail Safety & Interoperability Unit of RAS.



Figure 1: Organisational Chart





	Staff provided		Staff covered		Vacancy	
	Dipl. Engineers	Graduate Engineers	Dipl. Engineers	Graduate Engineers	Dipl. Engineers	Graduate Engineers
RAIL SAFETY DEPARTMENT	5	1	3	0	2	1
INTEROPERABILITY DEPARTMENT	4	1	2	1	2	0
TOTAL	9	2	5	1	4	1
TOTAL	11		6*		5	

Table 1: Personnel of the Rail Safety & Interoperability Unit of RAS



## **SAFETY PERFORMANCE**





#### 4. **SAFETY PERFOMANCE**

#### 4.1 Detailed analysis of the latest recorded trends

Considering the CSIs reported from 2014 to 2018 the following trend analysis was conducted:

Number of significant accidents (at least 1 fatality or 1 seriously injured or damages more 150.000 € or more than 6 hours delay):

2014	2015	2016	2017	2018	2014-18 average
23	25	9	22	24	20.6

The total number of accidents in 2018 compared to the five-year average is higher. The majority (13 accidents) are due to 'rolling stock in motion" and (7 accidents) "level crossings' while the corresponding figures for 2017 were 18 and 6. The causes of railway accidents in Greece are described in par. 1.2. The main problem in Greek railways is migrants, who do not know the language and cannot understand or read the warning signs, do not follow safety rules. While trying to cross the country and reach the frontiers to Europe, are moving on the railway tracks, or sheltering in railway installations, resulting in many accidents.

### **Number of fatalities:**

2014	2015	2016	2017	2018	2014-18 average
9	14	7	18	17	13

The total number of fatalities in 2018 compared to the five-year average is 30% higher. The majority (12 fatalities) are from "rolling stock in motion" and 4 fatalities are from "level crossings".

This increase in 2018 is due the migrant's problem analyzed above. From the total fatalities (17) for 2018 more than the half (9) fatalities are migrants, who have been hit by rolling stock in motion, while walking on the line or sleeping on it. In only one accident (27/11/2018) we had 3 migrant fatalities. It is understandable that these accidents are not easy to deal with



for the Greek rail system, because they are exclusively due to immigrant risk ignorance and unpredictable behavior.

### **Number of injuries:**

2014	2015	2016	2017	2018	2014-18 average
11	11	2	10	12	9.2

The total number of injuries in 2018 compared to the five-year average is 30% higher but except for 2016, is almost stable from 2014 to 2018. Five injuries are caused by "rolling stock in motion" and six are from "level crossings". Please note that three injuries are from a level crossing accident on 9/2018, when a car was hit by train in LC resulting one fatality and three seriously injured.

### **Number of suicides:**

2014	2015	2016	2017	2018	2014-18 average
4	7	7	7	5	6

Since 2014 the number of suicides has remained relatively stable. Especially in 2018 the number of suicides is a little smaller than five-year average, bearing in mind the financial crisis that has plagued Greece for the last nine years.

### **Number of precursors to accidents:**

2014	2015	2016	2017	2018	2014-18 average
140	134	127	126	101	137.4



The number of precursors to accidents for the five-year period is firmly downward, which is very optimistic about the future of railway safety in Greece.

### **Cost of significant accidents:**

2014	2015	2016	2017	2018	2014-18 average
1,54	37,53	7.79	22,76	18.71	17.66

The value of "Economic impact of significant accidents" for the year 2018 compared to the five-year average is almost equal and compared to 2017 has been 18% reduced. However, the highest price within those five years is the number in 2015.

The value of "Economic impact of significant accidents" for the year 2018 is analysed to:

- 17.09 (million EUR) from economic impact of fatalities
- 1.58 from economic impact of injuries
- And only 0.40 from cost of material damages to rolling stock or infrastructure

It is obvious that almost all the cost comes from economic impact of fatalities, which in its turn comes from the 9 immigrants' fatalities (9 out of 17 fatalities). Consequently, as analysed in par 1.2 the real picture for safety in Greek railways is much better than the CSI's are indicating.

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

	2014	2015	2016	2017	2018
Active	760	749	749	692	695
Passive	693	656	656	571	568
Total	1453	1405	1405	1263	1263

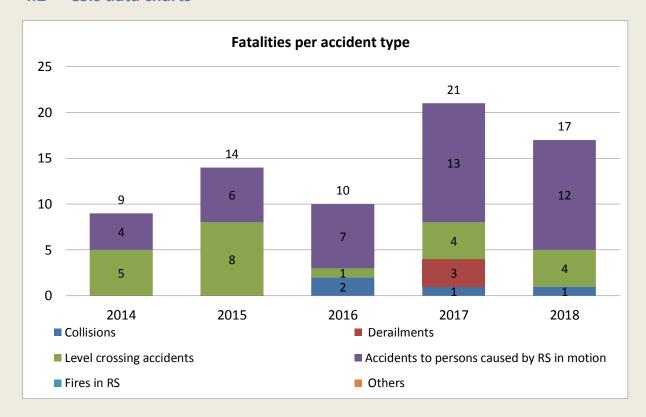


The significant reduction of the number of Passive level crossings in 2017, is due to the OSE's different way of measuring them so far. Until 2016 OSE also measured the level crossings in the network that were suspended. Since 2017 counts only the level crossings in the active network.

Anyway, there is an ongoing effort to reduce the passive level crossings and that would be achieved partly by the delivery of the new high-speed line, which has no level crossings, only elevated crossings.

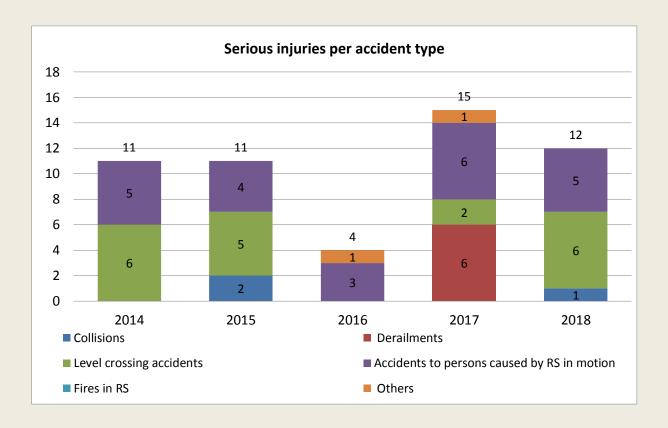


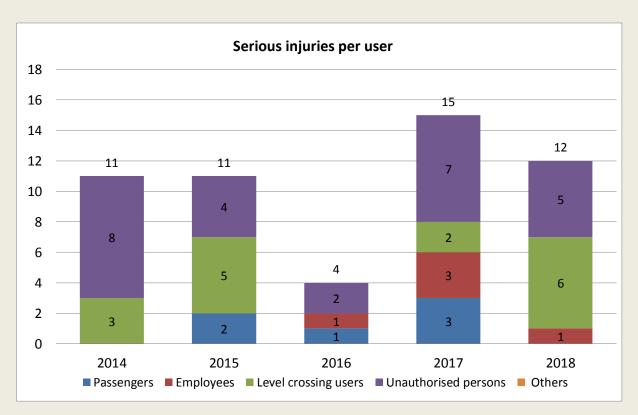
#### 4.2 **CSIs data charts**



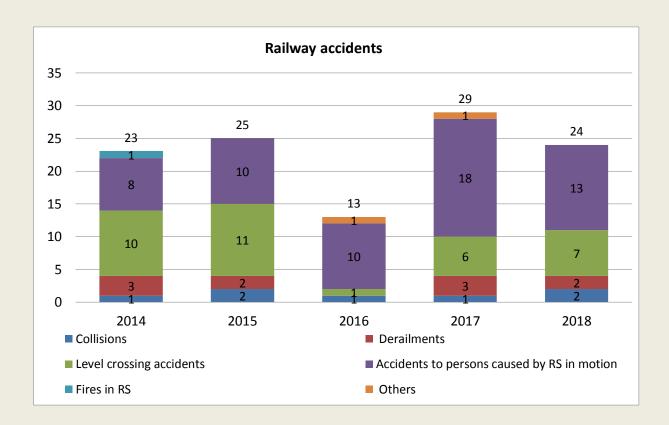


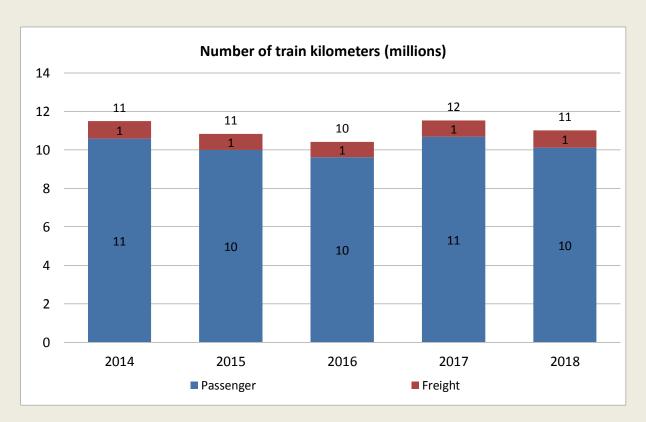




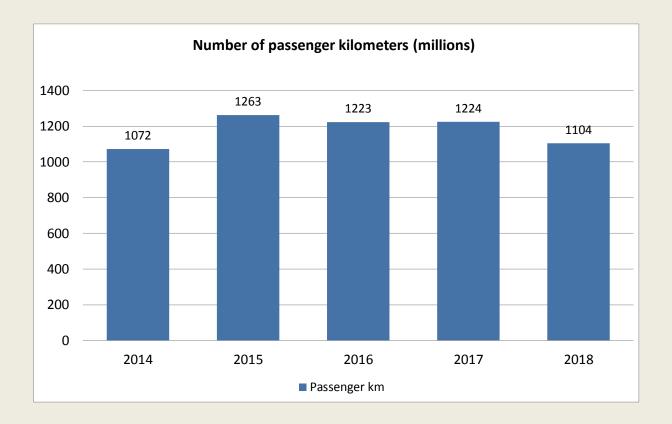


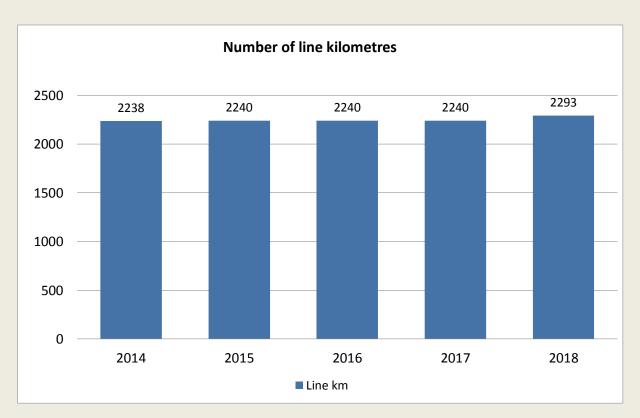




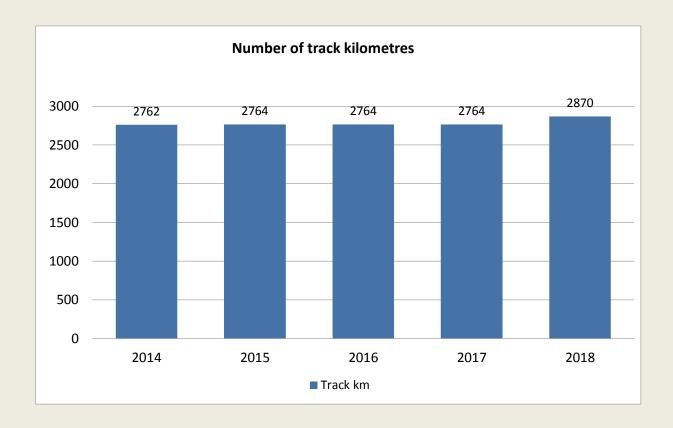


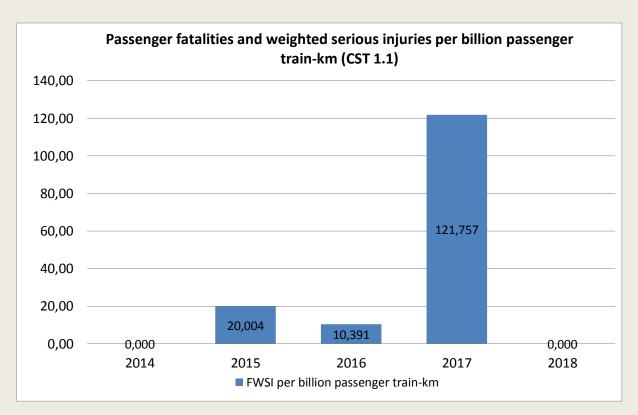




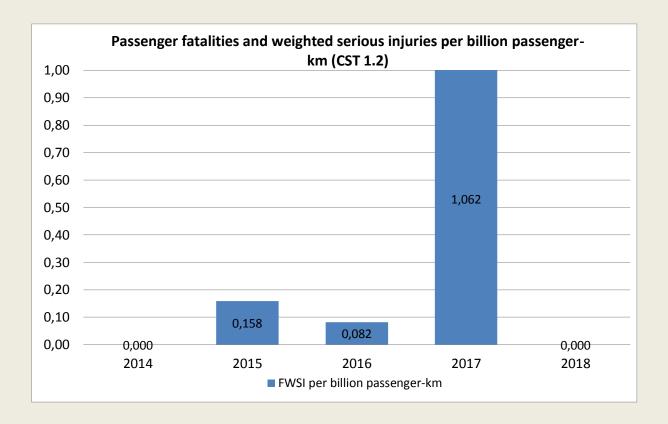


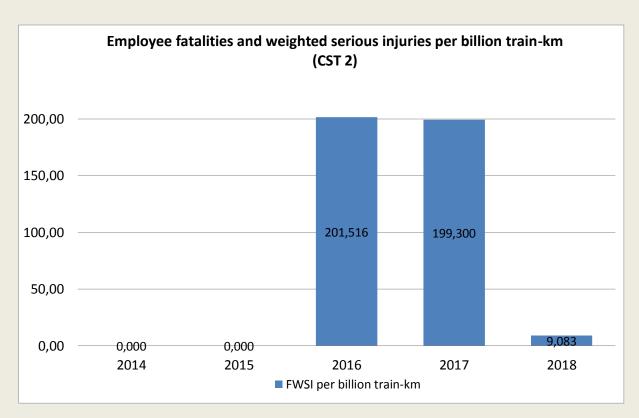




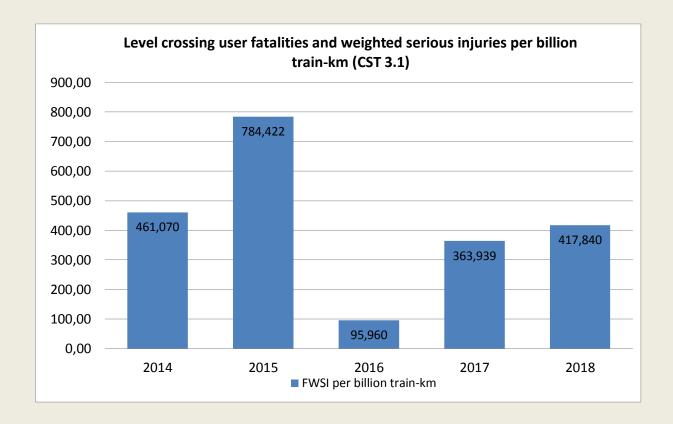


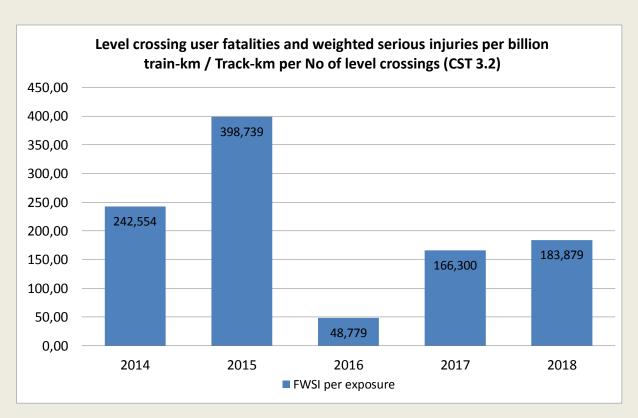




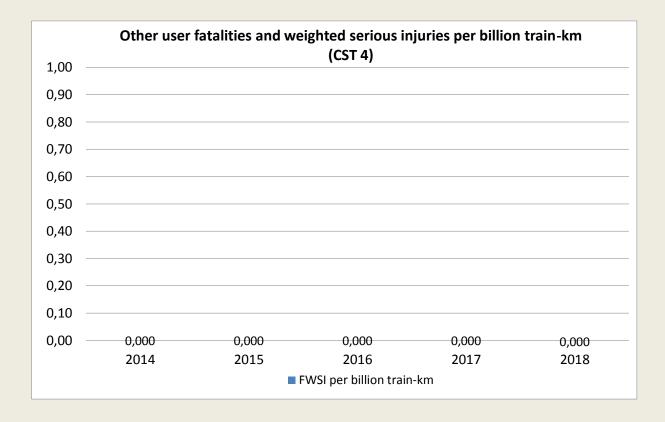


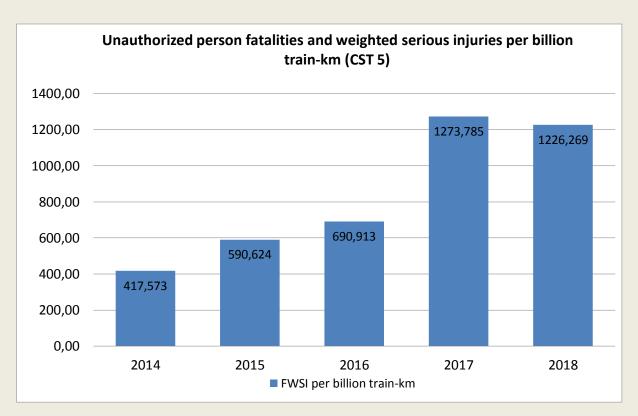




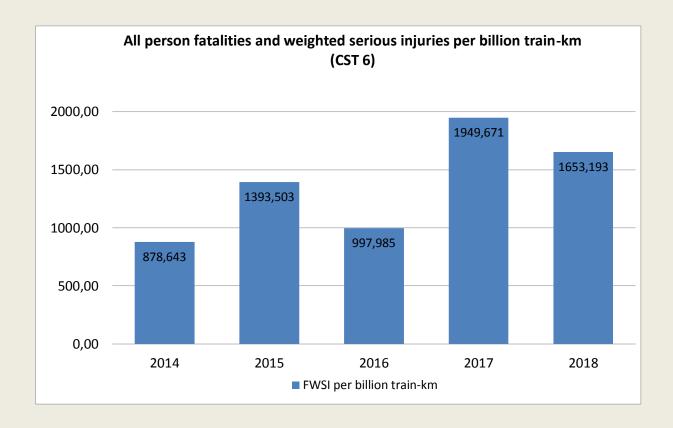


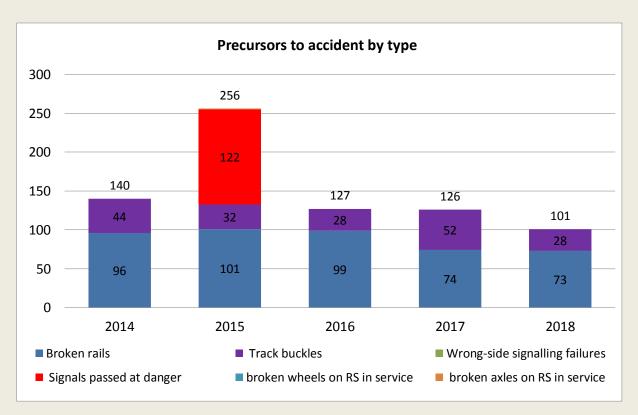




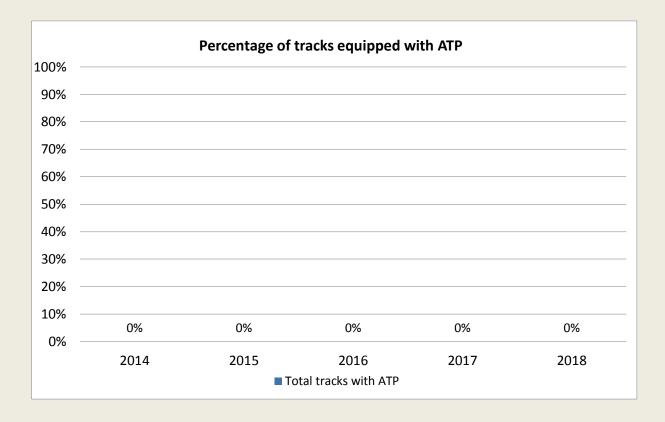


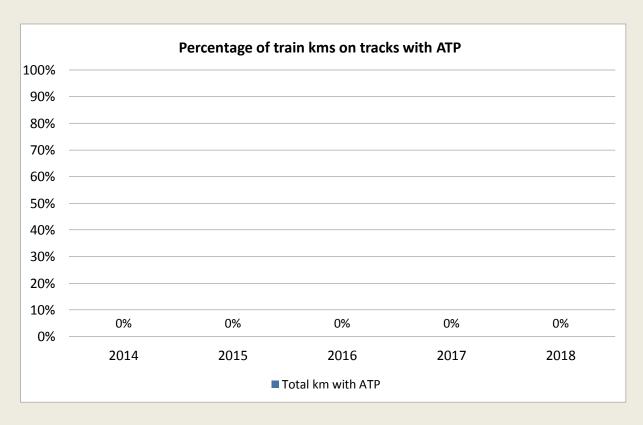




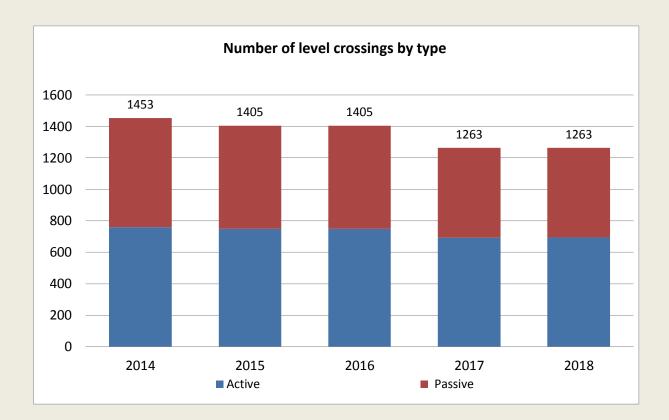














# **NSA SAFETY STRATEGY,** PROGRAMS, INITIATIVES AND **ORGANIZATIONAL CONTEXT**

## 5.1 Changes in legislation and regulations





### 5. EU LEGISLATION AND REGULATION

### **5.1** Changes in legislation and regulations

The following legal and administrative acts relating to the railway safety and the interoperability were issued during 2018:

- 1. Law 4530/2018 (Official Gazette of Hellenic Republic A' 59), amendments to Law 3911/2011 (Official Gazette of Hellenic Republic A' 12) on the Train Driving issues.
- 2. Decision of the Minister of Infrastructure and Transport (Official Gazette of Hellenic Republic B' 2578) - Conversion of existing national train driver's licenses and certificates.
- 3. Decision of the Minister of Infrastructure and Transport (Official Gazette of Hellenic Republic B' 3379) - Amendment of the Decision of Ministry of Transport and Communications YA AΣ16.4/οικ.24863/2773 regarding the procedure of the authorization of placing into service structural subsystems and vehicles.
- 4. Joint Ministerial Decision (Official Gazette of Hellenic Republic B' 3089 Printing train driver's licenses).
- 5. Joint Ministerial Decision (Official Gazette of Hellenic Republic B' 2838 Recognition of Training Centers of train drivers and candidate train drivers).
- 6. Joint Ministerial Decision (Official Gazette of Hellenic Republic B' 1517) Determination of fees for authorization of placing into service structural subsystems and vehicles.
- 7. Joint Ministerial Decision (Official Gazette of Hellenic Republic B' 5781) Approval of the Rules of Procedure of RAS).
- 8. RAS Decision (Official Gazette of Hellenic Republic B' 1691) Certification of the competence of the trainers of train drivers and candidate train drivers.
- 9. RAS Decision (Official Gazette of Hellenic Republic B' 4687) Amendment on the certification of the competence of the trainers of train drivers and candidate train drivers.

## 5.2 Derogation in accordance with Art. 15 RSD

In Greece there has not been any derogation decided according to Art. 15, Directive 2016/798.



# SAFETY CERTIFICATIONS, SAFETY **AUTHORISATIONS AND OTHER CERTIFICATES ISSUED BY THE NSA**

- 6.1 Safety Single Certificates Safety and **Authorisations**
- 6.2 Vehicle Authorisations
- 6.3 Entities in Charge of Maintenance (ECM)
- 6.4 Train Drivers
- 6.5 Other type of Authorization / Certifications
- other **National** 6.6 Contacts with **Authorities**
- 6.7 Exchange of Information between NSA and **Railway Operators**



### SAFETY CERTIFICATIONS, SAFETY AUTHORISATIONS AND 6. OTHER CERTIFICATES ISSUED BY THE NSA

#### **Safety Single Certificates and Safety Authorisations** 6.1

The valid Part A and Part safety certificates and safety authorisations having been issued in Greece until the end of the year 2018 are shown in the table below.

Holder Name	History	Date Issued	Valid Until	Certificate Type	Type of Services
IM - OSE SA	New	05-06- 2015	04-06- 2020	Safety Authorisation	
RU - PIRAEUS EUROPE ASIA RAIL LOGISTICS (PEARL) SA	Amended	21-03- 2018	09-11- 2022	Safety Certificate – Part B	Freight
RU - PIRAEUS EUROPE ASIA RAIL LOGISTICS (PEARL) SA	Amended	21-03- 2018	18-12- 2021	Safety Certificate – Part A	Freight
RU - RAIL CARGO LOGISTICS GOLDAIR SA	New	21-06- 2017	20-06- 2022	Safety Certificate – Part B	Freight
RU - RAIL CARGO LOGISTICS GOLDAIR SA	New	30-09- 2016	29-09- 2021	Safety Certificate – Part A	Freight
RU – TRAINOSE SA	Renewed	28-12- 2017	31-12- 2022	Safety Certificate – Part B	Passenger / Freight



RU – TRAINOSE SA	Renewed	28-12- 2017	31-12- 2022	Safety Certificate – Part A	Passenger / Freight
RU – URBAN RAIL TRANSPORT SA	New	15-07- 2016	14-07- 2021	Safety Certificate – Part B	Passenger
RU – URBAN RAIL TRANSPORT SA	New	15-07- 2016	14-07- 2021	Safety Certificate – Part A	Passenger

For the time being, there has not been any case of a safety certificate revocation and safety authorization revocation in Greece.

There were not any changes to the strategy and the procedures for issuing safety certificates and safety authorisations.

There were not any discussions or outcomes of supervision results with other NSAs in the context of safety certification / authorization during 2018.

### **6.2** Vehicle Authorisations

At present, no vehicle authorization has been issued in Greece.

There were not any changes to the strategy and the procedures for issuing vehicle authorisations during 2018.

### **6.3** Entities in Charge of Maintenance

RAS acts as the certification body for ECM in Greece. At present the only one active ECM is the company EESSTY SA which has been recently bought by the RU TRAINOSE SA During 2018 RAS issued the renewed ECM Certificate under the EU Identification Number EL 3100180001 for the EESSTY SA, valid until 10-10-2023.

There have not been any non-conformities detected by RAS during its surveillance activities.

### **6.4** Train Drivers

During the reporting year 2018 RAS did not issued/amended/suspended any train driver licenses. The process of the converting of national train driver licenses into licenses according to the community model contained in the Annex I of the Commission Regulation (EU) 36/2010 is under process.



RAS is the competent authority for the recognition of the training centres for the train drivers and candidate train drivers in Greece, for the recognition of the relevant examiners and for the certification of the competence for the relevant trainers. In this context, during 2018 RAS issued a statement of recognition of the unique – till now - training centre for the train drivers and candidate train drivers belonging to the IM OSE which performs the training tasks in all areas of competence provided by the Directive 2007/59/EC. The statement of recognition is valid until 22-08-2023.

Additionally, RAS recognized twenty-eight (28) medical doctors for conducting the required examination for the confirmation of the physical and the occupational psychological fitness of the train drivers and candidate train drivers.

Moreover, the competence of nine-six (96) trainers for train drivers and candidate train drivers was certified by RAS in 2018.

No statement of recognition for examiners was issued by RAS during 2018.

There were not any changes to the strategy and the procedure related to the process of train driver licensing during 2018.

### 6.5 Other type of authorisation /certifications

RAS is the competent authority in Greece for authorizing the placing in service of fixed installations, in accordance with article 18 of the Directive (EU) 2016/797. In this context, RAS did not issue such an authorization. An application for authorization of an infrastructure subsystem was received in 2018, the assessment of which is ongoing.

### 6.6 Contacts with other National safety Authorities

No requests from / to other NSAs asking for information on authorisations/certification have been send during 2018 because there is no RU doing an international route between Greece and a neighbouring country.

There were no outcomes of discussions of supervision results with other NSAs.

### 6.7 Exchange of information between the NSA and Railway Operators

During 2018 RAS continued to exchange views and information with the railway operators in Greek railway market. This exchange of information is usually carried out through regular and extraordinary supervision, or other, meetings as well as through correspondence. RUs and IM can express opinions on issuing procedures/practices, to file complaints to RAS or to raise any topic for discussion.



At least one supervision meeting with each railway organization individually and at least one joint meeting with all the actors together are carried out in an annual basis.

The topics discussed on the above-mentioned meetings for 2018 are listed below:

- The reform of the IM's Traffic Rulebook, taking into account the requirements of the Regulation (EU) 2015/995 (TSI OPE).
- Emergency Plans / Implementation Progress / Compliance with Article 4.2.3.7. of the Annex to Regulation (EU) 2015/995.
- The Rule Book of the RUs and the IM.
- Converting the existing national train driver licenses to licenses in accordance with the Community Model of the Regulation (EU) 36/2010.
- Preparation of the implementation of the technical pillar of the EU 4<sup>th</sup> Railway Package. New requirements – New tasks.
- One Stop Shop OSS / Training
- Full-scale preparedness tests in case of emergency on critical rail infrastructure (new tunnels).
- Training programs of the recognised IM's Training Centre. Duration of the training of the train drivers and the candidate drivers. Programs of other staff with critical safety tasks.



# 7. SUPERVISION

- 7.1 Strategy, plan, procedures and decision making
- 7.2 Supervision results
- 7.3 Coordination and cooperation





### 7. SUPERVISION

### 7.1 Strategy, plan, procedures and decision making

In the end of 2018, RAS started preparing a documented Supervision Strategy taking into account all the relevant new legal provisions, the new guidance and the proposed template for a supervision strategy, contained in Annex I of Agency's Supervision Guide. However, despite the lack of a documented strategy, RAS performed its supervision activities in 2018, considering the relevant risk areas after the analysis of information from a variety of sources, such as: reports of previous supervision activities, reports from conformity assessment of applications for safety certification or safety authorization, meetings with railway organizations, findings of investigating railway accidents and incidents, complaints, complaints from citizens, annual reports from railway organizations, safety indicators, monthly statistical processing of data on compliance of RU TRAINOSE with the provided train speed limits etc.

There were not any changes in the procedure related to the "Regulatory framework for the Supervision of RAS concerning the safety performance after issuing a Safety Certificate or a Safety Authorization".

The supervision plan for the year 2018 included nineteen (19) supervision activities to IM and RUs, eleven (11) of which were performed. The lack of resources was the main reason for the failure in performance of all scheduled activities.

One (1) sudden supervision activity to the IM's Training Centre for train drivers and candidate train drivers was also carried out.

One (1) surveillance activity to the ECM EESSTY was also performed.

There were not any complaints submitted by stakeholders on decisions taken during supervision activities.

### 7.2 Supervision results

During 2018, RAS performed the following supervision and surveillance activities per railway organisation:

- IM OSE (4 supervision activities)
  - Asset Inspection (Infrastructure, tunnel)
  - Process Inspection (Track and marshalling yards)
  - Process Inspection (Traffic control centre)
  - Process Inspection (Training centre for train drivers)



- RU TRAINOSE (5 supervision activities)
  - Two SMS Audits
  - Process Inspection (Cab ride)
  - · Process Inspection (Staff performing the task of accompanying a train on the network)
  - Process Inspection (Cab ride, marshalling yard and cross border station)
- RU PEARL (1 supervision activity)
  - SMS Audit
- o IM and all RUs (1 supervision activity)
  - Joint supervision meeting
- ECM EESSTY
  - Surveillance Audit

The outcomes of the above-mentioned activities were sixteen (16) non conformities and also four (4) areas for improvement indicated by the auditors. Three (3) non conformities have already been closed while the implementation of the required corrective actions for the rest of non conformities is ongoing and under the monitoring of RAS.

#### 7.3 **Coordination and cooperation**

No discussion of supervision results with other NSAs was done during 2018.



# 8. APPLICATION OF RELEVANT **CSMs BY Rus AND IMs**

- 8.1 Application of the CSM on Safety Management **System**
- 8.2 Application of the CSM for Risk Evaluation and Assessment
- 8.3 Application of the CSM for Monitoring
- 8.4 Participation an Implementation of EU **Projects**





### 8. APPLICATION OF RELEVANT CSMs BY RUs and IMs

### 8.1 Application of the CSM on Safety Management System

The application of the new CSM on Safety Management System [Commission Regulation (EU) 2018/762] has not been applied by the RUs and the IM in Greece yet. So far, all the Safety Management Systems have been assessed and supervised by RAS against the criteria set in the Commission Regulations EU 1158/2010 and 1169/2010.

The implementation of the above-mentioned Regulations by the national railway sector is considered satisfactory.

### 8.2 Application of the CSM for Risk Evaluation and Assessment

The application of the CSM for Risk Evaluation and Assessment has not been applicable in Greece yet. National legislation clearly requires the examination of its application by the applicants in cases of applications for placing into services of structural subsystems.

In 2008, RAS asked an interested RU to examine the application of the Commission Implementing Regulation (EU) 402/2013 in the context of the extent of its operation in new sections of the railway network, as referred to in Article 10(5) of Directive 2004/49/EC. There is no further information available concerning this request.

### 8.3 Application of the CSM for Monitoring

Most of the railway organisations in Greece have tried to implement the CSM for Monitoring [Commission Regulation (EU) 1078/2012] without, however, substantial results. It would be good for the organizations to distinguish monitoring from other similar activities such as internal auditing or management review.

The application of the CSM for Monitoring is planned to be a focused area for the next RAS supervision plan.

### 8.4 Participation and Implementation of EU projects

The EU 4<sup>th</sup> Railway Package and the preparation for the transposition of its requirements into the national legislation in 2019 was in the spotlight in 2018.

In this context, RAS under the auspices of the Hellenic Ministry of Infrastructure and Transport and the participation of the Agency (ERA) organized successfully a two-day workshop on "Dissemination of Information on the 4<sup>th</sup> Railway Package" in Athens on 6 and 7 November 2018.



The subject and the objective of the workshop was the dissemination of information on the 4th Railway Package (RP), mainly on the requirements, the new roles and the changes brought by the implementation of the technical & market pillar of the 4<sup>th</sup> Railway Package.

High Officials of the Bulgarian and Romanian Ministries of Transport, Bulgarian and Romanian National Safety Authorities for Railways as well as representatives of the organizations, undertakings and bodies of the Greek railway sector were invited to attend the workshop.

The comprehensive presentations and the discussion during the workshop attracted the interest of the participants who raised their awareness and were informed about the reforms brought by the 4<sup>th</sup> Railway Package.







## 9. SAFETY CULTURE

- 9.1 Safety Culture Evaluation and Monitoring
- 9.2 Safety Culture Initiatives / Projects
- 9.3 Safety Culture Initiatives, Projects and Communication



#### 9. **SAFETY CULTURE**

#### 9.1 Safety culture evaluation and monitoring

No system or process has been available in Greece for the evaluation and monitoring of the development of the safety culture of the whole railway sector.

Activities relating to safety culture have not been included in the planning and execution of the supervision plan until now. The evaluation of the safety culture during supervision activities was a topic discussed between RAS and the Agency during 2018. The result of this consultation was the organization in 2019 of a training program addressed to RAS auditors as well as to safety managers of the national railway sector, regarding the evaluation of the development of safety culture. The safety culture evaluation and monitoring intends to be an area for supervision during the next supervision plan.

#### 9.2 Safety culture initiatives/projects

During 2018 RAS undertook the below mentioned initiatives which contribute to the development of a positive safety culture:

- RAS top management participated in the first European Rail Safety Summit held in Dubrovnik, Croatia, from 10-12/04/2018. Leaders and safety managers of Greek railway sector were also encouraged to attend the Summit.
- Safety culture was one of the most important and interesting topics of the agenda of workshop on "Dissemination of Information on the 4th Railway Package" held in Athens on 6 and 7 November 2018.
- A workshop dedicated to the safety culture was agreed to be held in Athens in April 2019, under the collaboration of RAS and the Agency.

#### 9.3 Safety culture initiatives, projects and communication

RAS communication activities to the public/ Greek Society

RAS, in collaboration with IM OSE organised an informational program on the prevention of accidents on the rail network entitled: "Safe student co-existence with the railway network ". That was due to many fatal incidents of underage students at various points of the national railway network and with a view to their elimination. The permission from Ministry of Education was granted in November 2018 and in the school year 2018-2019 the program is expected to be presented to 10.000 students in area of Attika and Larissa.



RAS in collaboration with the Safety Institute «Panos Mylonas» and the RU TRAINOSE planned to participate to the International Level Crossing Awareness Day (ILCAD) in June 2019 in Athens. This year's campaign aims at professional taxi, trucks and buses drivers and RAS intends, in cooperation with the respective unions to distribute informative material.



# **10.THEME CHAPTER**

Not Applicable



# **ANNEX: PROGRESS WITH INTEROPERABILITY**





### ANNEX: Progress with Interoperability

Please provide the following information as it is at the 31st December of the reporting year.

Please refer to the Appendix for definitions.

### 1. Lines excluded from the scope of IOP/SAF Directive (end of year)

	Length of lines excluded from the scope of application of the IOP	No Information
<b>1</b> a	Directive [km]	Available (NIA)
	Length of lines excluded from the scope of application of the SAF	
1b	Directive [km]	NIA

Please provide the list of lines excluded:

### Length of new lines authorized by NSA (during the reporting

### 2. year)

2a	Total length of lines [km]	0
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### 3. PRM adapted stations (end of year)

3a	PRM TSI compliant railway stations	NIA
3b	PRM TSI compliant railway stations - partial TSI compliance	NIA
3c	Accessible railway stations	NIA
3d	Other stations	NIA

### 4. Train driver licenses (end of year)

	Total number of valid European licenses issued in accordance with	
4a	the TDD	0
4b	Number of newly issued European licenses (first issuance)	0

### 5. Number of vehicles authorized under the interoperability Directive (EU) 2008/57 (during the reporting year)

5a	First authorization - total	
5aa	Wagon	0
5ab	Locomotives	0
5ac	Hauled passenger vehicles	0
5ad	Fixed or pre-defined formation	0
5ae	Special vehicles	0
5b	Additional authorization - total	0
5ba	Wagon	0
5bb	Locomotives	0



5bc	Hauled passenger vehicles	0
5bd	Fixed or pre-defined formation	0
5be	Special vehicles	0
5c	Type authorization - total	0
5ca	Wagon	0
5cb	Locomotives	0
5cc	Hauled passenger vehicles	0
5cd	Fixed or pre-defined formation	0
5ce	Special vehicles	0
5d	Authorizations granted after upgrade or renewal - total	0
5da	Wagon	0
5db	Locomotives	0
5dc	Hauled passenger vehicles	0
5de	Fixed or pre-defined formation	0
5df	Special vehicles	0

### 6. ERTMS equipped vehicles (end of year)

Ī	6a	Tractive vehicles including trainsets equipped with ERTMS	0
Ī	6b	Tractive vehicles including trainsets – no ERTMS	0

### Number of NSA staff (full time equivalent employees) by the end

### 7. of year

7a	FTE staff involved in safety certification	
7b	FTE staff involved in vehicle authorization	
7c	FTE staff involved in supervision	
7d	FTE staff involved in other railway-related tasks	



# Appendix to ANNEX: Applicable definitions - Progress with Interoperability

Applicable definitions are those contained in the relevant articles of the legal documents.

In addition, the following definitions apply:

### 1. Lines excluded from the scope of IOP/SAF Directive (end of year)

Railway lines excluded by the Member States from the scope of the application of RSD/IOD: DIRECTIVE (EU) 2015/797, Art. 4 a-d; DIRECTIVE (EU) 2015/798, Art. 3 a-d, as of 31.12.20xx (reporting year).

### 2. Length of new lines authorized by NSA (during the reporting year)

Length of lines constituting the Union rail system authorized for placing in service in accordance with Article 18(2) of Directive (EU) 2015/797 during the reporting year.

### 3. PRM adapted stations (end of year)

Railway stations as of 31.12.20xx (reporting year), that complies with the requirements of the Commission Regulation (EU) No 1300/2014 on the technical specifications for interoperability relating to accessibility of the Union's rail system for persons with disabilities and persons with reduced mobility (PRM TSI).

Full TSI compliance means full conformity with PRM TSI requirements, as demonstrated with the NoBo certificate. Partial TSI compliance means conformity with some (but not all) PRM TSI requirements, as demonstrated with the NoBo certificate. Accessible station means a station considered accessible under national legislation. (No NoBo certificate available.).

Railway station means a location on a railway system where a passenger train service can start, stop or end.

### 4. Train driver licenses (end of year)

Newly issued and valid driver licenses as of 31.12.20xx (reporting year), issued in accordance with the Directive 2007/59/EC of the European Parliament and of the Council of 23 October 2007 on the certification of train drivers operating locomotives and trains on the EU railway system.

# 5. Number of vehicles authorized under the interoperability Directive (EU) 2008/57 (during the reporting year)



The number of issued, renewed and amended vehicle authorizations for placing on the market in accordance with Article 21(8) of Directive (EU) 2015/797 during the reporting year.

### 5. ERTMS equipped vehicles (end of year)

Number of operated tractive vehicles (owned, leased, and rented minus rented-out) equipped with ETCS.

Vehicles without power units are excluded. Multiple units to be counted once. Includes only vehicles which are operated to transport freight or passengers. Yellow fleet and other IM vehicles are not included. Includes only vehicles which are registered in the country of main business activities of RUs.

### 7. Number of NSA staff (full time equivalent employees) by the end of year

Total number of full time equivalent NSA employees as of 31.12.20XX (reporting year).

Only staff dealing with railways is to be included