

# 8D Report #209814

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

**Awareness date :** 01/07/2021  
**Opening date :** 23/06/2021  
**Update date :** 06/10/2021  
**Closing date :** //  
**Step :** 3/8

<b>Title :</b>	CVS MF Transformer terminal and cables burned.
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D1	Description
	Created by RANIPETA Mahaboob on 2021-06-23
What, Where, How detected	During the Trian operation its found that the battery is not charging, IOS182 is present (T615_HC2 : IOS182 : One Battery is isolated, or Battery protection tripped, or Battery not charging). Then discovered that MF transformer terminal of CVS2 is burned and also the cables connection
Why is it a problem	The Train cannot be fully operational
How Many	only 1 train , 1 set - Train 615 , Head car 2 Serial Number of the Transformer of CVS is CRL0077. The Serial Number of the affected transformer is SN.0074
Objective to be reached	Train/CVS and Battery has to be back to conformity
Impacted Product (PBS)	1. Trainset/Vehicles   1.H. Auxillary Operation Equipment   1.H.A. Auxillary Operation Equipment   1.C.F. External Additions   1.C. Vehicle Fitting out
FBS	



Picture showing the problem

D2		Stakeholders	
Team leader	RANIPETA Mahaboob	Safety leader	MARGUET Laurent
Distribution List	FADDOUL Ramzi (ramzi.faddoul@alstomgroup.com) / HOCQ Patrick (patrick.hocq@alstomgroup.com) / MARGUET Laurent (laurent.marguet@alstomgroup.com) / LEMAIRE Mikael (mikael.lemaire@alstomgroup.com) / GEBSKI Miroslaw (miroslaw.gebski@alstomgroup.com) / ZEEBERGH Jean-Mathieu (jean-mathieu.zeebergh@transport.alstom.com) / BERTHOLET Edouard (edouard.bertholet@transport.alstom.com) / MAGAIN Christine (christine.magain@alstomgroup.com) / KAHLAOUI Wahid (wahid.kahlaoui@alstomgroup.com) / BONDROIT Emmanuel (emmanuel.bondroit@alstomgroup.com) / RUCQUOY Ludovic (ludovic.rucquoy@alstomgroup.com) / TRIFFAUX Vincent (vincent.triffaux@alstomgroup.com) / VACCARGIU Valentin (valentin.vaccargiu@alstomgroup.com) / MUSSA Taha (taha.mussa@alstomgroup.com) / HUBERT Pierre (pierre.hubert@alstomgroup.com) / LEDUNE Benjamin (benjamin.ledune@alstomgroup.com) / DOUCET Romain (romain.doucet-ext@alstomgroup.com) / TAMINIAUX Jean-Francois (jean-francois.taminiaux@alstomgroup.com) / MARGUET Laurent (laurent.marguet@alstomgroup.com) / GEBSKI Miroslaw (miroslaw.gebski@alstomgroup.com) / MUSSA Taha (taha.mussa@alstomgroup.com) / LEDUNE Benjamin (benjamin.ledune@alstomgroup.com) / DOUCET Romain (romain.doucet-ext@alstomgroup.com) / HOCQ Patrick (patrick.hocq@alstomgroup.com) /		
Region Site Solving	Europe	Region Projet	Africa Middle-East and C
Reporting Unit in charge solving the issue	Charleroi BE	Reporting Unit in charge of integration	TRA Katowice PL

D3		Problem characterization	
Provisional cost > 100K		OTP reference	

<b>Kx classification</b>	K1 Safety	<b>Current score</b>	3
<b>Severity</b>	Catastrophic	<b>Frequency</b>	

D4	Containment
Start Date (D4-KPI)	Visual Inspection / Check for No-Rotation torque Replace Litz , and TFO.
Target start Date	2021-07-14
Start Date (D4-KPI)	2021-07-14
End of deployment	
Progress / result / next steps for deployment	<p><i>Update by DOUCET Romain on 2021-09-28T00:00:00</i></p> <p>Review done 28-09-21 - Litz cables and TFO are ready to be shipped - 4 CVS still to be inspected Review done 29-07-21 - Issue with transformer supplying : action plan request from supplier - Inspections on hold : Riyadh check to obtain right tooling for the 8 fasteners inspection Review done 14-07-21 : - Litz cable &amp; Transformer will be supplied 23/07 - 4 out of 138 CVS have been checked (1 NOK for marking and rotation / 1 NOK for marking not aligned / 2 OK) - Visual inspection will be clarified (Trace of Burning / screw assembly) - Way forward in case of non-conformities detected (full inspection + check after 3 months) - Clarification has been provided regarding marking after inspections Review done 12-07-21 Target D4 closing : 01-07-21 + 45 days Review done 01-07-21: - Visual Inspection to be defined - CVS to be repaired based on procedure.</p>

## List of actions

No	Actions (what?)	Resp. action (who?)	Due date (when?)	Date of completion
1223363	To specify the visual inspection to deploy : Check the Transfo ? what exactly ? - check Tightening torque ? ( specific one ? marking ? ) , ..	LEDUNE Benjamin	2021-07-29	2021-07-29
1223364	Inspection on the fleet	RANIPETA Mahaboob	2021-10-03	0000-00-00
1223365	Troubleshooting procedure (Litz Cable and Transformer replacement)	LEDUNE Benjamin	2021-07-29	2021-07-29
1223472	To supply litz cable and transformator in order to perform replacement on CVS	VACCARGIU Valentin	2021-10-03	0000-00-00

1234905 To provide CVS log events on the 33 trains in mainline	RANIPETA Mahaboob	2021-08-06	2021-09-23
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D5	Root causes
Progress / result / next steps for deployment	<p><i>Update by DOUCET Romain on 2021-09-28</i></p> <p>Ishikawa first version done 8D meeting held on 28/09/2021 : Root causes action updated 8D meeting held on 21/09/2021 : Root causes action updated 8D meeting held on 14/09/2021 : Root causes action updated</p>
Root causes Occurrence	
Root causes Non Detection	

## List of actions to deploy the corrective solutions

No	Actions (what?)	Resp. action (who?)	Due date (when?)	Date of completion
1223366	Send back the transformer for analysis at CRL (instruction in comments & RMA files attached)	RANIPETA Mahaboob	2021-07-07	2021-09-23
1223367	Data plug received and to be analyzed by CRL	LEDUNE Benjamin	2021-07-23	2021-09-23
1226670	To check the WI (tightening torque, tightening mark, the self-inspections)	STEINIER Nicolas	2021-07-23	2021-09-23
1226683	To check FAC 12 filled out for the CVS (CRL0077)	TRIFFAUX Vincent	2021-10-05	0000-00-00
1226687	To check drawing regarding the tightening requirements on the connexion cables/Transformer	LEDUNE Benjamin	2021-07-23	2021-09-28
1226690	To check final inspection sheet in order to check instruction regarding inspection on tightening torque.	TRIFFAUX Vincent	2021-07-23	2021-09-23
1226691	To check if software and troubleshooting procedure are aligned regarding actions and how to react accordingly	FAHE Stephane	2021-07-23	2021-09-28
1227035	Supply 1 extra Litz Cable and 2 Transformers as consignment stock	VACCARGIU Valentin	2021-10-17	0000-00-00
1248700	Is there any tooling specification for tightening ?	SAFFRE Sebastien	2021-09-23	2021-09-23
1248705	Check in the SRIL if there is specific requirement regarding the connection	LEDUNE Benjamin	2021-09-23	2021-09-23
1248707	To check if there was preventive maintenance already performed on CVS	STEVENS Valerie	2021-09-23	2021-09-23
1248751	REX on the connection to obtain from similar projects. Selected project : HANOI. Action : to check on accessible connections the torque conformance (10 CVS)	LEDUNE Benjamin	2021-10-05	0000-00-00
1248752	Check on similar project the torque applied (Hanoi, Dubai)	NDONGALA-NZUZI Jacques	2021-09-28	2021-09-28

## 8D Report

1248753 To obtain production sheets for 5 CVS NOK and 5 CVS OK

DOUCET Romain

2021-10-05

0000-00-00

D6	Solution
What does the solution consist of?	
Mod reference	
Target start Date	2022-02-25
Start Date (D6-KPI)	
% done	0% on

## List of actions to deploy corrective solutions

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