

Reporting Body

IT
Ministero delle infrastrutture
e dei trasporti

ID

IT-3171

Occurrence
Summary

What		Location	
Date of occurrence	01-12-13	Location name	km 10+200 line Foggia - Metaponto
Local time	22:55	Latitude	41:18:52 North
Event type	Railway vehicle movement events Train derailment	Longitude	15:37:36 East

Description Train derails because of the removal of part of the roadbed as a result of adverse weather conditions.

Direct Cause descrip Introflection of rails caused by the removal of a section of the railway embankment below due to a flood event of considerable importance with the flooding of the river Carapelle and the channel Ponte Rotto.
Inadequate disposal of alluvial flow from the hydraulic structures in the route concerned, for which it has been determined the undermining of the embankment below the track, with the introversion of the track.
Failure to secure the driver's seat on the floor, which, without attachment, was able to move independently within the cabin as a result of shaking, causing injuries to the driver.

Final Report

Other Attachments

Nam	Desc	Type	Size	Last	Orga	Repo	Nam	Desc	Type	Size	Last	Orga	Repo
Relazione	Final report	application/pdf	2889817	4/29/2015	Softeco					0			
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What

Title Train derailment, 12/1/2013, km 10+200 line Foggia - Metaponto (Italy)

Occurrence type	Railway vehicle movement events Train derailment	Occurrence Class	Accident
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Date of occurrence	01-12-13	Local time	22:55
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Events Railway vehicle movement events - Train derailment

Descriptions

Language	English	Translation provider	Information providers own translation
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Description Train derails because of the removal of part of the roadbed as a result of adverse weather conditions.

Location name km 10+200 line Foggia - Metaponto

Railway System type	Railway	Country	Italy
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Location type	Line	Border Country	
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Line type	Single track	Line number	
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Allowed line speed		Km number	km 10+200
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Latitude	41:18:52 North	Longitude	15:37:36 East
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Location description

Additional location in

Location type details	Plain track	Fixed installations	
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Occurrence details

Railway vehicles

Movement type	Regional passenger train	Train number	3546
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RU	Italy Trenitalia SpA	Wagons overturned	No
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Train speed at mom		Passengers onboard	Yes
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Vehicle description

Other objects involved in the occurrence

Other objects

Parties involved

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IM Involved	Italy - RFI SpA	RU Italy - Trenitalia SpA	
	Fatalities	Serious injuries	Minor injuries
Passengers	0	0	0
Staff	0	2	0
Level crossing users	0	0	0
Unauthorised persons	0	0	0
Others	0	0	0
Total	0	2	0

Material consequences

Material Damage	Infrastructure Rolling stock	Estimated total mate	150 000 - 2 000 000 €
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Damage description

Images

Name	Description	Type	Size	Last modified	Organization	Repository
0						

Causation

Causes

Language	English	Translation provider	Information providers own translation
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Direct Cause description

Introflexion of rails caused by the removal of a section of the railway embankment below due to a flood event of considerable importance with the flooding of the river Carapelle and the channel Ponte Rotto.

Inadequate disposal of alluvial flow from the hydraulic structures in the route concerned, for which it has been determined the undermining of the embankment below the track, with the introversion of the track.

Failure to secure the driver's seat on the floor, which, without attachment, was able to move independently within the cabin as a result of shaking, causing injuries to the driver.

Underlying and root causes description

Failure to consider the route as a singular point as regards atmospheric phenomena characterized by particular situations of danger in the context of the system In.Rete 2000 of RFI SpA, then no obligation to carry out extraordinary monitoring activities.

The numerous sharp edges and protrusions present in the cabin, on which, to the effect of shocks suffered during the derailment, the agents in the cabin have repeatedly impacted.

Causation classification

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Railway vehicle movement events - Train derailment

- 1 - Plain line track
- 2 - Line side structure
 - 1 - Supervision
- 3 - Vehicle superstructure
 - 1 - Design

Recommendations

Recommendation

Issuing information

Recommendation title	n.1	End implementer	IM
Recommendation ID	REC-000087	Addressee	NSA
Status	Sent to adreesee		
Issue date	09-10-14		

Recommendation texts

Language	English	Translation provider	Information providers own translation
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Recommendations text

It is recommended to the NSA (ANSF) to strive so that the IM (RFI SpA) continues the analysis to check - also based on an update of the series of weather events of particular intensity - the effective compliance of the classification of singular points to real data.
in the points identified as at risk, it will be recommended to the IM to take appropriate preventive measures, commensurate with the risk conditions themselves.

Implementation information

Implementation status	Implementation date
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Unknown

NSA Response

NIB Comment

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Recommendation

Issuing information

Recommendation title	n. 2		
Recommendation ID	REC-000088	End implementer	NSA
Status	Sent to addressee	Addressee	NSA
Issue date	09-10-14		

Recommendation texts

Language	English	Translation provider	Information providers own translation
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Recommendations text

It is recommended to the NSA (ANSF) to consider the possibility of activating a process of coordination of the medium-term, aimed at involving institutions responsible for land management, aimed at the coordinated management of hydrogeological safety issues, for its implications on the safety of infrastructures and transport.

Implementation information

Implementation status	Implementation date
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Unknown

NSA Response

NIB Comment

Recommendation

Issuing information

Recommendation title	n. 3		
Recommendation ID	REC-000089	End implementer	RU
Status	Sent to addressee	Addressee	NSA
Issue date	09-10-14		

Recommendation texts

Language	English	Translation provider	Information providers own translation
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Recommendations text

It is recommended to the NSA (ANSF) to strive so that RUs predispose improvements in driving safety of rolling stock and habitability conditions

Implementation information

Implementation status	Implementation date
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Unknown

NSA Response

NIB Comment

Causation links

- Railway vehicle movement events - Train derailment
 - Subsystem - Infrastructure - Plain line track
 - Subsystem - Infrastructure - Line side structure
 - Causal factors - Supervision
 - Subsystem - Rolling stock - Locomotives and traction units - Vehicle superstructure
 - Causal factors - Design

Investigation details

Legal Basis National rules imposed by implementing of the Safety Directive 2004/49/EC - in light of Article 19, §2 of SD - (a) the seriousness of the accident or incident

Other reason descrip

ID	IT-3171	Reporting Body	Ministero delle infrastrutture e dei trasporti
National investigatio		Investigator in charge	
Occurrence creation	14-01-14 12:49:06		
Decision to investigate	03-12-13		
Declaration date	14-01-14		
Date of IM/RU notific	02-12-13		

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

Other Attachments	Name	Descriptio	Type	Size	Last	Organizati	Repositor
				0			

Final Report	Name	Descriptio	Type	Size	Last	Organizati	Repositor
	Relazione _finale_d_ __indagin e_relativa __azioni_ Tecniche_ .pdf	Final report & Recomme ndations	applicatio n/pdf	2889817	4/29/2015 4:10:24 PM	Softeco	