

8D Report #210735

Project : ADA, Riyadh Metro Transit System&Consortium
Platform : Turnkey Systems
Customer : ARRIYADH DEVELOPMENT AUTHORITY
Supplier :

Awareness date : 30/06/2021
Opening date : 01/07/2021
Update date : 06/10/2021
Closing date : //
Step : 4/8

Title :	Train Running with one Unlocked Door
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D1	Description
Created by POUZANCRE Guilhem on 2021-07-01	
What, Where, How detected	A video have been shown to C-ISA where, while the train was running, a person (on purpose) has activated the Emergency Evacuation Device. The train doors has been unlocked and open on around 5 centimeters. The train was still running.
Why is it a problem	The Final Safety Cases of the rolling stock was signed for the full fleet with the mention "Ready for revenue service". It has been reported to C-ISA that this incident happened during "System Integration tests" The C-ISA has requested some clarifications, but no one was able to provide the proper explanations.
How Many	1 Train door of TS 517, 1HC1
Objective to be reached	8D closure
Impacted Product (PBS)	1. Trainset/Vehicles 1.A. Train
FBS	



Picture showing the problem

D2	Stakeholders		
Team leader	MUSSA Taha	Safety leader	POUZANCRE Guilhem
Distribution List	RAMOS Paulo (paulo.ramos@alstomgroup.com) / KAHLAOUI Wahid (wahid.kahlaoui@alstomgroup.com) / RANIPETA Mahaboob (mahaboob-basha.ranipeta@alstomgroup.com) / MUSSA Taha (taha.mussa@alstomgroup.com) / POUZANCRE Guilhem (guilhem.pouzancre@alstomgroup.com) / OUHMID Abdelaziz (abdelaziz.ouhmid@alstomgroup.com) /		
Region Site Solving	Europe	Region Projet	Africa Middle-East and Ce
Reporting Unit in charge solving the issue	TRA Katowice PL	Reporting Unit in charge of integration	TGS Riyadh SA

D3	Problem characterization		
Provisional cost > 100K		OTP reference	
Kx classification	K1 Safety	Current score	3
Severity	Critical	Frequency	Remote

D4	Containment
Start Date (D4-KPI)	Removal of safety hazard by preventing the train door from unlocking while the train is running

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Target start Date	2021-07-12
Start Date (D4-KPI)	2021-07-12
End of deployment	2021-08-12
Progress / result / next steps for deployment	<p><i>Update by RANIPETA Mahaboob on 2021-08-23T00:00:00</i></p> <p>23/08/2021 by RANIPETA Mahaboob : Full fleet doors are checked in the different driving modes in the depot. All trains that have one or multiple doors that are malfunctioning, whether due to the same issue or due to a different issue are not allowed to go in-line. 61 of 69 trains can go in main line, investigations and corrective actions ongoing for the remaining 8 trains. Refer to the attached email for the summary of all doors status 18/07/2021: Refer to the attached email dated 13 July 2021, the status of doors behavior in different mode of static tests 8/07/2021: Suspected mechanical failure. Verified by exchanging DCUs of the doors but the issue is not exported to the next door. Tested 4 other trains in dynamic mode but no such issue observed. Investigation still ongoing.</p>

List of actions

No	Actions (what?)	Resp. action (who?)	Due date (when?)	Date of completion
1226762	Isolate the affected train and stop using it for operation and tests	RANIPETA Mahaboob	2021-07-05	2021-07-12
1226763	Full fleet doors are being checked in the different driving modes in the depot. All trains that have one or multiple doors that are malfunctioning, whether due to the same issue or due to a different issue are not allowed to go in-line.	MUSSA Taha	2021-08-23	2021-08-23

D5

Root causes

Progress / result / next steps for deployment	<p><i>Update by RANIPETA Mahaboob on 2021-09-20</i></p> <p>20/09/2021: Train 517: update ? We start checking T517 HC1 door 1. We notes that door was open immediately with EED UTO active. Other doors open with delay 5 sec of ATC after EB applied from PEED. We checked the motor brake connection in electrical schematic, and all was fine. We exchange the motor for motor brake function confirmation with door 3 (healthy originally). But still there was problem in Door 1 (the issue didnâ€™t transfer with it). ? Then We start checking mechanical lock system. we found door was not lock properly with Mechanical lock. We Adjust the door mechanically (by changing the limit of closing command mechanically from this device, according to manual) and then we test the door it was working fine. We move the train in workshop on 3kph and open the door with EED. We can not open the door (healthy status and its normal) .</p>
Root causes Occurence	<i>Method - Other</i>
Root causes Non Detection	<i>, 3 - Control / Routine test issue</i>

List of actions to deploy the corrective solutions

No	Actions (what?)	Resp. action (who?)	Due date (when?)	Date of completion
1243013	Root cause analysis report to be provided	RANIPETA Mahaboob	2021-09-30	0000-00-00

D6	Solution
What does the solution consist of?	Mechanical adjustment of the EED
Mod reference	
Target start Date	2022-02-24
Start Date (D6-KPI)	

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List of actions to deploy corrective solutions

No	Actions (what?)	Resp. action (who?)	Due date (when?)	Date of completion
1252777	Detail description about the correction of the issue is to to be provided with schematics and pictures if needed.	MUSSA Taha	2021-10-04	0000-00-00

D7	Rex
List of recommendations	<i>Update by on</i>
Plateform concerned by Rex	
Metiers concerned by Rex	
Impacted projects have been notified ?	

List of actions to engrave the lessons learn

No	Actions (what?)	Resp. action (who?)	Due date (when?)	Date of completion
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