



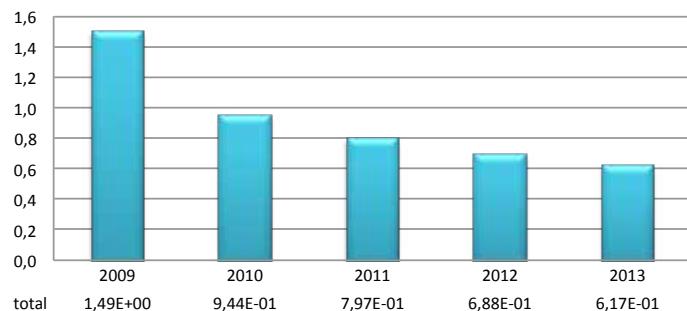
# CORRIGENDUM TO ANNUAL REPORT 2013

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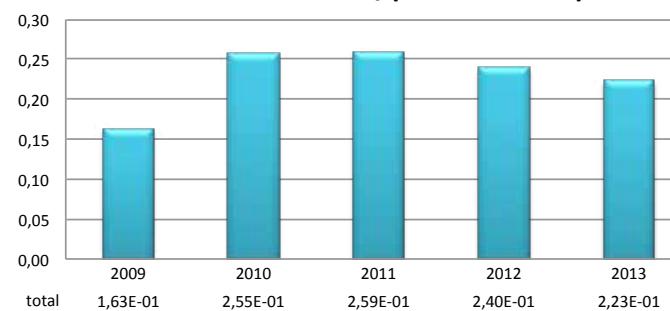
# 1. Annex A - Common Safety Indicators (CSI)

## 1) View of all indicators

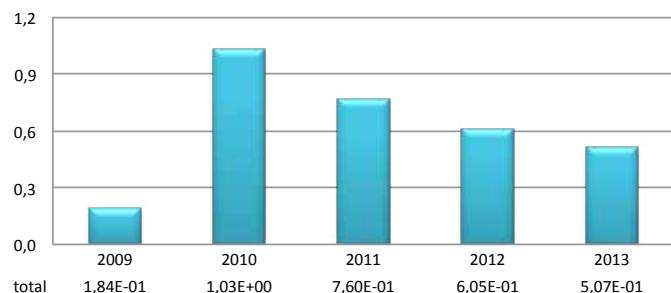
Total n° of accidents / (mln train\*km)



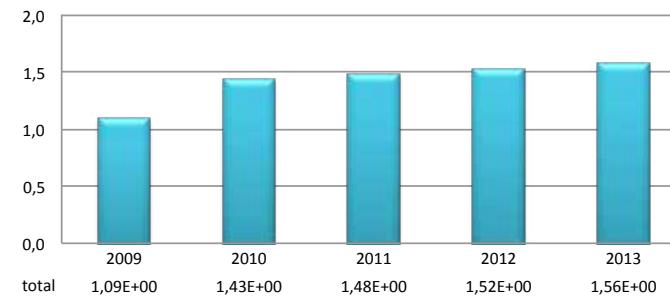
Total n° of fatalities / (mln train\*km)



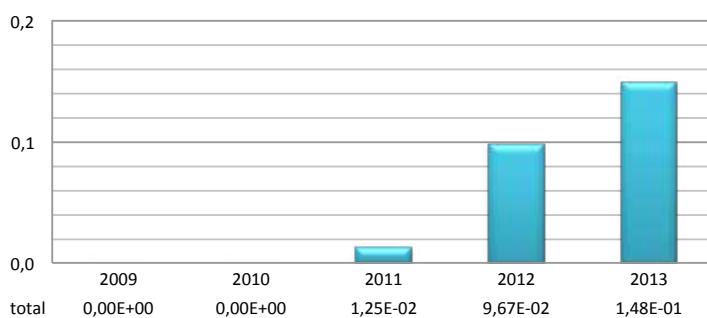
Total n° of injuries / (mln train\*km)



Total n° of precursors / (mln train\*km)



Total costs in mln € / (mln train\*km)



2009: values for 2009

2010: average values for 2009 and 2010

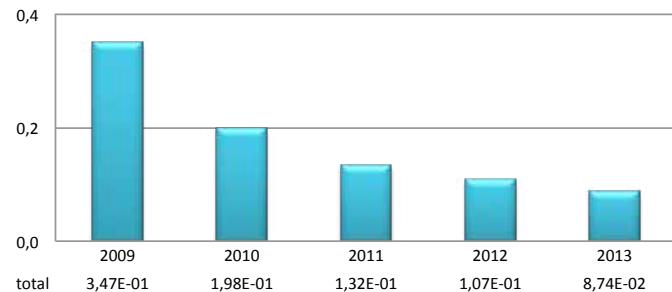
2011: average values for 2009, 2010 and 2011

2012: average values for 2009, 2010, 2011 and 2012

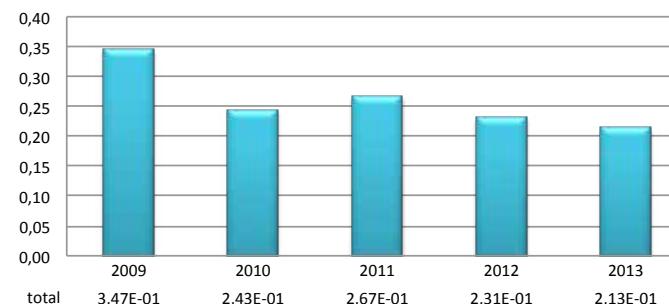
2013: average values for 2009, 2010, 2011, 2012 and 2013

## 2) Accidents by type

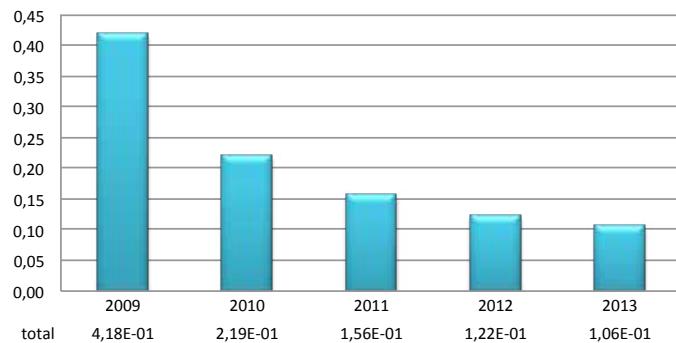
Nº collisions /(mln train\*km)



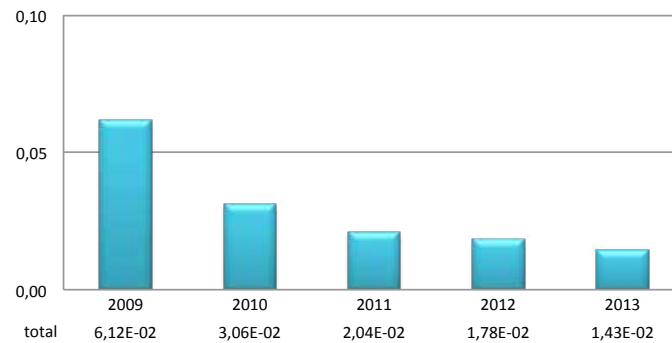
Nº accidents to persons caused by RS in motion /(mln train\*km)



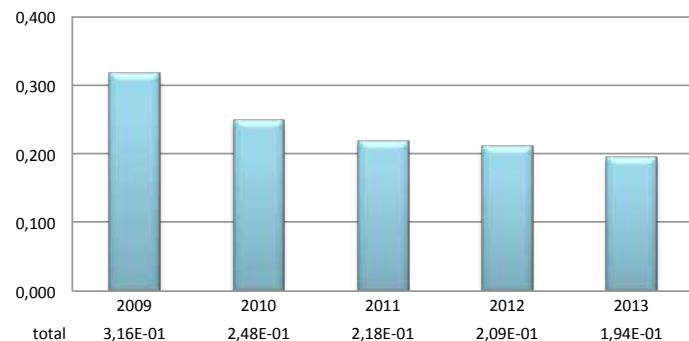
Nº derailments /(mln train\*km)



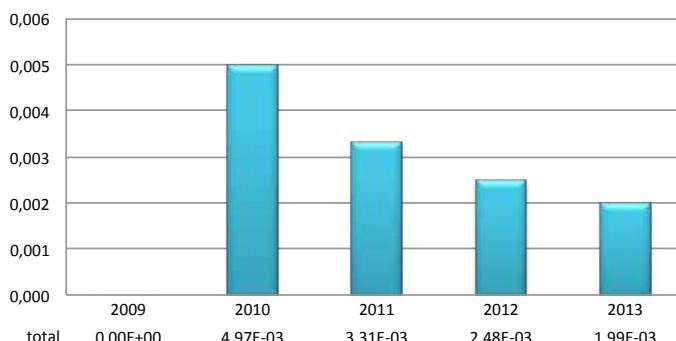
Nº fires in RS /(mln train\*km)



Nº Level crossing accidents /(mln train\*km)



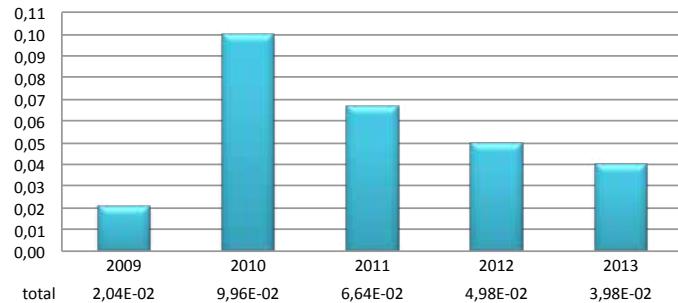
Nº others /(mln train\*km)



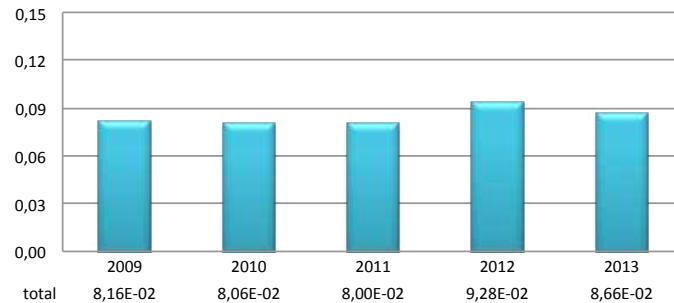
2009: values for 2009  
 2010: average values for 2009 and 2010  
 2011: average values for 2009, 2010 and 2011  
 2012: average values for 2009, 2010, 2011 and 2012  
 2013: average values for 2009, 2010, 2011, 2012 and 2013

### 3) Deaths per category of person

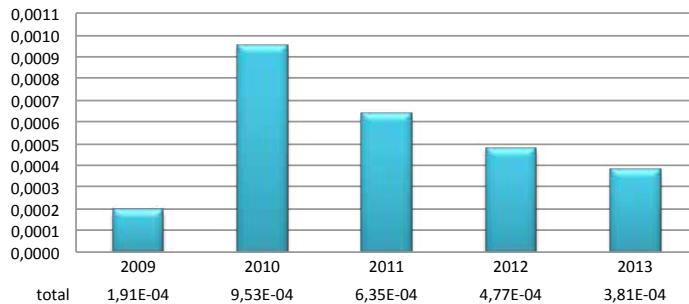
N° fatalities - passengers  
(mln train\*km)



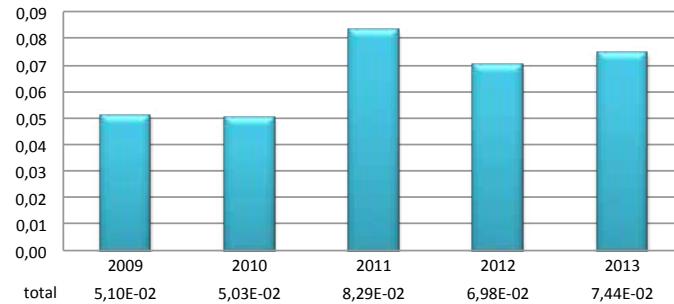
N° fatalities - level crossing users  
(mln train\*km)



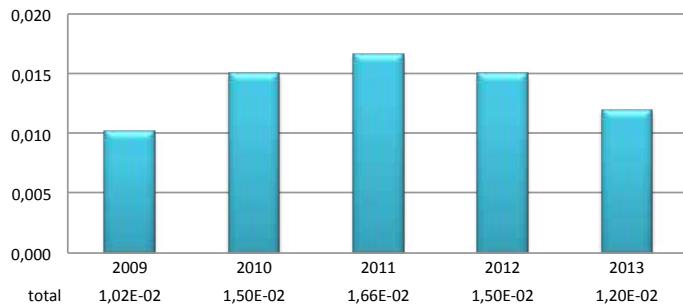
N° fatalities - passengers  
(bln passenger\*km)



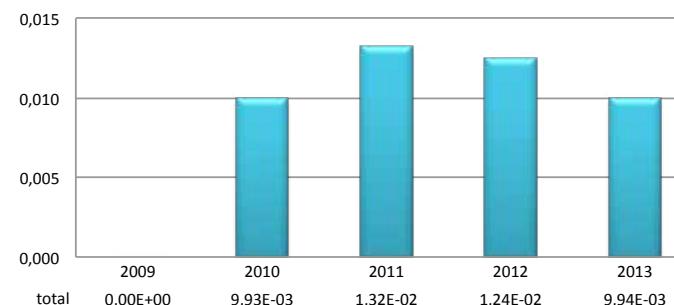
N° fatalities - unauthorised persons  
(mln train\*km)



N° fatalities - employees  
(mln train\*km)



N° fatalities - others  
(mln train\*km)



2009: values for 2009

2010: average values for 2009 and 2010

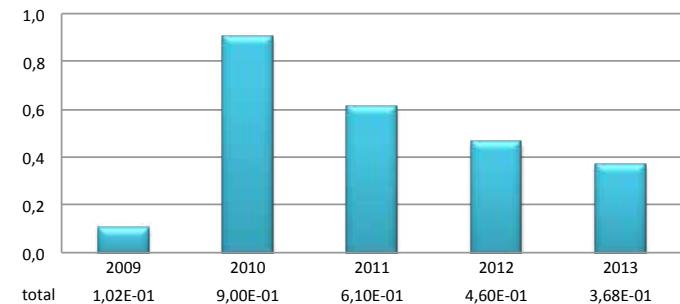
2011: average values for 2009, 2010 and 2011

2012: average values for 2009, 2010, 2011 and 2012

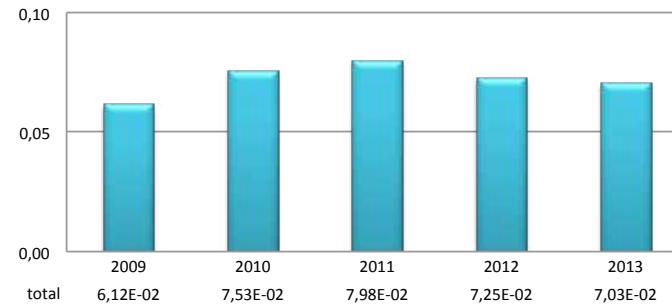
2013: average values for 2009, 2010, 2011, 2012 and 2013

#### 4) Injuries by category of person

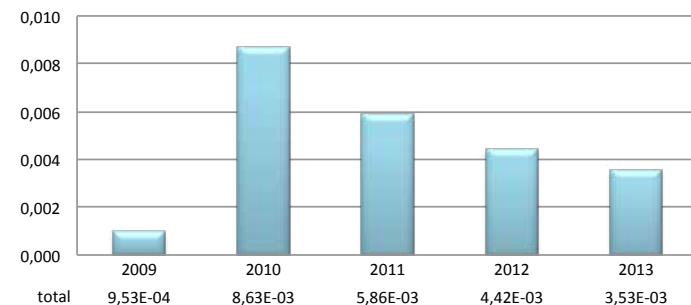
N° injuries - passengers  
(mln train\*km)



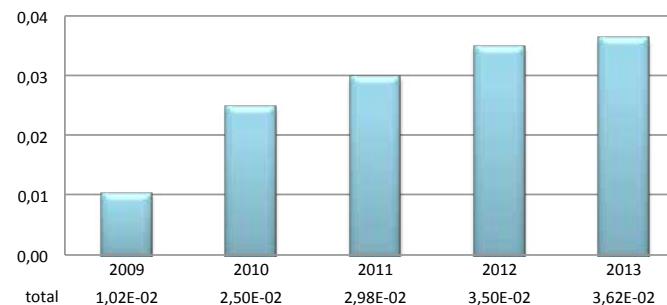
N° injuries - level crossing users  
(mln train\*km)



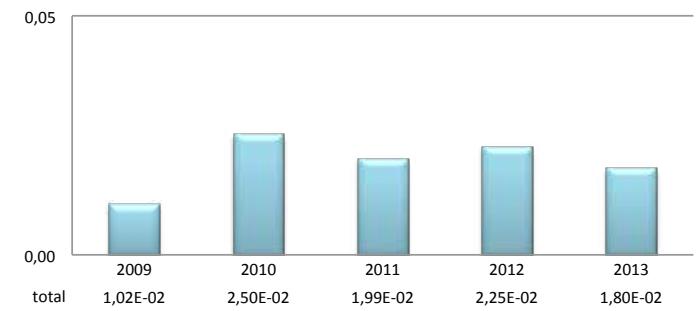
N° injuries - passengers  
(bln passenger\*km)



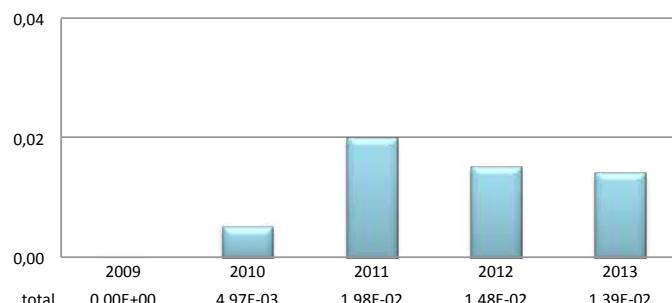
N° injuries - unauthorised persons  
(mln train\*km)



N° injuries - employees  
(mln train\*km)



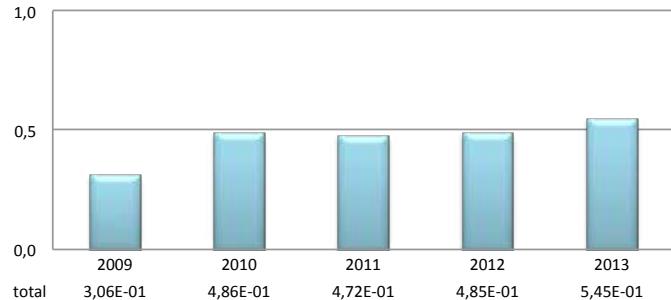
N° injuries - others  
(mln train\*km)



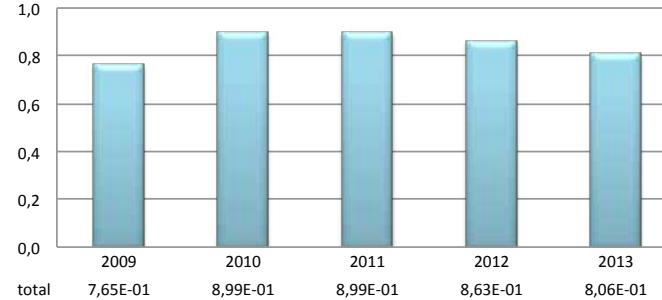
2009: values for 2009  
2010: average values for 2009 and 2010  
2011: average values for 2009, 2010 and 2011  
2012: average values for 2009, 2010, 2011 and 2012  
2013: average values for 2009, 2010, 2011, 2012 and 2013

## 5) Precursors of accidents

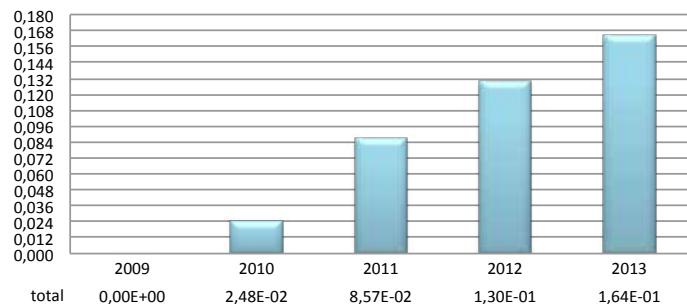
N° of broken rails  
(mln train\*km)



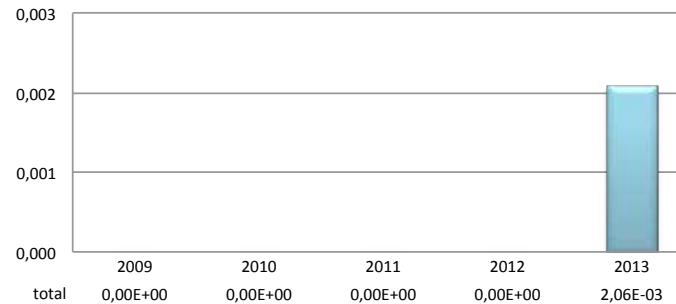
N° of signals passed at danger  
(mln train\*km)



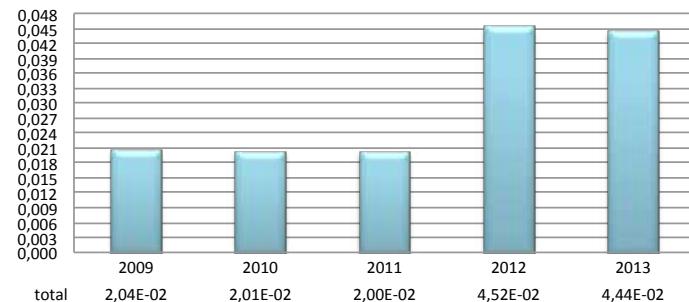
N° of track buckles  
(mln train\*km)



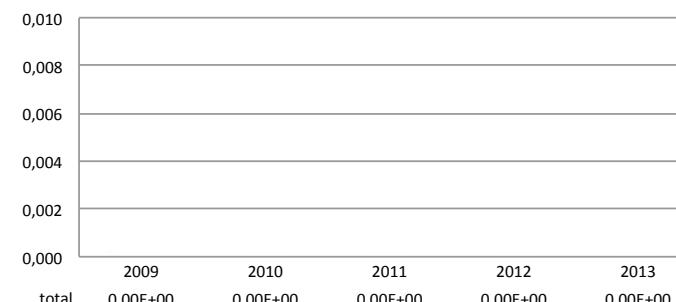
N° of broken wheels on rolling stock in service / (mln train\*km)



N° of wrong-side signaling failures / (mln train\*km)



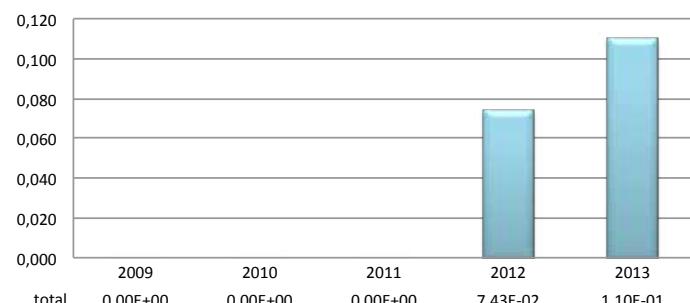
N° of broken axles on rolling stock in service / (mln train\*km)



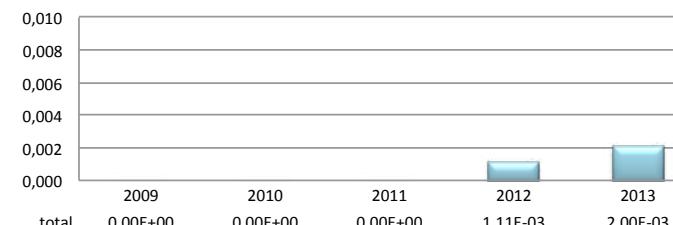
2009: values for 2009  
2010: average values for 2009 and 2010  
2011: average values for 2009, 2010 and 2011  
2012: average values for 2009, 2010, 2011 and 2012  
2013: average values for 2009, 2010, 2011, 2012 and 2013

## 6) Costs of all accidents, number of hours of work lost by the workforce and contractors due to accidents

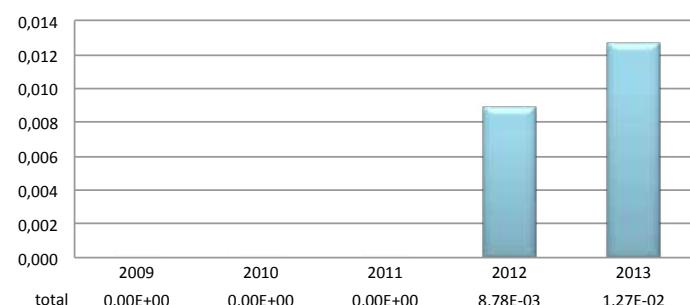
**Costs of deaths in mln €  
(mln train\*km)**



**Costs of delays, disturbance & re-routing of traffic, incl. extra costs for staff & loss of future revenue in mln €  
(mln train\*km)**



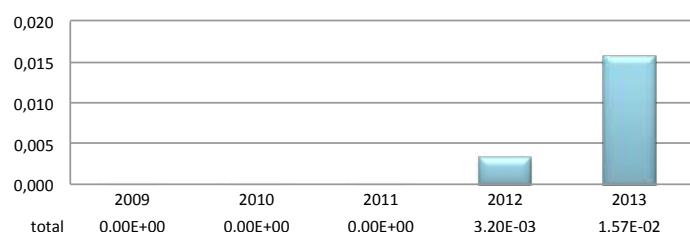
**Costs of injuries in mln €  
(mln train\*km)**



**N° of working hours (mln) of staff and contractors lost as a consequence of accidents/N° of working hours (mln) of staff and contractors**



**Costs of replacement or repair of damaged rolling stock and railway installations in mln €  
(mln train\*km)**



2009: values for 2009

2010: average values for 2009 and 2010

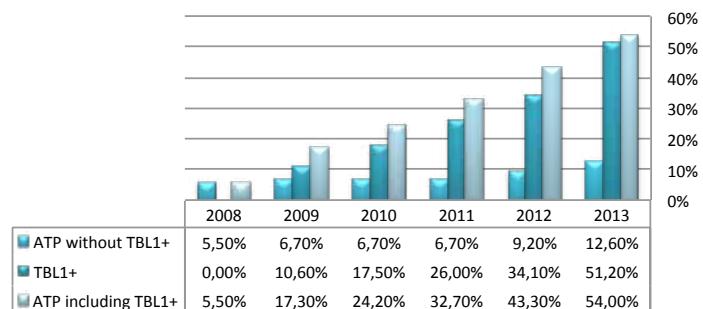
2011: average values for 2009, 2010 and 2011

2012: average values for 2009, 2010, 2011 and 2012

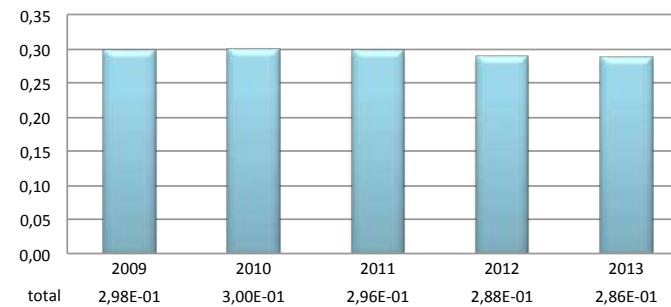
2013: average values for 2009, 2010, 2011, 2012 and 2013

## 7) Technical infrastructure safety and its implementation, safety management

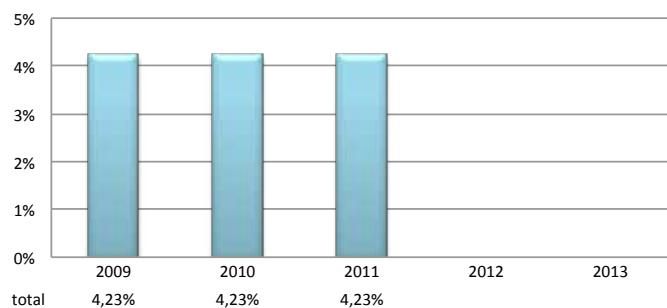
**Percentage of tracks with Automatic Train Protection (ATP) in operation**



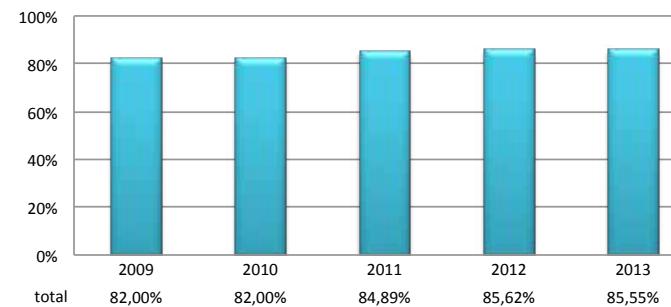
**Total number of level crossings per track Km**



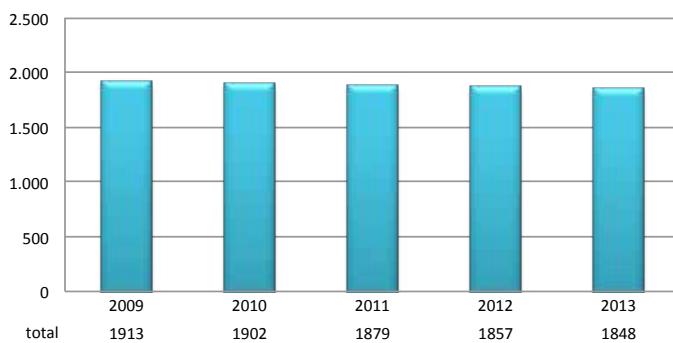
**Percentage of Train\*Km using operational ATP systems**



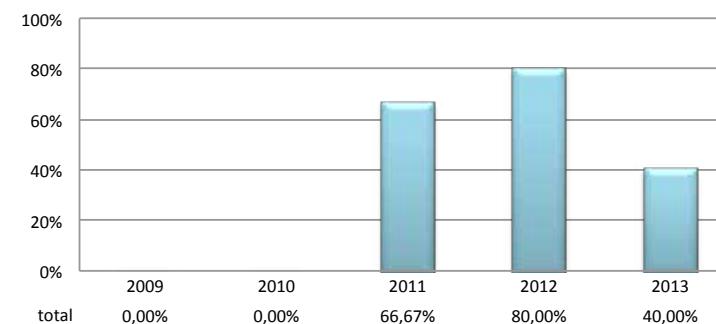
**Percentage of level crossings with automatic or manual protection**



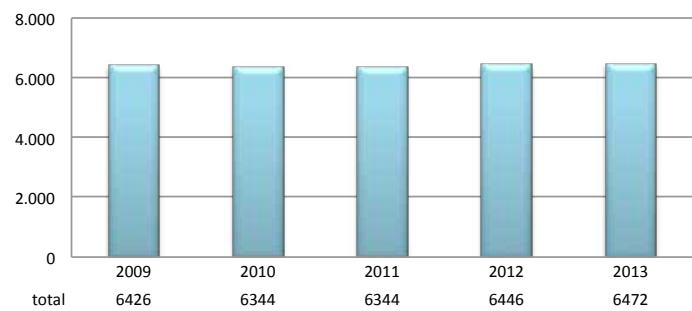
**Total number of level crossings**



**Nº of audits accomplished / Nº of audits required (and/or planned)**



**Number of track Km (double track lines are  
to be counted twice)**



## 2. ABSOLUTE CSI-DATA

Year	Number of accidents and Train*Km							
	Type of accidents							
Collisions	Derailments	Level crossing accidents	Accidents to persons caused by RS in motion	Fires in RS	Others	Total	Train*Km (MLN)	
2006	84	7	56	22	18	0	187	93
2007	77	17	76	30	17	1	218	94
2008	94	21	56	25	24	0	220	93
2009	34	41	31	34	6	0	146	98
2010	5	2	18	14	0	1	40	101
2011	0	3	16	32	0	0	51	101
2012	3	2	18	12	1	0	36	99
2013	1	4	13	14	0	0	32	97

Year	Nº of fatalities, Train*Km and Passenger*Km							
	Category of persons							
Passengers	Employees	Level crossing users	Unauthorised persons	Others	Total	Passenger*Km (BLN)	Train*Km (MLN)	
2006	4	0	9	7	0	20	9607	93
2007	9	3	19	7	1	39	9932	94
2008	2	1	10	8	0	21	10403	93
2009	2	1	8	5	0	16	10493	98
2010	18	2	8	5	2	35	10491	101
2011	0	2	8	15	2	27	9494	101
2012	0	1	13	3	1	18	9493	99
2013	0	0	6	9	0	15	10886	97

Nº of injuries, Train*Km and Passenger*Km								
Year	Category of persons							
	Passengers	Employees	Level crossing users	Unauthorised persons	Others	Total	Passenger*Km (BLN)	Train*Km (MLN)
2006	63	14	14	6	9	106	9607	93
2007	96	27	25	4	1	153	9932	94
2008	36	28	16	2	1	83	10403	93
2009	10	1	6	1	0	18	10493	98
2010	171	4	9	4	1	189	10491	101
2011	3	1	9	4	5	22	9494	101
2012	1	3	5	5	0	14	9493	99
2013	0	0	6	4	1	11	10886	97

Nº of precursors and Train*Km								
Year	Number of broken rails	Number of track buckles	Number of wrong-side signalling failures	Number of signals passed at danger	Number of broken wheels on rolling stock in service	Number of broken axles on rolling stock in service	Total	Train*Km (MLN)
2006	115	1	1	55	0	0	172	93
2007	98	0	1	81	1	0	181	94
2008	281	0	1	97	1	0	380	93
2009	30	0	2	75	0	0	107	98
2010	67	5	2	104	0	0	178	101
2011	45	21	2	91	0	0	159	101
2012	52	26	12	75	0	0	165	99
2013	76	29	4	56	1	0	166	97

Year	Cost of all accidents, safety hours							
	Costs of deaths in MLN €	Costs of injuries in MLN €	Costs of replace- ment or repair of damaged rolling stock and railway installations in MLN €	Costs of delays, disturbances and rerouting of traffic, including extra costs for staff and loss of future revenue in MLN €	Total costs in MLN €	Total number of working hours of staff and contrac- tors lost as a consequence of accidents	Total number of working hours	Train*Km (MLN)
2006								93
2007								94
2008								93
2009								98
2010								101
2011					3,785			101
2012	29,502	3,486	1,271	0,441	34,700	NA	NA	99
2013	24,585	2,739	6,352	0,538	34,214	NA	NA	97

## Technical safety of infrastructure and its implementation, management of safety

Year	Percentage of tracks with Automatic Train Protection (ATP) in operation	Percentage of Train Km using operational ATP systems	Total number of level crossings	Number of track Km (double track lines are to be counted twice)	Total number of level crossings per track Km	Percentage of level crossings with automatic or manual protection	Nº of audits accomplished / Nº of audits required (and/or planned)	Level crossings with protection
2006	see CSI in graphic	3,87%	2037	6212	3,28E-01	79,19%	0,00%	
2007		3,87%	1957	6212	3,15E-01	80,79%	0,00%	
2008		3,87%	1929	6282	3,07E-01	81,00%	0,00%	
2009		4,23%	1913	6426	2,98E-01	82,00%	0,00%	
2010		4,23%	1902	6344	3,00E-01	82,00%	0,00%	
2011		4,23%	1879	6344	2,96E-01	84,89%	66,67%	1595
2012			1857	6446	2,88E-01	85,62%	80,00%	1590
2013			1848	6472	2,86E-01	85,55%	40,00%	1581