

Reporting Body

IT
Ministero delle infrastrutture
e dei trasporti

ID

IT-1408

**Occurrence
Summary**

What		Location	
Date of occurrence	26-04-12	Location name	Roma Termini station
Local time	18:58	Latitude	41:53:34 North
Event type	Railway vehicle movement events Train derailment	Longitude	12:28:57 East
Description	Derailment of the train 9643, collision with the train 9558 and derailment of the train 9558		
Direct Cause descrip	The wear measured on the left blade of the frame No. 1 of the switch 184/185 are compatible with the wheel climb		

Final Report

Nam	Desc	Type	Size	Last	Orga	Repo
RELA ZION E_IN DAGI NE_2 4.07. 13.p df	Final repor t	appli catio n/pdf	4115 518	7/31 /201 3 3:05: 49 PM	Softe co	

Other Attachments

Nam	Desc	Type	Size	Last	Orga	Repo
Racc oma ndazi oni_ DGIF .pdf	Offici al Reco mme ndati ons 2-4	appli catio n/pdf	2493 9	7/31 /201 3 3:09: 00 PM	Softe co	
Racc oma ndazi one_ DGIF _n1. pdf	Offici al Reco mme ndati on 1 (urg ent)	appli catio n/pdf	8882 81	7/31 /201 3 3:11: 30 PM	Softe co	

What

Title	Train derailment, 26/04/2012, Roma Termini station (Italy)		
Occurrence type	Railway vehicle movement events Train derailment	Occurrence Class	Serious accident
Date of occurrence	26-04-12	Local time	18:58
Events	Railway vehicle movement events - Train derailment Railway vehicle movement events - Trains collision		

Reporting Body	IT Ministero delle infrastrutture e dei trasporti	ID	IT-1408
----------------	---	----	---------

Railway vehicle movement events - Train derailment

Descriptions

Language	English	Translation provider	Information providers own translation
Description	Derailment of the train 9643, collision with the train 9558 and derailment of the train 9558		

Location name	Roma Termini station		
Railway System type	Railway	Country	Italy
Location type	Station	Border Country	
Line type	Multiple track	Line number	
Allowed line speed	30 km/h	Km number	
Latitude	41:53:34 North	Longitude	12:28:57 East
Location description	Roma Termini station		
Additional location in			
Location type details	Switches And Crossings	Fixed installations	

Occurrence details

Railway vehicles

Movement type	High speed passenger train	Train number	9643
RU	Italy Trenitalia SpA	Wagons overturned	No
Train speed at mom	30 km/h	Passengers onboard	Yes
Vehicle description	ETR500 (High speed train: loco+11coaches+loco)		

Other objects involved in the occurrence

Other objects

Parties involved

IM Involved	Italy - RFI SpA	RU	
		Italy - Trenitalia SpA	

	Fatalities	Serious injuries	Minor injuries
Passengers	0	0	0
Staff	0	0	5
Level crossing users	0	0	0

Reporting Body	IT Ministero delle infrastrutture e dei trasporti	ID	IT-1408
----------------	---	----	---------

Unauthorised persons	0	0	0
Others	0	0	0
Total	0	0	5

Material consequences

Material Damage	Infrastructure Rolling stock	Estimated total mate	> 2 000 000 €
Damage description	Damages to the infrastructure: € 1.119.056,00 Damages to the rolling stock: € 2.082.000,00		

Images

Name	Description	Type	Size	Last modified	Organization	Repository
0						

Causation

Causes

Language	English	Translation provider	Information providers own translation
----------	---------	----------------------	---------------------------------------

Direct Cause description

The wear measured on the left blade of the frame No. 1 of the switch 184/185 are compatible with the wheel climb

Underlying and root causes description

The control of some characteristic parameters of the components of the switch, following the onset of signs of wear, it does not appear to have been recorded. The controls provided for the wear of blades and stock rails of the switch were not intensified, disregarding the procedure.

The procedures for verifying the switches do not provide the measurement and monitoring of the cusp that is generated for the wear phenomenon that has affected the most slender of the left blade of the frame No. 1 of the switch 184/185.

Causation classification

Railway vehicle movement events - Train derailment

1 - Switches and crossings

1 - Maintenance of infrastructure

2 - Procedures

Railway vehicle movement events - Trains collision

Railway vehicle movement events - Train derailment

Reporting Body	IT Ministero delle infrastrutture e dei trasporti	ID	IT-1408
----------------	---	----	---------

Recommendations
Recommendation

Issuing information

Recommendation title Recommendation No. 1 (urgent)

Recommendation ID	REC-000271	End implementer	IM
Status	Sent to addressee	Addressee	RFI SpA
Issue date	30-04-12		

Recommendation texts

Language	English	Translation provider	Information providers own translation
----------	---------	----------------------	---------------------------------------

Recommendations text

It is recommended to the Infrastructure Manager to carry out a thorough self-check of the maintenance of the entire system of the infrastructure of the station Roma Termini for the faster possible restoration of optimal conditions of the track equipment state.

Implementation information

Implementation status	Implementation date
Unknown	

NSA Response

NIB Comment

Recommendation

Issuing information

Recommendation title	Recommendation No.2		
Recommendation ID	REC-000272	End implementer	IM
Status	Sent to addressee	Addressee	NSA
Issue date	29-07-13		

Recommendation texts

Language	English	Translation provider	Information providers own translation
----------	---------	----------------------	---------------------------------------

Recommendations text

It is recommended to the NSA to work in order to verify that the Infrastructure Manager provides to conclude the thorough analysis of the state of repair of the entire system of the infrastructure of the Roma Termini station to restore optimal conditions of the state of the track equipment as required by the urgent recommendation issued on 30.04.2012, or to ensure that the Infrastructure Manager has already done the requirements described above.

Reporting Body IT ID IT-1408
Ministero delle infrastrutture
e dei trasporti

Implementation information

Implementation status Unknown Implementation date

NSA Response

NIB Comment

Recommendation

Issuing information

Recommendation title	Recommendation No.3		
Recommendation ID	REC-000273	End implementer	NSA
Status	Sent to addressee	Addressee	NSA
Issue date	29-07-13		

Recommendation texts

Language	English	Translation provider	Information providers own translation
----------	---------	----------------------	---------------------------------------

Recommendations text

It is recommended to the NSA to note which actions for the assessment of the maintenance status of the switches present in the station yards of the entire national rail network have been taken by the Infrastructure Manager.

Implementation information

Implementation status Unknown Implementation date

NSA Response

NIB Comment

Recommendation

Issuing information

Recommendation title	Recommendation No.4		
Recommendation ID	REC-000274	End implementer	NSA
Status	Sent to addressee	Addressee	NSA
Issue date	29-07-13		

Recommendation texts

Reporting Body	IT Ministero delle infrastrutture e dei trasporti	ID	IT-1408
----------------	---	----	---------

Language	English	Translation provider	EU Official translation service
----------	---------	----------------------	---------------------------------

Recommendations text

It is recommended to the NSA to examine the effectiveness of the procedures put in place by the IM to verify its perform checks for the suitability for work of track equipment that have to be exhaustive, systematic and traceable and to ascertain what procedures are in progress or are already have been taken to achieve the objective of ensuring implementation of operation. The examination shall aim in particular to verify the effectiveness of procedures for planning and subsequent execution of all actions necessary, including the replacement of the couple stock rail - blame rail , where a planimetric cusp on these elements or other wear phenomena on the switches arise.

Implementation information

Implementation status	Implementation date
Unknown	

NSA Response

NIB Comment

Causation links

- Railway vehicle movement events - Train derailment
 - Subsystem - Infrastructure - Switches and crossings
 - Causal factors - Maintenance - Maintenance of infrastructure
 - Causal factors - Procedures
- Railway vehicle movement events - Trains collision
- Railway vehicle movement events - Train derailment

Investigation details

Legal Basis	National rules imposed by implementing of the Safety Directive 2004/49/EC - in light of Article 19, §1 of SD
-------------	--

Other reason descrip

ID	IT-1408	Reporting Body	Ministero delle infrastrutture e dei trasporti
National investigatio		Investigator in charge	SDEMARCO
Occurrence creation	03-05-12 10:17:47		
Decision to investigate	26-04-12		
Declaration date	03-05-12		
Date of IM/RU notific			

Report Type	Final report	Workflow Status	Validated
Report Version	2	Investigation Status	Closed

Reporting Body IT Ministero delle infrastrutture e dei trasporti ID IT-1408

Other Attachments	Name	Description	Type	Size	Last	Organizati	Repositor
	Raccoman dazioni_D GIF.pdf	Official Recomme ndations 2-4	applicatio n/pdf	24939	7/31/2013 3:09:00 PM	Softeco	
	Raccoman dazione_D GIF_n1.pd f	Official Recomme ndation 1 (urgent)	applicatio n/pdf	888281	7/31/2013 3:11:30 PM	Softeco	

Final Report	Name	Description	Type	Size	Last	Organizati	Repositor
	RELAZION E_INDAGI NE_24.07. 13.pdf	Final report	applicatio n/pdf	4115518	7/31/2013 3:05:49 PM	Softeco	