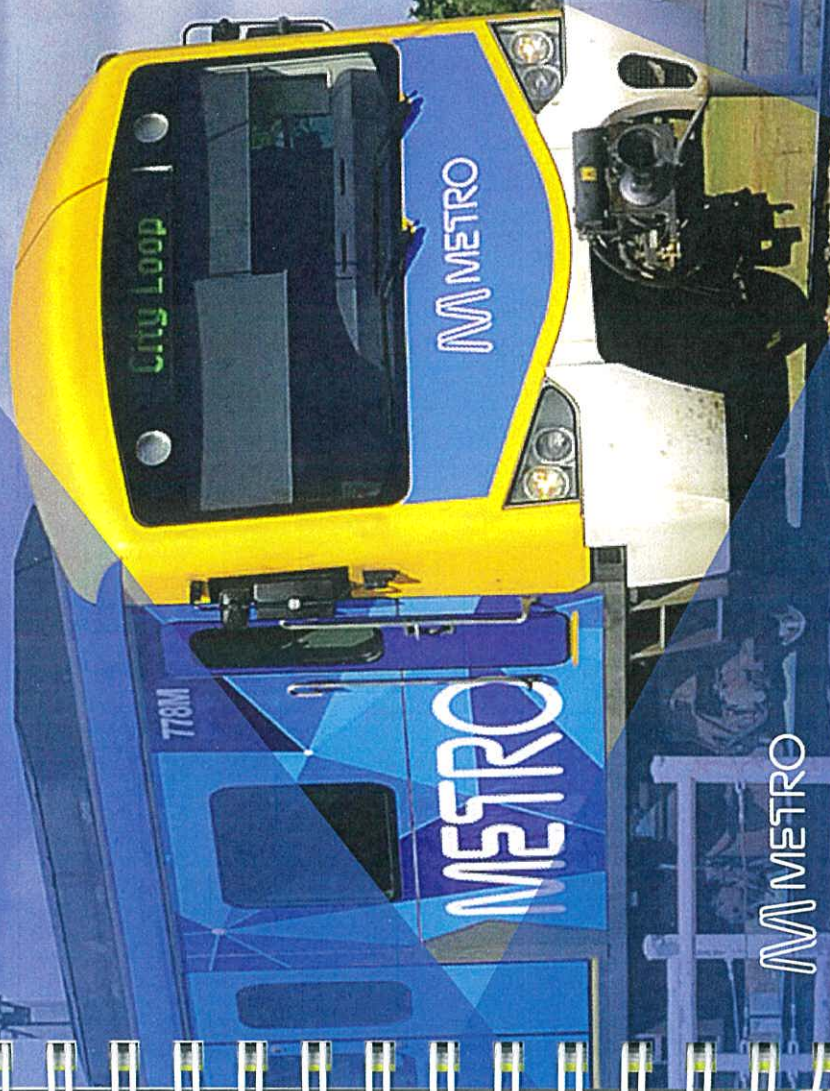




Driver Training Stage 2

2016

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Driver Training Stage 2

Session 1 Operational Issues



Handling Wheelchair Ramps



Handling Wheelchair Ramps Safely



To avoid injury, when sliding the DDA ramp in or out of the ramp cabinet, care must be taken to ensure hands are not jammed between the ramp and saloon door frame, or the ramp and the cabinet frame.

Unlocking Cabinet and Removing Ramp

- Ensure saloon door is fully open.
- Place tri key into DDA ramp cabinet lock.
- Turn clockwise to unlock.
- Swing cabinet door open.
- Keeping your back straight and without twisting, grasp the DDA ramp by both handles and slide it out of the cabinet.
- Inspect the ramp for damage.



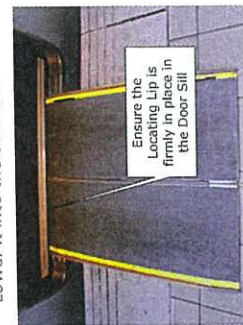
Handling Wheelchair Ramps Safely

Placing Ramp into Saloon Door Sill

- Ensure the saloon door area is clear of obstruction (e.g. customers, prams).
- Keeping your back straight, bend your knees and place the ramp on the centre of saloon door sill.
- Keeping your back straight, bend your knees further and lower both ramp leaves toward yourself.
- Ensure the ramp lip is in place in door sill.
- Release ramp handles.



- Walk around to other side of ramp.
- Keeping your back straight, bend your knees, reach across ramp and grasp the top ramp handle.
- Raise the top leaf toward yourself.
- Lower it into the door sill.



Handling Wheelchair Ramps Safely

Removing Ramp from Saloon Door Sill

- Keeping your back straight and knees bent, grasp the ramp handle nearest you.
- Ensure that no one is about to step onto the ramp.
- Raise the leaf and fold ramp in half by lowering the leaf to the opposite side.
- Release ramp handle.
- Walk around to other side of ramp.



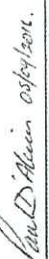
Handling Wheelchair Ramps Safely



- Keeping your back straight and your knees bent, grasp both handles of ramp.
- Ensure that customers are standing clear.
- Keeping your back straight, straighten your knees and lift the ramp to the vertical position.
- Keeping your back straight and without twisting, replace ramp into ramp cabinet, ensuring hands are clear of the cabinet frame.

	ASSISTING A CUSTOMER WITH SPECIAL NEEDS
L3-TSD-PRO-027	Version: 3 Effective from: 6 th September 2016

Approval

Document Author	Name	Position	Signature
	Neil Attwell	Acting Head of Train Services Operations	
Document Endorser	Tim Young	Director Strategy & Support Services	
Approving Manager	Paul D'Alessio	General Manager Train Services	

Amendment Record

Approval Date	Version	Description
31/01/2012	1	First issue Metro. This version superseded: - cml-8-13-tsg-014 - Cab Unattended Procedure when Assisting Customers with Special Needs Please dispose of all copies. This version removes: - Train securing procedures This version introduces: - Reference to L3-TSD-PRO-017 Cab Unattended Procedure for train securing procedures - Definition of a Customer with Special Needs - Definition of saloon doors to be utilised - Driver capacity assessment for safe boarding
12/08/2013	2	This version introduces: - A broadening of the example of a Customers with Special Needs to include vision impaired persons - Method vision impaired persons may be assisted - Increased stress on ramp safety
06/09/2016	3	This version formalises boarding and alighting a Customer with Special Needs at Secondary Doors as required by the Exemptions to the <i>Disability Standards for Accessible Public Transport 2002 (Cth)</i> granted on 1 October 2015.

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	ASSISTING A CUSTOMER WITH SPECIAL NEEDS
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1. Purpose

This procedure describes the Driver procedures to safely and promptly assist a Customer with Special Needs.

2. Scope

This procedure includes definitions of special needs and details assistance requirements and methods.

3. Abbreviations and Acronyms

- 'ESB' means 'Emergency Stop Button
- 'FMP' means Fault Management Procedure

4. Responsibilities

- Train Drivers and Trainee Train Drivers.

5. Definitions

A 'Customer with Special Needs' has the same meaning as a 'person with special needs' as defined by regulation 5 of the *Transport (Compliance and Miscellaneous) (Conduct on Public Transport) Regulations 2015 (Vic)* and means:

- A person who, because of age, disability, illness or pregnancy has a special need to travel in a seat; or
- The carer of a person referred to in paragraph (a), if the person has a need for the carer's continuing or immediate assistance.

For the avoidance of doubt, a Customer with Special Needs includes a customer with vision impairment.

'Primary Doors' means:

- for Comeng and X'Trapolis: Saloon doors 1 & 6; and
- for Siemens: Saloon doors 1 & 4.

'Secondary Doors' means:

- for Comeng and X'Trapolis: Saloon doors 2 & 5; and
- for Siemens: Saloon doors 1 & 4 of the leading centre carriage.

6. Introduction

- A Driver is responsible for boarding and alighting a Customer with Special Needs.
- A Customer with Special Needs may require a ramp to board and alight.
- When required to leave the cab the train must be secured in accordance with work instruction L3-TSD-PRO-017 Cab Unattended Procedure.

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	ASSISTING A CUSTOMER WITH SPECIAL NEEDS
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7. Ramps

- 7.1 Ramps are provided on all trains. If a Customer with Special Needs requests a ramp, a Driver must provide a ramp for their use.
- 7.2 A Driver may be required to place the ramp to enable the safe boarding of a Customer with Special Needs, for example wheelchairs, walking frames, crutches and prams.

8. Ramp Safety and Defects

- 8.1 A Driver must be mindful of the risk of personal injury if ramps are incorrectly or roughly handled. Care must be taken at all times when placing and storing the ramp.
- 8.2 A Driver must ensure they keep knees bent and back straight while using the ramp and use it according to handling instructions delivered in Driver training.
- 8.3 A Driver must ensure that any persons in the vicinity are well clear before placing the ramp.
- 8.4 In accordance with the FIMP, a Driver must report any defects with the ramp (eg, sharp or bent edges), or with the wall bracket/saloon cabinet.
- 8.5 If a ramp is found to be unserviceable, a Driver must exchange it with a centre motor ramp at the first opportunity and then report as per the FIMP.

9. Process

- 9.1 A Customer with Special Needs who requires assistance from a Driver is required to be waiting at the 3 or 6 car mark on the platform when the train stops.
- 9.2 In the first instance, a Driver will utilise the Primary Doors to board and alight a Customer with Special Needs.
- 9.3 Equivalent access must be provided to an alternative door in the following circumstances relating to the Primary Doors:
- If an allocated space is not available; or
 - To ensure access to unique facilities; or
 - To ensure a Customer with Special Needs can both board and alight the Train.
- 9.4 In these circumstances, a Driver will utilise the Secondary Doors to board and alight a Customer with Special Needs.
- 9.5 In relation to the Secondary Doors for Siemens, a Driver will:
- apply the full cab unattended procedure to the leading cab;
 - proceed to and activate the leading centre cab (ensuring the door inhibit is activated);
 - use the ramp provided at doors 1 or 4;
 - deactivate the leading centre cab; and
 - return to the leading cab, activate and proceed.
- 9.6 A Driver must report any associated delays 3 minutes or over to Metrol.

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9.7 In relation to Driver assistance for a Customer with Special Needs:

- Regardless of any special need, a Driver must not request any customer to alight in favour of allowing any other customer to board.
 - Should a Driver consider it safe to do so and there is sufficient space on the train, a Driver may request an able bodied customer to vacate an allocated space to make space for a Customer with Special Needs.
 - Should an able bodied customer refuse to vacate an allocated space, a Driver must not engage further with that customer.
- 9.8 A Driver must report any customer behaviour matters to Metrol or the police.
- 9.9 A Driver must make an assessment to ensure a Customer with Special Needs can be safely boarded at the Primary Doors and/or the Secondary Doors, taking into consideration the location, time of day and service frequency. If safe boarding is not possible, a Driver must inform the Customer with Special Needs that, for their own safety, they are to utilise the next available service.
- 9.10 In all cases, a Driver must inform Metrol of the location and subsequent delays and submit a Driver's Incident Report.
- 9.11 A Driver must ascertain the station at which a Customer with Special Needs wishes to alight, and on arrival there assist them from the train, including provision of the ramp if required.
- 9.12 Assistance may also include, for example, a manual announcement of the next station to enable a vision impaired Customer with Special Needs to alight unassisted.
- 9.13 A Customer with Special Needs may communicate their travel requirements in various ways. A Driver must be aware of this when ascertaining their destination.
- 9.14 A Driver must use available reminder note pads and place them in a prominent position in the cab.
- 9.15 If a Driver is relieved en-route, the relief Driver must be advised of any Customer with Special Needs on the train and ensure that they alight at their destination.
- 9.16 Should a disruption to services occur, a Driver must advise Metrol of any Customer with Special Needs who requires further assistance to reach their destination.

10. Securing a Terminating Train - Relief at Opposite End

- 10.1 When a Driver is to be relieved and arrives at the terminating station and the train is to depart in the opposite direction, the following additional step must be taken prior to alighting a Customer with Special Needs. This prevents inadvertent departure while the Driver being relieved is attending to the Customer with Special Needs.

Coming:

- The brake controller must be moved to and left in EMERGENCY until after the Customer with Special Needs has been assisted and the cab is isolated
- Siemens and X'Trapolis:
- The ESB must be activated until after the Customer with Special Needs has been assisted and the cab is isolated

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11. Reference and Legislation

- L3-TSD-PRO-017 Cab Unattended Procedure References and Legislation
- *Transport (Compliance and Miscellaneous) (Conduct on Public Transport) Regulations 2015 (Vic)*

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	ASSISTING A CUSTOMER WITH SPECIAL NEEDS	Document No. TSD-461
Approved General Manager Train Services	Version: 1	Page 1 of 2

Drivers Please Note:

On 9 September 2016, changes to the 'Assisting A Customer with Special Needs' procedure will come into effect, as required by the Exemptions to the *Disability Standards for Accessible Public Transport (2002) (Cth)* granted on 1 October 2015.

The following changes relate to boarding on all fleet types:

1. In the first instance, a Driver will utilise the following primary doors to board and alight a Customer with Special Needs (collectively the **Primary Doors**):
 - Comeng and X'Trapolis: Saloon doors 1 & 6.
 - Siemens: Saloon doors 1 & 4.
2. Equivalent access must be provided to an alternative door in the following circumstances relating to the Primary Doors:
 - If an allocated space is not available; or
 - To ensure access to unique facilities; or
 - To ensure a customer can both board and alight the Train.
3. In these circumstances, a Driver will utilise the following secondary doors to board and alight a Customer with Special Needs (collectively the **Secondary Doors**):
 - Comeng and X'Trapolis: Saloon doors 2 & 5.
 - Siemens: Saloon doors 1 & 4 of the leading centre carriage.
4. In relation to the Secondary Doors for Siemens, a Driver must first offer a Customer with Special Needs the choice to board at the leading centre carriage or wait for the next service. Should the Customer with Special Needs choose to be boarded, a Driver will:
 - apply the full cab unattended procedure to the leading cab;
 - proceed to and activate the leading centre cab (ensuring the door inhibit is activated);
 - use the ramp provided at doors 1 or 4;
 - deactivate the leading centre cab; and

TSD-461 Assisting A Customer with Special Needs

Issued 09/09/2016
Expiry 09/12/2016

METRO	ASSISTING A CUSTOMER WITH SPECIAL NEEDS	Document No. TSD-461
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- return to the leading cab, activate and proceed.
5. In relation to Driver assistance for a Customer with Special Needs:
- Regardless of any special need, a Driver must not request any customer to alight in favour of allowing any other customer to board.
 - Should a Driver consider it safe to do so and there is sufficient space on the train, a Driver may request an able bodied customer to vacate an allocated space to make space for a Customer with Special Needs.
 - Should an able bodied customer refuse to vacate an allocated space, a Driver must not engage further with that customer.
6. A Driver must make an assessment to ensure that a Customer with Special Needs can safely board and alight at the Primary Doors and/or the Secondary Doors, taking into consideration the location, time of day and service frequency. If safe boarding and alighting is not possible, a Driver must inform the Customer with Special Needs that, for their own safety, they are to utilise the next available service.
7. In all cases, a Driver must inform Metrol of the location and subsequent delays and submit a Driver's Incident Report.

Best Regards

N. Attwell

Neil Attwell
Acting Head of Train Services Operations

PROTECTING THE TRAIN YOU ARE WORKING ON

WORKING BETWEEN VEHICLES

Drivers must not go in between vehicles until they are satisfied that no further movement will take place. If a Driver is working alone, the automatic air brake must be applied and isolated and the park brake applied unless requirements during fault finding stipulate otherwise. If there are two or more Drivers, a STOP hand signal must be exhibited and a clear understanding of what is to occur reached.

ENTERING AND EXITING DRIVING COMPARTMENTS

Handrails and steps are provided at driving compartment doors and should be used at all times. During wet weather handrails may become slippery and gloves must be used to minimise hazard risk.

Entering Cab

When entering a cab from the ground a Driver must:

- Unlock and open the cab door
- Place bag into the cab clear of the door
- Place a hand on each handrail
- Place one foot on bottom step
- Climb into the cab maintaining three points of contact at all times

Exiting Cab

Exiting the cab requires more care, as there are more dangers involved. The following procedures should be followed:

- Drivers must look out of the cab door to check for any moving train on the adjacent track and if so, Drivers cannot alight until any moving train has stopped.



- The ground below the door needs to be looked at to check for any obstructions, eg fire hydrant.

When exiting a cab from the ground a Driver must:

- Place bag clear of the door near exit
- Set door snap back to LOCK
- Place one hand across the front of body on one handrail
- Turn backwards
- Place the other hand on the other handrail
- Place one foot on top step
- Maintain three points of contact until on ground
- Remove bag from cab
- Close and lock cab door.

Drivers must not jump out of the doorway

HAND OPERATED POINTS

Trains are routed to different lines by the operation of points.



Points (in the Facing Direction)

Points consist of two moveable rail blades, which direct the train's wheels onto a different line.

Points can be operated remotely from a signal box, control panel or locally at the points themselves by a hand lever.

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File: M9222L01-H(4) Sidings Infrastructure and Safety.doc

METRO	DETRAINING OF PASSENGERS FROM SUBURBAN ELECTRIC TRAINS AT NON PLATFORM LOCATION	
L2-OPS-PRO-007	Version: 2	Effective from: 1 st December 2012

Approval

Document Author	Name	Position	Signature
Document Endorsers	Lindsay Underwood	Development and Implementation Manager	
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Approving Managers	Jim Dimitrioski	Manager Network Operations	
	Perry Ramsey	Manager Train Service Delivery	
	Wayne Walsh	General Manager Current Operations	

Amendment Record

Approval Date	Version	Description
07/08/2012	1	Improved processes following post incident review
	2	Update to section 5 re availability of staff for detrainning

Approving Manager: GM Current Operations/Manager Train Service Delivery	Approval Date: 01/12/2012	Next Review Date: 01/12/2015
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	DETRAINING OF PASSENGERS FROM SUBURBAN ELECTRIC TRAINS AT NON PLATFORM LOCATION	Version: 2	Effective from: 1 st December 2012
L2-OPS-PRO-007			

1. Purpose

To provide guidelines to be adopted by all Metro Trains employees for the management of passengers when detraining is required when the train is not at a platform. Or cannot be moved to a platform in under 30 minutes

2. Scope

This procedure will apply to all staff involved in the detraining of passengers from Suburban Electric trains at a non platform location. The evacuation of trains can be hazardous and should only be undertaken only when the danger of the situation demands immediate evacuation or when adequate resources are in place to assist with the management of the introduced risks while detraining.

3. Definitions

Passengers:
Whether it is as a result of an incident, injury or pre-existing condition all passengers will fit into one of the 3 categories below:

- Those that can evacuate unassisted.
- Those that may require some assistance but are able to move themselves.
- Those that cannot evacuate without assistance.

Hazard:

A source of potential harm or a situation with potential to cause loss, injury or illness.

Hazard Assessment of site:

An initial assessment of any obvious or foreseeable hazards will help an individual to assess a situation from a safety perspective as it is unfolding and react to the best of their ability using the information available utilising learned skills as well as other available resources.

The process starts with an evaluation of the environment taking into account any working procedures, rules or regulations specific to an incident.

Senior Network Controller:

Nominated Operations Manager at Metrol responsible for initiating the critical incident management process.

The Senior Network Controller is the primary point of contact both during standard business hours and after hours.

4. Definitions and Responsibilities

Group Operations Managers are to ensure all relevantly trained staff are familiar with this procedure.

Group Driver Managers are to ensure all relevantly trained staff are familiar with this procedure.

Train control is to ensure all relevantly trained staff are familiar with this procedure.

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Train Services Officers will assist with information and/or resources to evacuate passengers who do not require medical attention this includes ensuring adequate staffing and monitoring where they are to remain on the train until the train can be moved to a platform.

Network Operations Staff will assist with information and/or resources to evacuate passengers who do not require medical attention this includes ensuring adequate staffing and monitoring where they are to remain on the train until the train can be moved to a platform.

5. Process

When it becomes necessary to detain passengers at a non platform location due to the train not being able to move forward or return to a platform, Metrol will co-ordinate all arrangements with the train driver and other staff on site. Passenger evacuation from trains always presents difficulties and hazards and should only be undertaken when there is a clear understanding that the train is to be evacuated or the danger of the situation demands immediate evacuation.

The Site Coordinator will perform a hazard assessment and identify which options are available.

Once the assessment has been made the information is to be used on site during a tool box discussion prior to commencing detraining. It should also be repeated to all other assistance that arrives on site afterwards.

For example (but not limited to)

Passengers should remain in the unaffected carriage for as long as possible as this is the safest place until assistance arrives and any unauthorised detraining by passengers is to be reported to Metrol.

1. Assisted self evacuation:

- Life threatening - where the outcome is beyond immediate control.
- Non life threatening- emergency service not required.

2. The Site Coordinator will seek and assess availability of passengers to assist with detraining passengers with special needs.

Where available a staff member is to perform an assessment of the area and the intended evacuation route to be taken. This may also include placement of other passengers to identify hazards or obstructions such as suitable walking surface, overhead lines down and opposite or parallel running lines. The use of the equipment carried in Incident Response Vehicles for barricading and lighting areas should also be arranged if needed.

All opportunities for assistance is to be sought from Police Officers in addition to the normal deployment of Authorised Officers, Station staff and Train Services Officers before detraining, including the availability to assist with the transportation of passengers with special needs.

The use of Drivers cab doors as exit points is also closely supervised to ensure that there is no interference with cab equipment by unauthorised persons. Excluding Hitachi Trains.

Alternative transport is made available to transfer passengers if a train on an adjoining line is not used to take passengers to a station.

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At the completion of the detrainning activities the TSO incident report to include the details including time, number of passengers involved and those involved in assisting

6. Priorities for Evacuation

In the event of an evacuation the passengers should be detrained in the following order:

- Those that can evacuate unassisted.
- Those that may require some assistance but are able to move themselves.
- Those that cannot evacuate without assistance

6.1. Unassisted Persons

Will be evacuated as directed by staff/emergency personnel and can be utilised to provide assistance to other passengers. E.g. assisting passengers using the ladder or any other area where a hazard or obstacle is unavoidable.

6.2. Those Requiring Some Assistance

Those that may require some assistance but are able to move themselves.

For example (but not limited to)

- Persons with Visual Impairments
- Persons with Hearing Impairments.
- Using Crutches, Canes, or Walkers.
- Passengers, who are "not in control" whether, caused by illness injury, state of shock or drug/alcohol effects.

If the person is having difficulty exiting quickly, treat him/her as if injured for evacuation purposes utilising other passengers or assigning someone to these passengers to assist them.

6.3. Those Requiring Full Assistance

In the event of an incident on a train, except when the train is at a platform, we will not detain these passengers during an evacuation, unless there is a life threatening situation. This is because there is always a risk of causing injury to people with physical disabilities in an evacuation

Whenever possible we will move the passenger to a safer part of the train until arrangements can be made to move the train to the nearest station

The needs and preferences of such people will vary. Some people have minimal ability to move and lifting them may be painful and/or injurious. This needs to be taken into account when passing this information onto the emergency services who will be attending.

Always consult the person as to his / her preference with regard to:

- Ways of being removed from the wheelchair.
- The number of people necessary for assistance.
- Whether to extend or move extremities when lifting because of pain, catheter bags, braces etc.
- Being carried forward or backward
- After-care, if removed from wheelchair.

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- In some instances where assistance is not achievable a staff member may be required to remain with the vehicle until it is taken to an available platform. Where staff are unable to negotiate a safe evacuation staff are to wait for emergency services to assist.

6.4. The Danger of the Situation Demands Immediate Evacuation.

- The situation is so severe that the inconvenience of evacuating passengers from the train is less of an inconvenience to those passengers then if they remained on the train.
- When all other methods of solving the problem have proved unsuccessful resulting in a train being totally disabled between stations.
- Passengers on a train would be evacuated in the following situations:
- The danger of situation demands immediate evacuation such as fire, health hazards or situations that endangers human life.
- When Train Driver is notified by train controller to evacuate passengers from train.

Conditions in emergency situations can vary; therefore it is imperative that a careful assessment of all factors be made before a decision to evacuate is made by Train Controller / Train Driver.

In all cases where the train can proceed at reduced speed either independently or with the assistance of a following train, the train must go forward at least to the next station where the situation shall be reassessed and if necessary detrained.

6.5. Sudden Extreme Emergency

In the case of sudden extreme emergency, the Train Driver may evacuate passengers from train without the authority of the Train Controller. In doing so, the Driver at the first opportunity must contact the Train Controller.

7. Records and Enquiry

Site coordinator must record all information in emergency management log book and forward report on completion of incident.

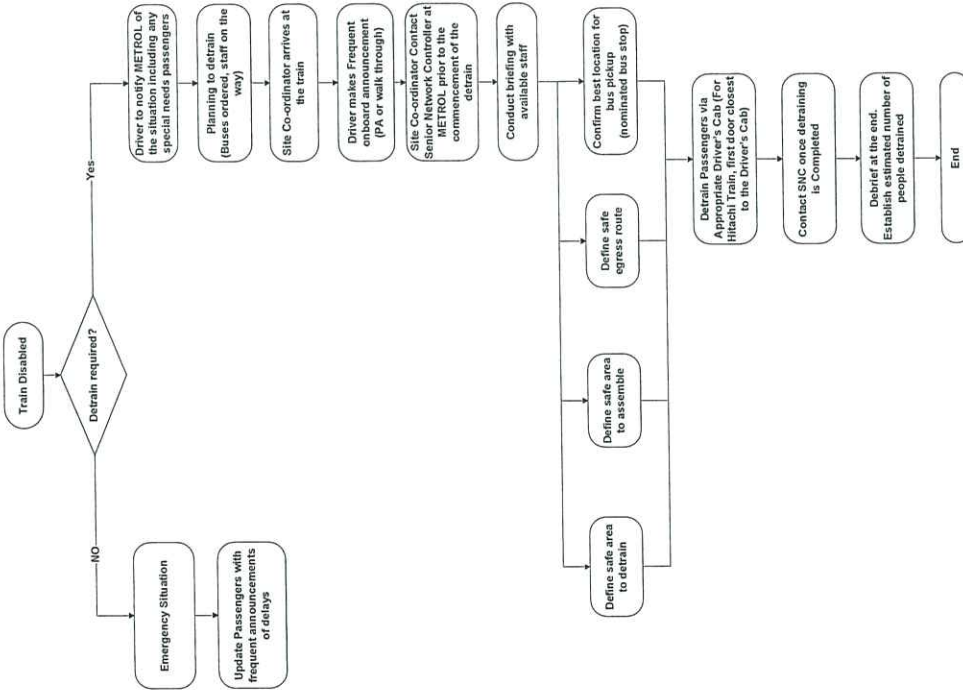
8. Related Documents

Safety Practices Detraining Customers at a Non Platform Location SWP 004
L2-SQE-PLA-003 Emergency and Crisis Management Plan

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Appendix: Detraining Process Flowchart



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METRO	Detraining of Passengers Near Construction Sites	Document No. TSD-421
Approved General Manager Train Services	Version: 1	Page 1 of 1

Drivers Please Note:

If it becomes necessary to evacuate passengers at a non-platform location where construction works are in place along the rail corridor, Drivers must seek instructions from Metrol who will co-ordinate all arrangements with staff and/or emergency services on site.

Fenced off construction areas must not to be entered without the authority of the Senior Train Controller.

Any concerns must be communicated with the Senior Train Controller at Metrol.

Regards

Anthony Arcaro

Projects Operational and Signal Route Specialist

Driving Our Customers

Train Drivers have faced many challenges over time in their evolution to Driver only operation, vastly improving their contribution to our service.

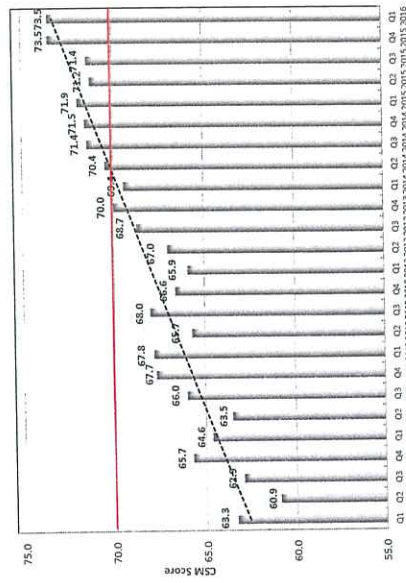
Drivers are a very important part of the Customer Experience and this is evident every day in how they do their job:

- Drivers regularly go above and beyond their duties.
- Drivers care about our customers and the important role they play.
- Drivers can handle extreme pressure and make sound decisions.
- Highest Customer Satisfaction rating of all Metro front line staff.
- Brand is respected externally (Customer Satisfaction).



Metro Trains Customer Satisfaction Q1 2016

Metro Trains Overall Customer Satisfaction



Source: PTV Walle Report

Customer Satisfaction – Train Drivers



Customer Feedback (Complaints) Areas for Improvement

- In the 6 months since 1 Jan 2016:
 - We have received 447 complaints, 30 complaints were substantiated, 252 were not substantiated and 115 were FVI.
- The major contributors to these figures are:-
 - Door closure issues 32%
 - Lack/Poor Customer Service 26%
 - Complaints against Drivers 22%
- Investigation process:
 - All complaints come via PTV and must be thoroughly investigated this could involve obtaining a statement from the Driver, obtaining relevant CCTV footage, downloading of Vicores and PIS.
 - How you can help:
 - Be mindful of platform procedures ensuring no one is boarding/alighting the train when you close the doors.
 - Keep Customers advised via PA announcements of any delays
 - Complete an Incident Report prior to the end of your shift for any incident

"Just stopping at Flagstaff. What is the driver doing. Accelerating fast then slowing down suddenly and everyone is going flying and jerked around, can't this person drive a train?"

"I am on the Sandringham line from Flinders and the driver is playing Eminem over the loudspeakers. Make it stop!"

"On the train to Flinders St during a delay. I watched the driver open his door and throw an empty coffee cup into the park next to the train! What steps do you take to reduce the impact your staff has on the environment?"



Customer Feedback - Compliments

"Great work by our train driver attempting to remove a dog from the tracks, and she even got bitten. Way above the call of duty."

"Great driver, said over the PA that he'd like to give a warm welcome to 3 special passengers – those that don't have their head phones on."

"I wanted to let you know how enjoyable my train journey was – catching the driver looking and smiling at me. When I got off and saw him walking I managed a shy smile and a wave which he returned. I didn't have the courage to stop and tell him that he's one good-looking train driver so please Metro Customer service please pass on this message."

• In the 6 months since 1 Jan 2016:

• We have received 142 Compliments.

• We receive many & varied compliments for the drivers ranging from:

- ❖ Appreciating the PA announcements, the professional attitude.
- ❖ The quality of the jokes.
- ❖ Train running commentary that some drivers provide.

• Investigation process

• To ensure that credit goes to the right person we investigate every compliment and ensure feedback is provided to the relevant driver

• How you can help

- ❖ Its all about communication so keep the customers advised of any delays or changes in the running of the service.
- ❖ If its raining you may want to remind them not to leave their umbrellas on the train.
- ❖ In case of disruptions offer advice on alternate travel arrangements ie: trams or buses.

PA announcements suggested network locations

Group	Corridor	Location
Burnley	Ringwood	UP – Departing Box Hill
		UP – Departing Camberwell
		DOWN – Departing Richmond DOWN – Departing Box Hill
	Glen Waverley	UP – Departing Darling DOWN – Departing Richmond
		UP – Departing Camberwell DOWN – Departing Richmond
	Alamein	

PA announcements suggested network locations

Group	Corridor	Location
Clifton Hill	South Morang	UP – Departing Preston UP – Clifton Hill DOWN – Departing Parliament DOWN – Departing Clifton Hill
	Hurstbridge	UP – Departing Heidelberg UP – Departing Westgarth DOWN – Departing Parliament DOWN – Departing Heidelberg

PA announcements suggested network locations

Group	Corridor	Location
Dandenong	Pakenham	UP – Departing Dandenong UP – Departing Carnegie DOWN – Departing Richmond DOWN – Departing Caulfield
	Cranbourne	UP – Departing Dandenong UP – Departing Carnegie DOWN – Departing Richmond DOWN – Departing Caulfield

PA announcements suggested network locations

Group	Corridor	Location
Northern	Craigieburn	UP – Departing Broadmeadows
		UP – Departing Essendon
		DOWN – Departing Flagstaff
		DOWN – Departing Essendon
	Upfield	UP – Departing Coburg
		DOWN – Departing Flagstaff
	Sunbury	UP – Departing Sunshine
		UP – Departing Footscray
		DOWN – Departing Flagstaff
		DOWN – Departing Sunshine

Metro | Driver Training Stage 2 |
2016

PA announcements suggested network locations

Group	Corridor	Location
Cross City	Frankston	UP – Departing Cheltenham
		UP – Departing Caulfield
		DOWN – Departing Richmond
		DOWN – Departing Caulfield
	Sandringham	UP – Departing Elsternwick
		DOWN – Departing Richmond
	Werribee	UP – Departing Laverton
		UP – Departing Footscray
		DOWN – Departing Flagstaff
		DOWN – Departing Newport

Metro | Driver Training Stage 2 |
2016

PA announcements suggested network locations

Group	Corridor	Location
Central	Flinders St	ARRIVAL – Transposal alert DEPARTURE – destination message

Transposal Alert Message

"Hi everyone, our next stop is Flinders St Station.

If you're leaving us here, don't forget to take all your belongings with you.

If you're travelling beyond Flinders St, it may be worth just checking the information screens to make sure you're on the right train.

Thanks for choosing to travel with us and enjoy the rest of your evening."

Metro | Driver Training Stage 2 |
2016

PA Announcements

CONTENT	MINOR DELAYS (4%)		MAJOR DELAY (1%)	
	Day	Night	Day	Night
TONE	We are sorry for the short delay	Services are still running and we will be moving shortly	Please check with station staff for local alternatives	I will keep you fully informed as we resolve the problem
FIRST ANNOUNCEMENT	Cautious & empathetic	Serious, helpful & empathetic	Serious, helpful & empathetic	Focused on customer safety
FREQUENCY	Within 2 minutes of stopping	Within 2 minutes of stopping	Within 2 minutes of stopping	Within 2 minutes of stopping
	Every 5 minutes after that	Every 5 minutes after that	Every 5 minutes after that	Every 5 minutes after that

Metro | Driver Training Stage 2 |
2016

Customer travel needs & emotional state must be the priority for drivers for what we say:

- ❖ These needs vary at different times of day & night

Example – Ringwood Corridor departing Box Hill – during times of **Good Service**

"Good morning everyone and welcome aboard. [Greeting]
We'll be running express to Richmond and then via the city loop to Flinders St.
Our next stop will be Camberwell.
At this time we're running a **good service** this morning at this time with no delays so we should have you at your destination on time. [Translate]
Thanks for travelling with us and enjoy the rest of your day." [Farewell]



Example – Ringwood Corridor departing Box Hill – during times of **Minor Delay**

"Good morning everyone. [Greeting]
We're currently experiencing **minor delays** on services heading into the city. This is due to a signalling problem near Camberwell station.
At the moment our journey time is expected to be around 10 minutes longer than usual. Should there be any further changes I'll let you know ASAP. [Translate]
Thanks for your patience and good morning." [Farewell]



	PA Announcements when Tripping at Signals in a Multiple Signal Failure	Document No. TSD-102
Approved Head of Train Services	Version: 1	Page 1 of 1

Drivers Please Note:

Recently a number of passenger injuries have been reported during emergency braking whilst tripping at signals in sections with multiple signal failures.

To enhance passenger safety and improve communication regarding delays, Drivers will be required to make a PA announcement prior to tripping.

An example of the announcement that could be made is:

"Attention please customers.

Due to a fault with the signalling system, for a short time (or between Station A and Station B, etc) this train will proceed cautiously, stop, move a small distance and abruptly stop again.

Please ensure that you are seated or braced and do not be alarmed as this is the signalling safety system at work.

Unfortunately this will cause some delay and Metro apologises for any inconvenience.

Thank you for your patience."

Best Regards

Tim Young
Train Services Operations Manager

	Driver Announcements	Document No. TSD-083
Approved Manager Train Service Delivery	Version: 1	Page 1 of 1

Drivers Please Note:

Drivers are reminded of their obligations regarding announcements as part of our responsibility to keep customers fully informed.

Ensure automatic announcements are operating accurately by confirming correct TDN in the DDU and monitoring DDU station display. Automatic announcements must be supplemented by manual announcements in times of disruption.

When the destination indicator, PIDS, or automatic announcements are inoperative or incorrect, or the TDN cannot be entered in DDU, make frequent manual announcements of destination, junction connections and express running. Faults encountered with these systems must be promptly reported via the FMP.

When altered stopping conditions are introduced, service change special messages must be entered into the DDU, and additional frequent manual announcements of the changes made.

When late running of three minutes or more occurs, an announcement giving the cause of the delay and likely resumption must be made.

In conclusion, announcements are a vital tool to make sure all of our customers are fully informed, and a method of avoiding cause for customer complaint.

Best Regards


Perry Ramsey
Manager Train Service Delivery

TSD-083 Driver Announcements

Issued: 25/02/2013

	Altona Junction Line Speed	Document No. TSD-431
Approved General Manager Train Services	Version: 1	Page 1 of 2

Drivers Please Note:**Change in Maximum Speed Limit : Newport to Altona Junction.**

The attached SW.144/2016 is the reference source for this notice to advise Drivers of the change to the maximum line speed applicable from Newport to Altona Junction.

When traveling from Newport to 197 meters on the up side of Maddox Road level crossing, the maximum line speed is :	80 KPH No change.
From 197 meters on the Up side of Maddox Road level crossing to Altona Junction the maximum speed is :	115 KPH New Speed Limit

The new speed limit applies to both the East and West lines In the Up and Down directions.

A map of Newport to Altona Junction has been provided on the back of the document to assist in understanding the locations where the speed changes.

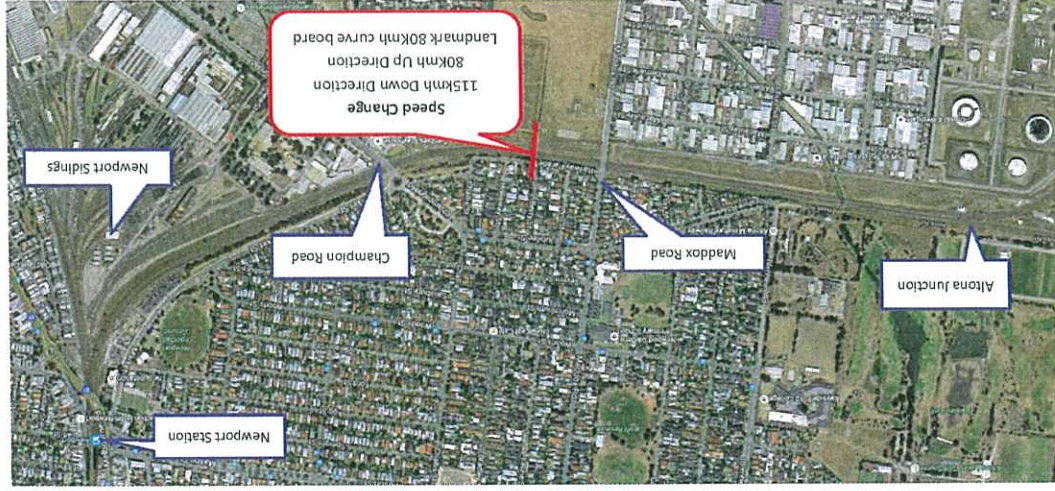
Regards,
Peter Boyle



Technical support Manager-Train Services

TSD-431 Altona Junction Line Speed Change

Issued: 06/06/2016



~~SW.139/2016 IS CANCELLED AND REPLACED BY THIS CIRCULAR.
THE TABLE BELOW HAS BEEN AMENDED TO REFLECT THE CORRECT SPEED FOR EMU
BETWEEN NEWPORT SOUTH (KP2.115 UP SIDE MADDOX RD) AND ALTONA JUNCTION~~

NEWPORT SOUTH TO ALTONA JUNCTION

LOCATION OF LINE SPEED CHANGE

**AMENDMENT TO METROPOLITAN WORKING TIMETABLE SYSTEM DESCRIPTION
(WTT ADDENDA) DECEMBER 2013.**

The line speed kilometre change location for the section Newport and Altona Junction is amended to reflect the actual speed change location for the various train types.

The speed change location is at KP 12.115 (approximately 197 metres on the up side of Maddox Road level crossing).

Amend pages A76 and A77 by altering the wording under the heading **MAXIMUM LINE SPEED** as highlighted in italics below.

FOOTSCRAY TO WERRIBEE (VIA WESTONA)

Continued from page A78

Continued from page A78

Type	TRACK	ELECTRIC										STEAM					RAILCAR			
		EMU	BAU	E	L	A	D	J	K	R	Y	Single to city	Double to city	Pass	Goods					
MAXIMUM LINE SPEED	Pass	80	NA	80	65	65	65	65	65	65	65	60	80	80	65	65				
	Goods	50	NA	50	50	50	50	50	50	50	50	50	NA	NA	NA	NA				
	Pass	10	NA	80	65	80	80	80	80	80	80	80	80	80	80	80				
	Goods	50	NA	50	50	50	50	50	50	50	50	50	NA	NA	NA	NA				
	Pass	60	NA	80	30	30	30	30	30	30	30	30	30	30	30	30				
	Goods	30	NA	30	30	30	30	30	30	30	30	30	30	NA	NA	NA				
	Pass	10	NA	NA	NA	NA	10	10	10	10	10	10	10	10	10	10				
	Goods	10	NA	NA	NA	NA	10	10	10	10	10	10	10	NA	NA	NA				
	Goods	65	65	65	65	65	65	65	65	65	65	60	65	65	65	65				
	Pass	130	115	80	65	115	100	95	80	80	100	60	130	130	100	115				
	Goods	80	NA	80	65	80	80	80	80	80	80	60	NA	NA	NA	NA				
	Pass	65	65	50	50	50	50	50	50	50	50	50	50	50	50	50				
	Goods	50	NA	50	50	50	50	50	50	50	50	50	NA	NA	NA	NA				
	Pass	80	80	80	65	80	80	80	80	80	80	80	80	80	80	80				
	Goods	60	NA	60	60	60	60	60	60	60	60	60	NA	NA	NA	NA				
Pass	130	115	80	65	115	100	95	80	80	100	60	130	130	100	115					
Goods	80	NA	80	65	80	80	80	80	80	80	60	NA	NA	NA	NA					
MAXIMUM LINE SPEED	Type	A	B	BL	H	H	N	GH	XR	Y										
			BL	G	T	P	T	S	X											
	Pass	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65				
	Goods	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50				
	Pass	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80				
	Goods	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50				
	Pass	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30				
	Goods	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30				
	Pass	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10				
	Goods	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10				
	Pass	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65				
	Goods	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65				
	Pass	115	115	60	100	100	100	115	115	80	100	115	115	80	100	115				
	Goods	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80				
	Pass	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80				
Goods	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80					
MAXIMUM LINE SPEED	Up trains diverging from West line to Double Line																			
	Newport and Newport South <i>(Mainline R&R)</i> Via Main Line																			
	Newport and Newport South <i>(Spur line NSP170)</i> Via Goods Line																			
	Newport and Newport South <i>(Spur line NSP170)</i> Via Goods Line																			
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RAIL SAFETY

SW:144/2016

SW:144/2016

[illegible]

For explanation of letters see page A 58.

A1 TONA JUNCTION TO LAVERTON (VIA PAISLEY)

Continues from page A76

[illegible]

For explanation of letters see page A 58.

Trevor Wyatt,
Rail Safety Manager.

3

3



RAIL SAFETY

SWP 009/2015

SWP 009/2015

DISTRIBUTION:

Metrol, Burnley,
All Metropolitan Stations,
Depots & Signalboxes.

Level 15, 700 Collins Street
10th December 2015

AMENDMENT

METRO TRAINS BURNLEY GROUP OPERATING PROCEDURES

BURNLEY – BURNLEY SIDINGS FAILURE OF SIGNALS

Commencing Monday 14th December 2015, the existing details contained in Metro Trains Burnley Group Operating Procedure No. 3 will be replaced with the following instruction relating to Burnley and Burnley Sidings failure of signals.

The Principle Change is:

- Provision of voice recording facilities at Burnley enabling the transmission of caution orders by telephone communication.

Metro Trains Burnley Group Operating Procedures (Metro Trains Intranet site) will be updated to reflect the change.

David Ward
Manager Network Safety

Per

5

6. Burnley and Burnley Stabling Sidings Failure of Signals

The points and signals at Burnley and Burnley stabling sidings are controlled from Burnley Signal box.

The PABX telephone line at Burnley 9610 6442 / 56442 is recorded.
The Signal Post telephones lines are not recorded.

(a) Should a signal failure occur, the following procedure must be complied with:

- The Driver must immediately contact the Signaller at Burnley by calling PABX number 9610 6442 / 56442.
- The Driver must state name, grade, the number of the home signal which is at the 'stop' position, the train number, originating station and destination.
- The Signaller must observe the signal control panel indications to check that all points in the route are set, locked and detected by ensuring:
 1. Points are not indicated as being "out of correspondence".
 2. All point levers in the affected route are to be operated to the required position and positive detection is displayed.
 3. If positive detection of the point's position is displayed "lever sleeves" must be placed on the points in the required position.
- The Signaller must then complete a Caution Order and transmit the contents to the Driver. The Signaller and Driver must exchange names and the Driver's name endorsed on the Caution Order. It will not be necessary for the Driver to take down details of the Caution Order, however must confirm:
 - The train describer number.
 - The number of the signal concerned.
 - The line to which the authority applies (applicable for parallel lines).

(b) Failure of Points - Positive Detection Unavailable on Points

If positive detection is not available on the points ahead of the defective signal, the Signaller must arrange for the points to be secured in the correct position prior to a caution order being issued.

The Signal Maintenance Technician or Competent employee may manually operate the points under direction from the Signaller. Once the points have been manually operated to the required position, a caution order can be transmitted or hand delivered to the Driver.

Note: A suitably qualified competent employee may be appointed to operate the point machine and hand deliver the Caution Order to train drivers under the direction of the Signaller.

(c) Burnley Stabling Sidings Switched 'Out'

Should a train arrive at the Home Signal and the Signal is at the 'Stop' position and the illuminated Letter 'A' is not displayed, the Driver must contact the Signaller at Burnley.

If the points are in the correct position and positive detection is available, the Signaller must then give the Driver verbal instructions to pass the defective Signal.

The Signaller and Driver must exchange names for record purposes.

(d) Burnley Stabling Sidings Switched 'In'

Should a train arrive at the Home Signal and the Signal is at the 'Stop' position and the illuminated Letter 'A' is not displayed, the Driver must contact the Signaller at Burnley.

If the Burnley signal Control panel is switched in the Signaller Burnley must deal with the signal failure in accordance with clause (a) above.

(e) Failure of the Security Gates (Burnley Sidings)

If the security gates fail to operate when required, a competent employee will attend to manually operate the gates under the directions of the Signaller at Burnley.

If the gates fail are required to be manually operated, the Signaller must first ensure the lever on the Burnley signal control panel is in the position the gates are required to be in. The competent employee must then open the cabinet located adjacent to the left hand (down side) of the security gates. The door is secured by a '5p' padlock. The Release Key (for releasing the braking system on the gates) must be obtained from the cabinet and placed in the key switch which is situated on the exterior of the second cabinet situated nearby. The key must then be placed to the 'Brake Release' position. The gates can then be pushed by hand. When the gates have been opened, they must be secured open with the chain provided on the post.

Once the security gates have been secured 'Open' and the lever is in the corresponding position, positive detection should be obtained. This will then allow the respective signals to be operated.

(f) Operation of Track Maintenance and Road-Rail Vehicles

For the movement of all track maintenance and road rail vehicles the Signaller, must ensure either the relevant point unit levers are placed in the 'N' or 'R' position and a "lever sleeve" is placed on each set of points in the route prior to clearing the signal.



RAIL SAFETY

SWP 003/2016

SWP 003/2016

DISTRIBUTION:

Metro, Ringwood,
All Metropolitan Stations,
Depots & Signal Boxes.

Level 15, 700 Collins Street
20th April 2016

AMENDMENT

**METRO TRAINS BURNLEY GROUP
OPERATING PROCEDURES**

RINGWOOD AND BAYSWATER FAILURE OF SIGNALS

Commencing forthwith, the existing details contained in Metro Trains Burnley Group Operating Procedure No. 8 will be replaced with the following instruction relating to Ringwood and Bayswater, "Failure of Signals".

The Principle Change is:

- Provision of voice recording facilities at Ringwood enabling the transmission of caution orders via telephone communication.
- The failure of main line signals at Bayswater is removed from Procedure titled "Bayswater Train Maintenance Facility & Stabling Sidings" and included within this procedure.

Metro Trains Burnley Group Operating Procedures (Metro Trains Intranet site) will be updated to reflect the change.

David Ward
Manager Network Safety

Per:

Driver Training Stage 2

Session 2 Policy and Procedures Update



METRO		ALERTNESS SELF-ASSESSMENT TOOL	
L4-SQE-FOR-122	Version: 1	Effective from: 12 th May 2016	

Notes
To be completed: - As specified in your local FRM Plan - Any time during work hours when you think you may be fatigued - Upon request of your Supervisor.
You are to complete this assessment yourself and implement the appropriate controls. - Answer all questions below, in order from 1 to 4. - Determine your highest colour risk rating from your answers to the 4 questions. - Implement the required controls, as shown in the Fatigue Risk Control Measures table.

Questions

1. How would you rate your current level of alertness/sleepiness

EXTREMELY ALERT	VERY ALERT	ALERT	RATHER ALERT	NEITHER ALERT OR SLEEPY	SOME SIGNS OF SLEEPINESS	SLEEPY BUT NO EFFORT TO STAY AWAKE	SLEEPY, SOME EFFORT TO STAY AWAKE	VERY SLEEPY, FIGHTING TO STAY AWAKE

2. How would you rate your sleep in the last 24 hours?

GOOD	OK	POOR	VERY POOR

3. Are you currently experiencing any mental or behavioural signs of fatigue?

(e.g. irritability, impatience, easily frustrated, lacking motivation, forgetfulness, poor concentration, difficulty making decisions, 'zoning out', waves of sleepiness)

NO	YES

4. Are you currently experiencing any physical signs of fatigue?

(e.g. lack of energy, light headache, poor hand-eye coordination, slowed reactions, yawning, sore or heavy eyes, blurry vision, slurred speech, microsleeps)

NO	YES

Approving Manager: Dr. SER	Approval Date: 12/05/2016	Next Review Date: 12/05/2018
FATIGUE MAY NOT BE UP-TO-DATE. REFER TO METRO INTRANE FOR THE LATEST VERSION.		

	ALERTNESS SELF-ASSESSMENT TOOL	
L4-SQE-FOR-122	Version: 1	Effective from: 12 th May 2016

Fatigue Risk Control Measures

Based on your highest fatigue risk rating to the above 4 questions, implement the following controls:

Highest Risk Rating	Recommended Fatigue Controls
Continue to monitor yourself for signs of fatigue.	- Maintain hydration – drink adequate water - Consider high protein, low fat meals and snacks
CAUTION! Contact your Supervisor	Contact your Supervisor to complete a Supervisor Fatigue Assessment
STOP! Stop all tasks and contact your Supervisor.	

Approving Manager: Dr. SER	Approval Date: 12/05/2016	Next Review Date: 12/05/2018
PRINTOUT MAY NOT BE UP-TO-DATE. REFER TO METRO INTRANET FOR THE LATEST VERSION		
Page 2 of 2		

	SUPERVISOR FATIGUE ASSESSMENT FORM	
L4-SQE-FOR-123	Version: 1	Effective from: 12 th May 2016

Notes

This form is to be used to conduct a fatigue risk assessment on an individual when:

- They report or are observed, as being potentially fatigued
- An incident has occurred that may involve fatigue
- As specified in the local FRM Plan

Details

SUPERVISOR NAME	DATE	
EMPLOYEE/CONTRACTOR NAME	TIME	
WORKGROUP	ROLE	
REASON FOR ASSESSMENT (Tick boxes)	Observed/ Reported signs of fatigue	Amber/Red risk rating on Alertness Self- Assessment Tool
	Other (specify):	
	Incident	Other

Individual to complete Alertness Self-Assessment Tool (if not already completed)

Alertness Self-Assessment Tool Risk Rating		Response		Possible Contributing Factor (Tick)
Questions – Potential Contributing Fatigue Risk Factors				
1. Inadequate sleep - Have you had enough good quality sleep in the last 24hrs?	Yes / No			
2. Inadequate sleep - Have you been having any sleeping problems recently?	Yes / No			
3. Length of time awake - How long have you been awake?				
4. Length of work shift - How long since you started work?				
5. Time of day – 02:00-06:00h or 14:00-16:00h?	Yes / No			
6. Number of consecutive work shifts?				
7. Inadequate breaks – When, and how long, was your last break?				
8. Workload – Has your workload this shift been physically demanding?	Yes / No			
9. Workload – Has your workload this shift been mentally demanding?	Yes / No			
10. Workload – Has your work this shift been repetitive, monotonous?	Yes / No			

Approving Manager: Dr. SER	Approval Date: 12/05/2016	Next Review Date: 12/05/2018
PRINTOUT MAY NOT BE UP-TO-DATE. REFER TO METRO INTRANET FOR THE LATEST VERSION		
Page 1 of 2		

 SUPERVISOR FATIGUE ASSESSMENT FORM		Version: 1	Effective from: 12 th May 2016
L4-SQE-FOR-123			
11. Work environment – Have you been working in challenging conditions (extreme heat, cold, noise, wind, vibration)?		Yes / No	
12. Nutrition – How long ago did you last eat and what was it?			
13. Hydration – Have you consumed adequate water this shift?		Yes / No	
14. Personal matters – Do you have any stress, health problems or other personal problems that are significantly affecting your concentration and/or sleep?		Yes / No	
15. Medication – Are you on any medication or other substance that could cause drowsiness or cause you to be unfit for work?		Yes / No	
16. Are there any other factors you think could have contributed to your current state of alertness/fatigue? <i>Please specify:</i>		Yes / No	
Required Actions (Select Option)		Tick	
Individual to continue working and monitor for early signs of fatigue			
Individual to continue working and implement fatigue controls (Select from below)			
Individual to cease work for the rest of the shift - arrange alternate transport or accommodation, if required			
Required Control Measures (Select Options)			
Continue to monitor for early signs of fatigue	Alertness self-assessment in _____hrs		
Ensure adequate hydration	No unaccompanied work		
Eat high protein, low fat snack	Arrange alternate transport home		
Use caffeine to increase alertness	Book accommodation		
More frequent breaks	No safety critical work, including driving		
Avoid working during periods of extreme temperature	Support 15-20 minute power naps in a controlled environment		
Task rotation, if possible	Increased supervision		
Double-checking of important tasks	Assign additional rest day		
Defer non-urgent tasks	Other (specify):		
Switch to lower risk tasks, if possible			
Sign Off			
Employee/Contractor Name:			
Supervisor Name:			

Approving Manager: Dr. SER	Approval Date: 12/05/2016	Next Review Date: 12/05/2018
CONFIDENTIAL MAY NOT BE UPLOADED, DEERED TO METRO INTRANET FOR THE LATEST VERSION Page 2 of 2		

COPING WITH TRAUMA

There are many great things about working in the rail industry. Unfortunately, one of the downsides is the risk of being exposed to a potentially traumatic event.

WHAT IS A POTENTIALLY TRAUMATIC EVENT (PTE)?

A PTE involves experiencing or witnessing a situation that involves the threat of death or serious injury.

Seeing body parts while investigating or cleaning up after an incident

Witnessing an assault or injury

THE SAME EVENT MAY HAVE LITTLE IMPACT ON ONE PERSON BUT CAUSE SEVERE DISTRESS TO ANOTHER.

Symptoms of trauma

Feeling distressed is very common in the first week or two after a PTE. You may experience:

Anxiety	Trouble sleeping	Fear	Guilt
Agitation	Loss of appetite	Sadness	Anger

Looking after yourself

Before the event: Prepare

Practice skills to manage stress

Ensure that you have:

- Supportive family and friends
- Good work-life balance
- Good coping skills

During the event: Cope

Practice calming techniques like controlled breathing

Think positively "I will get through this"

Follow procedures and focus on the task at hand

After the event: Self-Care

Support from family and friends

Support at work

Maximise effective coping strategies

Minimise negative coping strategies such as alcohol

PEOPLE REACT VERY DIFFERENTLY - THERE IS NO SINGLE OR RIGHT WAY TO RESPOND TO A PTE.

MOST PEOPLE WILL RECOVER FROM TRAUMA ON THEIR OWN WITH THE SUPPORT OF FAMILY, FRIENDS AND COLLEAGUES.

How to manage trauma

Cut back on

stimulants such as caffeine, alcohol, cigarettes and sugar

Relax:

Structure your days and return to normal activities

Get plenty of sleep and rest

Eat regular, well-balanced meals

Exercise

Avoid making major life decisions in the period following trauma

When ready, talk to someone who will understand

Recurring thoughts, dreams and flashbacks are normal and decrease over time

Helping a workmate deal with trauma

- Check in and ask how they are going
- Be patient and understanding
- Offer practical support such as helping with paperwork or covering a shift
- Help them socialise and relax
- Encourage them to ask for help if they are finding it hard to cope

Getting help

Don't be afraid to ask for help if you feel that things are not improving.

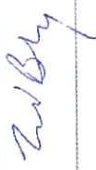
For immediate and ongoing support call Metro's Employee Assistance Program on 1800 808 374 (24 hours).

Lifeline can also assist anyone seeking support on 13 11 14 (24 hours).

Alternatively, make an appointment with your local GP.

TRAUMA MANAGEMENT PROCEDURE		
METRO	LO-HMR-PRO-057	Version: 1 Effective from: 16 th October 2014

Approval

Name	Position	Signature
Document Author Karyn Turnbull	Injury Management Team	
Document Endorser Todd Bentley	GM Safety, Environment & Risk	
Approving Manager Nick Dickinson	GM Human Resources	

Amendment Record

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16/10/2014	1	Initial issue under MTM

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1. Purpose

The purpose of this procedure is to describe the process for managing potentially traumatic events in MTM.

2. Scope

This procedure is applicable to Metro Employees. This procedure provides an overview of the Trauma Management Framework and the process for supporting employees and their family following a potentially traumatic event (PTE).

3. Definitions and Acronyms

Potentially Traumatic Event: involves either experiencing or witnessing events that can cause excessive stress to individuals including threat of death or serious injury. The nature and extent of individual response to a traumatic event will vary from person to person. Responses may include mood swings, excessive melancholy, depression, anger and so on. Events that may lead to these effects in the rail industry include, but not limited to:

- Driving a train involved in a fatality, or serious injury, or being involved in a near hit
- Witnessing someone being severely injured
- Violence or threats of violence
- Investigating, responding to or cleaning up after an incident
- Someone with a life-threatening or traumatic illness
- Death or injury of a colleague, family member or friend
- Involved in or witnessing an incident such as intense harassment, assault, injury or crime.
- Natural disasters

MTM Peer Support: Trained MTM employees who may have experienced traumatic events and can assist with support and are able to give support to one another.

Acronyms:

EAP	Employee Assistance Program
HSR	Health & Safety Representative
PTE	Potentially Traumatic Event
PFA	Psychological First Aid

Note: We say that an event is 'potentially' traumatic because every person responds differently

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4. Trauma Management Framework

The trauma management framework is presented in Figure 1. All elements presented in the framework below contribute to the overall management of PTEs and their impacts on Metro staff. This framework is based on best practice guidance and training developed by TrackSAFE.

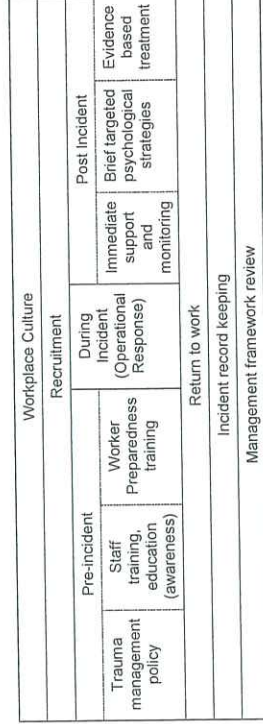


Figure 1: Trauma Management Framework

The framework provides a holistic approach with the purpose of each element below:

- **Workplace culture:** Efforts to minimise the impact of workplace trauma need to begin before a traumatic event, with consideration of the 'culture' of the organisation.
- **Recruitment** processes aim to identify suitable applicants for a position whilst providing the applicant with the relevant information that enables them to make a decision about whether the company and the job is a good match for them, including detail about potential traumatic events.
- **Pre-incident preparedness** should promote the expectation, within individuals and the Metro overall, of resilience and recovery following trauma exposure and build capacity to respond in an optimal way. Information and support is also available to employee's family.
- **Peri-Incident:** To ensure that Metro's response to a PTE minimises exposure to psychological hazards, has clearly defined roles and responsibilities to provide PTE support, and that this support is appropriate to the needs of an individual.
- **Post Incident:** To assist employees in their transition back to normal function at home, at work and in their leisure activities.
- **Return to work:** For all employees involved in a PTE the aim is to facilitate their return to work.
- **Incident Record Keeping:** To identify trends, patterns, cumulative exposure, and organisational outcomes to support ongoing prevention of PTE's and improvement to the PTE management program.
- **Management framework review:** To continually improve the trauma framework used at MTM.

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5. Process

This process is supported by the training *Providing Support after Trauma*. Further guidance is available in the training material available on the Metro Trauma Management Intranet site.

5.1 Immediately following a PTE:

- Ensure the threat has passed
- Remove the employee/s from the scene, where possible
- First Responder / Manager / Supervisor should contact the employee/s to provide operational and PFA (Psychological First Aid) requirements

5.2 Initial management of a PTE:

First Responder / Manager / Supervisor to:

- Be supportive
- Minimise questioning of affected employee/s at that time, as appropriate
- Promote the use of positive coping strategies
- Explain the next immediate steps to be taken
- Help connect the employee to social support. This can include offering to phone the employee's family or social support to advise them of the PTE.
- Inform the relevant senior manager / manager and local HSR, as required.

5.3 In the following 24 hours after the PTE:

Manager / Supervisor to:

- Allocate time and be available for individual discussions with employee
- Check on the wellbeing and encourage positive coping strategies
- Plan for a follow-up meeting.
- Encourage the use of EAP, provide EAP resources and offer to make an appointment on behalf of the employee.

5.4 Within one week after a PTE:

- Personnel involved should have been offered an opportunity for individual conversations with their manager / supervisor/ HSR / Peer support;
- Encourage personnel to return to suitable duties / normal life activities, even if gradually.

Follow-up support session (1 month or less)

- Provide ongoing support
- Identify issues that might emerge over time
- Make referrals & plans for returning to work / alternative duties, as appropriate

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- Monitor wellbeing

Note: There is no evidence that time off work alone contributes to recovery from trauma. Without support and structured activities, time off work may lead to a person dwelling on the incident and losing confidence in being able to cope at work. Where a person does take time off work, they should counter these potential negative effects by considering how they will use this time and how they can get support from others.

6. Confidentiality of Records

Records pertaining to employees and information regarding an individual are handled consistently with MTM's procedures for handling medical records.

7. Related Documents

Metro Trauma Management Framework intranet site:
<http://thedept.metrotrains.com.au/HSEQ/Trauma/Pages/default.aspx>
 LO-HMR-PRO-39 Injury Management Procedure
 LO-HMR-PRO-040 Absenteeism Management Procedure
 LO-HMR-PRO-007 Absenteeism, Employee Conduct and Attendance Procedure

8. Relevant Legislation

Occupational Health and Safety Act

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Driver Training Stage 2

Session 3 SPAD Update



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L1-TSD-PRO-008	Version: 3	Effective from: 30 th November 2015

Approval

Document Author	Name	Position	Signature
Document Endorsers	James Campbell	Operational Safety Risk Manager	
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Approving Manager	David Ward	Network Safety Manager	
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26/08/2014	1	First issue. This version supersedes: L2-TSD-PRO-001 Category A SPAD Immediate Response Procedure L3-TSD-PRO-032 Train Driver Post SPAD Occurrence Management Procedure L4-SWS-INF-001 SPAD Report Guide Categories & Definitions Please dispose of all copies.
18/09/2014	2	This version modifies: Instructions to the Driver for further movement of the train This version removes: Reference to Train Controller/Controlling Signaller SPAD Immediate Response form, which is withdrawn
30/11/2015	3	This version modifies: Responsibilities & position titles This version removes: Reference to Train Controller/Controlling Signaller & Infrastructure instructions (provided in separate documents. Reference to all SPAD governance (provided in MTM SPAD governance document LO-SQE-STD-001)

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1. Purpose

This procedure mandates the requirements for managing risks associated with Category A SPAD incidents to ensure the consequence of those risks are controlled.

2. Scope

This procedure applies to the management of risks associated with Category A SPAD incidents on the Metro rail network where:

- Trains are operated under Metro rail safety accreditation
 - Trains are operated by Metro qualified Train Drivers
- The Metro rail network includes depots, yards and sidings under Metro rail safety accreditation.

NOTE: This procedure is aimed at Metro Driver Category A SPAD incidents only. Mention of Category B SPADs is for Driver operating procedure information only.

3. Abbreviations and Acronyms

- ESC Executive SPAD Committee
- SAG SPAD Action Group
- SPAD A common international term for a signal passed at STOP
- SRRT SPAD Risk Ranking Tool

4. Responsibilities

- Manager of Safety, Training & Compliance
- Operational Safety Risk Manager
- Depot Train Driver Managers
- Driver Development Manager
- Group Train Driver Managers
- General Manager Train Services
- Human Resources Advisor Operations
- Train Drivers
- Train Services Duty Managers
- Train Services Officer – Principal Driver Specialists

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5. Definitions

Terminology	Definition
Black Spot Signal (Multi-SPAD)	A signal that has been exceeded five or more times in a three year period or three or more times in a 12 month period
Blacked Out Signal	A signal where the aspect of the signal cannot be discerned due to illumination failure
Category A SPAD	Where a train has passed a signal at STOP without the necessary safeguarding authority
Driver Stood Aside	Driver temporarily removed from driving duties, surrendering their controller/master keys pending the outcome of an investigation
Metro Train Driver	Qualified person who has the authority to drive Metro trains on the Metro rail network
Multi-SPAD Signal	A signal that has been exceeded two or more times in a 12 month period
Signal	A device which conveys instructions or provides prior warning of instructions regarding the Driver's authority to proceed
SPAD	Signal Passed at Danger – a common international term for a signal passed at STOP
SPAD Alarm	Where equipment is installed to detect a SPAD and gives an audible alert to the Controlling Signaller
Stop Signal	A signal capable of displaying a STOP aspect or indication

6. Introduction

Potential consequences of SPADs are:

- Train collision with other trains, road vehicle/s, person/s, obstruction and/or, SPAD
- Train derailment directly resulting from a SPAD or resulting from a collision after a

Benefits resulting from the implementation of this procedure are:

- Effective management of risks identified in points 1 and 2 above
- Assurance of compliance with Metro legislative and industry requirements
- Reduction of financial and operational risks
- Driver resource planning and service delivery
- Prioritising resources to the higher risk conditions
- Communicating identified risks and actions to staff

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7. Classification of SPAD Incidents

SPAD incidents will be categorised in relation to the identified cause and possible resulting consequence as one of the following:

- CAT A1 to 4: The train interface/operation of the train
- CAT B1 to 4: The operating interface/signalling/network and network integrity

SPAD Category	Description
Category A SPAD	A1 When a SPAD has occurred and, according to available evidence, a STOP aspect or indication was displayed or given correctly and with sufficient time for the train to be stopped safely at it
	A2 When a SPAD has occurred and, according to available evidence, the STOP aspect or indication concerned was not displayed or given correctly, but was preceded by the correct warning aspects or indications
	A3 When a SPAD has occurred and, according to available evidence, verbal and/or visual permission to pass a signal at STOP was given by a hand signaller or other authorised person without the authority of the signaller
	A4 When a SPAD has occurred and, according to available evidence, a STOP aspect or indication was displayed or given correctly and with sufficient time for the train to be stopped safely at it, but the Driver was unable to stop the train owing to circumstances beyond their control (for example, poor rail head adhesion, train braking equipment failure or malfunction etc.)
Category B SPAD	B1 When a SPAD has occurred because a STOP aspect or indication that previously showed a proceed indication, was displayed because of infrastructure failure (for example, signalling or level crossing equipment has failed or malfunctioned)
	B2 When a SPAD has occurred because a STOP aspect or indication that previously showed a proceed indication, was displayed because it was returned to STOP or displayed in error
	B3 When a SPAD has occurred because a STOP aspect or indication was not displayed in sufficient time for the train to be stopped safely at the signal, as it had been returned to STOP automatically or in an emergency
	B4 When a SPAD has occurred because vehicles without any traction unit attached, or a train which is unattended, had run away past the signal at STOP

NOTE: All other incidents not classed Category A or B SPADs are considered safeworking incidents and will be reported as required.

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8. Risk Based SPAD Management

Managers responsible for the management of SPADs on the Metro rail network shall:

- Identify predominant contributing factors and the root cause
- Apply a risk based approach in the development and implementation of SPAD management strategies
- Implement SPAD management processes and management programs to prevent or reduce the risk from SPADs, including:
 - Identifying those conditions needing correction
 - Measuring and evaluating SPAD performance

9. SPAD Risk Ranking Tool

Risk profiling of the SPAD incident will be undertaken using the SPAD Risk Ranking Tool. The outcome will determine the severity of the incident and direct the process as set out in the *Driver Competence and Performance Program*.

The SRRT places the focus on potential consequences of the incident rather than the fact that a signal has been passed, in order to apply a risk based approach.

The three step process consists of:

- An initial collision potential assessment
- An accident vulnerability ranking
- A risk ranking score

10. Driver Risk Profile

A SPAD incident with a cause of Driver human error will instigate a review of the Driver's risk profile, as described in *Driver Competence and Performance Program*.

The Manager of Safety, Training & Compliance will be responsible for the maintenance of Driver risk profiles and will undertake risk profiling as part of the SPAD investigation.

10.1 Driver Risk Profile Report Recipients

A Driver Risk Profile Report will be updated weekly and electronic copies of this report will be submitted to:

- Duty Network Operations Manager, Metrol
- Senior Network Controller, Metrol
- Train Services Leadership Team
- Train Services Officer – Principal Driver Specialists
- Group Train Driver Managers
- Train Services Duty Managers
- Human Resources Advisor Operations

The Driver Risk Profile Report will be sent to Duty Network Operations Manager/Senior Network Controller, Metrol no later than 17:00 on Friday for the following week. This will be undertaken by the Manager of Safety, Training & Compliance or delegate.

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10.2 Driver Risk Profile Report

The Driver is relieved of driving duties on a risk based approach. The ranking of the risk profile and instruction will be as follows:

- **High Risk Driver** – Proceed with extreme caution and in accordance with all relevant signal indications to the next station and the Driver relieved. No further movement of the train to take place by that Driver
- **Moderate Risk Driver** – Proceed with extreme caution and in accordance with all relevant signal indications to the next station and the Driver relieved. No further movement of the train to take place by that Driver
- **Low Risk or Not Registered as at Risk Driver** – Proceed with extreme caution and in accordance with all relevant signal indications to the next station and detain passengers. Shunt to the nearest available siding or proceed to location where trains can pass around, whichever is closest.

11. SPAD Risk Management

This section details the requirements for applying SPAD risk management principles in order to proactively manage SPAD risk involving Metro qualified Drivers only on the Metro rail network.

11.1 SPAD Awareness Briefings

The Head of Train Services Operations must ensure that any Driver returning from extended leave of more than 12 weeks is briefed on all SPAD relevant information prior to undertaking their normal duties.

11.1.1 Communication of a SPAD Incident

Current and relevant SPAD A information will be communicated to the business and Drivers to ensure awareness to assist with proactive prevention of SPAD incidents. The Operational Safety Risk Manager will provide the following mechanisms for information to all required locations:

- Multi SPAD Alerts/Lessons Learned
- Monthly summary of SPAD events
- Relevant SPAD safety bulletins
- Black Spot /Multi-SPAD signals list
- SPAD prevention information

This list is not exhaustive. This information will be sent electronically to the relevant members of staff.

11.1.2 Display of SPAD information

SPAD information must be displayed and accessible to Drivers and managers. The approved display tool is the SPAD Notice Board (or other specially defined board). Depot Train Driver Managers are responsible for ensuring that the SPAD Notice Board (or other specially defined board) used for conveying SPAD information to Drivers is current and relevant within their allocated depots. The information displayed will be directed by the Notice Board Procedure.

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11.2 SPAD Risk Register

The Manager of Safety, Training & Compliance will maintain a SPAD Risk Register used for continual Train Services monitoring of SPAD Risk.

The register will be reviewed on an annual basis and/or when there is a requirement as directed by SPAD incidents, emerging trends, legislation or additional significant controls. This list is not exhaustive.

11.3 SPAD Hazard Reporting

Drivers must report any potential SPAD hazards to the Train Controller, Metro at the first convenient opportunity, eg, vegetation obscuring signal. Metro will record the reported SPAD hazard with the Fault Centre.

The Fault Centre will arrange rectification and advise back to Metro

11.4 Human Factors

Human factors must be considered in all aspects of SPAD risk management in order to evaluate and provide controls to mitigate SPAD incidents. This includes but is not limited to:

- Training and development
- Investigations
- Driver development and support plans
- SPAD initiatives and controls

11.5 SPAD Incident Database

The Train Services SPAD Incident Database will be maintained by the Operational Safety Risk Manager and shall detail SPAD incidents involving Metro Drivers.

The data produced will be the source for SPAD performance reports for Train Services.

SPAD information from the database will be made available to the business through a secure access point. The data produced will be the only recognised source for SPAD performance reports for Train Services.

11.6 Dissemination of SPAD Performance Reports

The Operational Safety Risk Manager shall provide SPAD performance reports on a monthly and yearly basis to the General Manager Train Services. The data shall include:

- Progressive SPAD statistics, totals and trends
- SPAD related initiatives and results
- Multi-SPAD signal and Black Spot signal locations
- Summary of actions and progress of initiatives

This list is not exhaustive.

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11.7 Reclassification of Incidents

A formal application must be made by the Manager of Safety, Training & Compliance to the Director of Safety, Environment and Risk for any request regarding change of classification of an incident. These requests may relate to:

- Amending the SPAD incident classification or changing the SPAD incident to a safeguarding incident
- Elevating an incident from a safeguarding incident to a SPAD classification
- Removal of a SPAD incident

The Director of Safety, Environment and Risk or the delegated person will either approve or not approve the application for change based on advice from Manager Network Safety and this decision will determine the need to alter the SPAD database and records.

12. Management of Drivers

Drivers will be stood aside and their driving duties suspended pending the outcome of the investigation.

If deemed necessary, Drivers will be found alternative non-safety critical duties until the investigation is completed and the findings disclosed. If the Driver is not willing to participate in other reasonable duties they can elect to be stood down without pay.

The Driver will attend a post investigation debrief and be entered into the *Driver Competence and Performance Program*.

13. Post SPAD Management

This section contains the mandatory requirements to manage the risk immediately after a SPAD, and recognises the most important outcome is to eliminate any further risk to passengers and staff, so far as reasonably practicable.

13.1 Train Driver Instructions Category A SPAD

When a Category A SPAD incident has occurred the following instructions are mandated and must be followed.

13.1.1 Driver

In the event of a Category A SPAD the Driver must:

- Immediately bring the train to a stand and secure the train
- Assess the situation in relation to potential risk to other trains
- If there is a risk to other trains, make a DTRS REC call to stop all trains in the vicinity of the SPAD location
- Not move the train unless instructed to do so
- Contact the Controlling Signaller or Train Controller, Metrol, provide the required information, then act under instructions of the Controlling Signaller or Train Controller, Metrol

At any time where the Driver deems themselves unfit, arrangements must be made to have the Driver relieved.

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13.1.2 Information to be Provided by the Driver

The following information must be provided to the Controlling Signaller/Train Controller, Metrol/Senior Network Controller/Duty Network Operations Manager once contact has been made:

- Name and Employee Number
- Depot
- Shift Number
- Leading motor number
- Train Descriptor Number
- Originating and destination stations
- Signal location
- Current train stopping point past the signal
- Answers to any further questions asked by the Train Controller, Metrol

13.1.3 Moving a Train after a Category A SPAD

Once the Driver has contacted the Controlling Signaller or Train Controller, Metrol and has been instructed to move the train, the Driver may continue on the journey as far as authorised at Extreme Caution until the train has cleared the next fixed signal.

Where the Driver deems themselves unfit, arrangements must be made to have the Driver relieved.

13.1.4 The Drivers Duties after Relief or the Train is Shunted to a Siding

After the Driver involved in the SPAD has been relieved, or has shunted the train to a siding, they must then return to the Flinders Street Depot or other instructed location to:

- Undertake a drug and alcohol test
- Fill out a Train Driver Incident report
- Hand over Driver keys
- Agree a time to attend work for a post SPAD interview (the next normal rostered working day)

At this point the Driver will be stood aside from all driving duties until the SPAD incident is fully investigated.

13.2 Train Driver Instructions Category B SPAD

When a Category B SPAD incident has occurred the following instructions are mandated and must be followed.

13.2.1 Driver

In the event of a Category B SPAD the Driver must:

- Immediately bring the train to a stand and secure it
- Not move the train unless instructed to do so

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- Contact the Controlling Signaller or Train Controller, Metrol, provide details of the SPAD, then act under instructions of the Controlling Signaller or Train Controller, Metrol
- Fill out a Report of Signal Reverting to 'Danger' for a SPAD/No SPAD Incident before the completion of the shift and submit it to their Depot Train Driver Manager or to the Train Services Officer – Principal Driver Specialists.

13.2.2 Moving the Train after a Category B SPAD

Once the Driver has contacted the Controlling Signaller or Train Controller, Metrol and has been instructed to move the train, the Driver may continue on the journey at Extreme Caution until the train has cleared the next fixed signal.

Where the Driver deems themselves unfit, arrangements must be made to have the Driver relieved.

14. Train Services Responsible Managers and Officers

14.1 Train Services Officer – Principal Driver Specialist

Upon being notified of a Category A SPAD, the Train Services Officer – Principal Driver Specialist is to follow the sequential steps in accordance with *Safeworking Incident Response Checklist*.

14.2 Manager of Safety, Training & Compliance

The Manager of Safety, Training & Compliance will instigate an investigation into the alleged SPAD incident and nominate a lead investigator to complete the investigation in line with the requirements of the Metro Incident Investigation procedure.

The Manager of Safety, Training & Compliance will undertake a post investigation debrief with the Driver once the full investigation is completed and enter the Driver into the *Driver Competence and Performance Program*.

14.3 Head of Train Services Operations

Where required, the Train Services Operations Manager will inform the relevant Group Train Driver Manager and arrange for non-safety critical duties for the Driver until the SPAD investigation is complete.

15. SPAD Investigations

15.1 Lead Investigator

All SPAD incidents must be reported and investigated.

All alleged SPADs will be treated as Category A SPADs unless evidence is present to suggest otherwise.

The Manager of Safety, Training & Compliance or nominated delegate (lead investigator) will undertake SPAD investigations on behalf of Train Services. The lead investigator has complete authority to request reasonable cooperation from Metro employees for the completion of the investigation.

The Manager of Safety, Training & Compliance will determine the SPAD classification based on the investigation evidence.

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The Driver, and their representative (if requested), must participate in a preliminary investigation into the alleged SPAD and provide a statement and details of the incident. If the preliminary investigation finds that Driver error is not the cause, the Driver may be immediately reinstated to full driving duties.

If the preliminary investigation finds that Driver human error may be the cause, the Manager of Safety, Training & Compliance will:

- Undertake a full investigation incorporating MTM Non-Technical Skills and Behaviours guidelines (L2-TSD-GDL-001) in conjunction with Detailed Category A SPAD Investigation Report (L4-SQE-REP-003)
- Review the investigation findings, including contributing factors to the SPAD
- Undertake a post investigation debrief with the Driver to provide a summary of the findings and any coinciding actions
- Conduct a SPAD risk assessment using the SPAD Risk Ranking Tool and enter the Driver into the Driver Safety Performance Process

15.2 Driver Interview

An interview will be conducted with Driver and their representative (if requested) subsequent to the investigation. The interview will be undertaken as soon as reasonably practicable, dependant on the availability of on train data downloads, other staff reports, rolling stock/infrastructure reports (this list is not limited).

15.3 Defective Rolling Stock Brakes

If any rolling stock brake issues are alleged or identified during the course of the investigation of a SPAD, a brake analysis is to be undertaken on the train involved in the SPAD. This action will be omitted where there is evidence to support that the braking system of the train is not a factor for consideration as a cause of the SPAD.

16. Related Documents

- L1-SQE-PRO-005 Incident Investigation
- L3-TSD-PRO-049 Driver Competence and Performance Program
- L3-TSD-PRO-055 SPAD Risk Ranking Tool
- L4-SWS-FOR-017 Report of Signal Reverting to 'Danger' for a SPAD/No SPAD Incident
- L4-TSD-FOR-015 Safeworking Incident Response Checklist
- L4-TSD-FOR-027 Train Driver Stood Aside/Reinstated Notification Advice
- L4-TSD-FOR-028 Shift Manager/Senior Network Controller SPAD A Immediate Response Form
- L4-SQE-REP-003 Detailed Category A SPAD Investigation Report
- L2-TSD-GDL-001 MTM Non-Technical Skills and Behaviours
- SPAD Action Group Charter

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17. Appendices

Appendix 1: SPAD Subcategories

Term	Definition
Misjudged	Where the Driver has attempted to stop the train but failed to do so before passing the signal. This excludes a SPAD associated with a rolling stock irregularity (eg, brake failure)
Starting Against Signal	Where a stationary train starts and proceeds beyond a signal at STOP without authority. The Driver may or may not realise that the train has overrun the signal
Completely Missed in Running	Where no attempt has been made to bring the train to a stand before a signal at STOP and the train has proceeded into the next section without the necessary authority. The Driver has not realised that the train has passed a signal at STOP until a more serious event results; the Driver is stopped by the Train Controller via verbal communication, at the next signal or by external intervention
Other	Any unauthorised passing of a signal at STOP that does not fit one of the above definitions. A description of the circumstances needs to be provided

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Appendix 2: Drivers Brief

This brief contains the mandatory requirements of a Driver to manage the risk immediately after a SPAD, and recognises the most important outcome is to eliminate any further risk to passengers and staff, so far as reasonably practicable.

SPAD Hazard Reporting

Drivers must report any potential SPAD hazards to the Train Controller. Metrol at the first convenient opportunity, eg. vegetation obscuring signal. Metrol will record the reported SPAD hazard with the Fault Centre.

The Fault Centre will arrange rectification and advise back to Metrol

Train Driver Instructions Category A SPAD

When a Category A SPAD incident has occurred the following instructions are mandated and must be followed.

Drivers Responsibilities

In the event of a Category A SPAD the Driver must:

- Immediately bring the train to a stand and secure the train
- Assess the situation in relation to potential risk to other trains
- If there is a risk to other trains, make a DTRS REC call to stop all trains in the vicinity of the SPAD location
- Not move the train unless instructed to do so
- Contact the Controlling Signaller or Train Controller, Metrol, provide the required information, then act under instructions of the Controlling Signaller or Train Controller, Metrol
- At any time where the Driver deems themselves unfit, arrangements must be made to have the Driver relieved.

Information to be provided by the Driver

The following information must be provided to the Controlling Signaller/Train Controller, Metrol/Senior Network Controller/Duty Network Operations Manager once contact has been made:

- Name and Employee Number
- Depot
- Shift Number
- Leading motor number
- Train Descriptor Number
- Originating and destination stations
- Signal location
- Current train stopping point past the signal
- Answers to any further questions asked by the Train Controller, Metrol

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Moving the Train after a Category A SPAD

Once the Driver has contacted the Controlling Signaller or Train Controller, Metrol and has been instructed to move the train, the Driver may continue on the journey as far as authorised at Extreme Caution until the train has cleared the next fixed signal.

Where the Driver deems themselves unfit, arrangements must be made to have the Driver relieved.

The Drivers Duties after Relief or the Train is shunted to a Siding

After the Driver involved in the SPAD has been relieved, or has shunted the train to a siding, they must then return to the Flinders Street Depot or other instructed location to:

- Undertake a drug and alcohol test
- Fill out a Train Driver Incident report
- Hand over Driver keys
- Agree a time to attend work for a post SPAD interview (the next normal rostered working day)

At this point the Driver will be stood aside from all driving duties until the SPAD incident is fully investigated.

Train Driver Instructions Category B SPAD

When a Category B SPAD incident has occurred the following instructions are mandated and must be followed.

Driver Responsibilities

In the event of a Category B SPAD the Driver must:

- Immediately bring the train to a stand and secure it
- Not move the train unless instructed to do so
- Contact the Controlling Signaller or Train Controller, Metrol, provide details of the SPAD, then act under instructions of the Controlling Signaller or Train Controller, Metrol
- Fill out a Report of Signal Reverting to 'Danger' for a SPAD/No SPAD Incident before the completion of the shift and submit it to their Depot Train Driver Manager or to the Train Services Officer – Principal Driver Specialists.

Moving the Train after a Category B SPAD

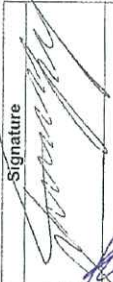
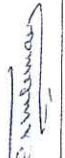
Once the Driver has contacted the Controlling Signaller or Train Controller, Metrol and has been instructed to move the train, the Driver may continue on the journey at Extreme Caution until the train has cleared the next fixed signal.

Where the Driver deems themselves unfit, arrangements must be made to have the Driver relieved.

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Approval

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Amendment Record

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1 Purpose

This procedure mandates the requirements for managing risks associated with Category A SPAD incidents to ensure the consequence of those risks are controlled.

2 Scope

This procedure applies to the management of risks associated with Category A SPAD incidents on the Metro rail network where:

- Trains are operated under Metro rail safety accreditation
 - Trains are operated by Metro qualified Train Drivers
- The Metro rail network includes depots, yards and sidings under Metro rail safety accreditation.
- This procedure does not apply to V/Line services, third party operators and track machine/track vehicle operators

3 Definitions

Extreme Caution: - is defined as being able to stop the train in half the distance that can be seen ahead not exceeding 25 km/h or the posted track speed if that is the lesser, and always prepared to find the section ahead occupied or obstructed or the track damaged.

4 Abbreviations and Acronyms

SPAD: - Signal Passed At Danger.

5 Responsibilities

Network Operations Duty Managers, Metrol
Senior Network Controllers & Train Controllers at Metrol
Train Controller 4 (Signallers) Metrol

6 Introduction

Potential consequences of SPADs are:

- Train collision with other trains, road vehicle/s, person/s, obstruction and/or,
- Train derailment directly resulting from a SPAD or resulting from a collision after a SPAD
- Unnecessary delays to Train Services leading to safety related issues
- Benefits resulting from the implementation of this procedure are:
- Assurance of compliance with Metro legislative and industry requirements
- Reduction of financial and operational risks
- Driver resource planning and service delivery

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7 Classification of SPAD Incidents

SPAD incidents will be categorised in relation to the identified cause and possible resulting consequence as one of the following:

- CAT A1 to A4: The train interface/operation of the train
- CAT B1 to B4: The operating interface/signalling/network and network integrity

SPAD Category	Description
Category A SPAD	A1 When a SPAD has occurred and, according to available evidence, a STOP aspect or indication was displayed or given correctly and with sufficient time for the train to be stopped safely at it
	A2 When a SPAD has occurred and, according to available evidence, the STOP aspect or indication concerned was not displayed or given correctly, but was preceded by the correct warning aspects or indications
	A3 When a SPAD has occurred and, according to available evidence, verbal and/or visual permission to pass a signal at STOP was given by a hand signaller or other authorised person without the authority of the signaller
	A4 When a SPAD has occurred and, according to available evidence, a STOP aspect or indication was displayed or given correctly and with sufficient time for the train to be stopped safely at it, but the Driver was unable to stop the train owing to circumstances beyond their control (for example, poor rail head adhesion, train braking equipment failure or malfunction etc.)
Category B SPAD	B1 When a SPAD has occurred because a STOP aspect or indication that previously showed a proceed indication, was displayed because of infrastructure failure (for example, signalling or level crossing equipment has failed or malfunctioned)
	B2 When a SPAD has occurred because a STOP aspect or indication that previously showed a proceed indication, was displayed because it was returned to STOP or displayed in error
	B3 When a SPAD has occurred because a STOP aspect or indication was not displayed in sufficient time for the train to be stopped safely at the signal, as it had been returned to STOP automatically or in an emergency
	B4 When a SPAD has occurred because vehicles without any traction unit attached, or a train which is unattended, had run away past the signal at STOP

Note: All other incidents not classed Category A or B SPADs are considered Safeworking incidents and will be reported as required.

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8 Driver Risk Profile

A SPAD incident with a cause of Driver human error will instigate a review of the Driver's risk profile, as described in *Driver Competence and Performance Program*.

The Manager of Safety, Training & Compliance will be responsible for the maintenance of Driver risk profiles and will undertake risk profiling as part of the SPAD investigation.

8.1 Driver Risk Profile Report

A Driver Risk Profile Report will be updated weekly and electronic copies of this report will be submitted to:

- Network Operations Duty Manager, Metrol
- Senior Network Controller, Metrol
- Train Services Leadership Team
- Train Services Officer – Principal Driver Specialists
- Group Train Driver Managers
- Train Services Duty Managers
- Human Resources Advisor Operations

If there is any confusion to the latest version of the Driver Risk Profile Report, the Senior Network Controller, Metrol must contact the TSO-PDS Help Desk immediately.

8.2 Driver Risk Ranking

The Driver is relieved of driving duties on a risk based approach. The ranking of the risk profile and instruction will be as follows:

- **High Risk Driver** – Proceed with extreme caution and in accordance with all relevant signal indications to the next station and the Driver relieved. No further movement of the train to take place by that Driver
 - **Moderate Risk Driver** – Proceed with extreme caution and in accordance with all relevant signal indications to the next station and the Driver relieved. No further movement of the train to take place by that Driver
 - **Low Risk or Not Registered as at Risk Driver** – Proceed with extreme caution and in accordance with all relevant signal indications to the next station and detain-passengers. Shunt to the nearest available siding or proceed to location where trains can pass around, whichever is closest.
- The Driver must then be relieved.

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9 SPAD Risk Management

9.1 SPAD Hazard Reporting

Drivers must report any potential SPAD hazards to the Train Controller, Metrol at the first convenient opportunity, e.g., vegetation obscuring signal. Metrol will record the reported SPAD hazard with the Fault Centre.

The Fault Centre will arrange rectification that will monitored by the Technical SPAD & Signal Sighting Committee.

10 Post SPAD Management

This section contains the mandatory requirements to manage the risk immediately after a SPAD, and recognises the most important outcome is to eliminate any further risk to passengers and staff, so far as reasonably practicable.

10.1 Identifying a SPAD Incident

A SPAD may be identified or reported by means other than the Driver, such as via:

- Indication on a Signaller/Train Controller control panel (ie, track circuit)
- SPAD alarm
- External party
- Other member of staff

10.2 Immediate Response

The immediate response for a SPAD incident is to determine if the train is to be moved to the next station for the purpose of Driver relief, or if it is to remain stationary. If there is any doubt at the time as to the classification of the SPAD Type (A or B) the default will always be category A.

If a Driver is to be Relieved Immediately

The Driver must be relieved from duty immediately at the location if it is established that any of the following circumstances apply:

- The Driver may be under the influence of drugs or alcohol
- The Driver claims to be medically unfit or suffering from fatigue
- The Driver is shocked by the incident to such an extent that driving judgement could be significantly impaired
- It is confirmed that damage to equipment has occurred including derailment, point run throughs or collision.

In order to establish whether there is any evidence of the above the Network Operations Duty Manager/Senior Network Controller, Metrol must determine this during initial discussion with the Driver. There may also be a need to contact a Train Services Officer – Principal Driver Specialist to contact the Driver to provide additional assessment.

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10.2.1 If a Driver is to be Relieved at Next Station

The Network Operations Duty Manager/Senior Network Controller, Metrol must be satisfied that immediate relief from duty on site is not required.

The Network Operations Duty Manager/Senior Network Controller, Metrol must arrange for the movement of the train if the Driver has agreed to move the train and proceed. This will be directed by the instructions in the Driver Risk Profile Report.

Note: - If Driver relief is available at the site of the SPAD, it must be effected before further movement of the train.

10.2.2 If a Driver is to Move the Train

The Network Operations Duty Manager/Senior Network Controller, Metrol will use the Driver Risk Profile Report to determine instructions to be given to a Driver (in relation to Driver relief and authorising forward movement of the train) post SPAD incident.

The Network Operations Duty Manager/Senior Network Controller, Metrol must refer only to the current Driver Risk Profile Report for direction on the instructions to be given to a Driver post SPAD incident. Any Driver not on the list is to be considered in the Low Risk category.

In the event that the current Driver Risk Profile Report is not available, the Network Operations Duty Manager or Senior Network Controller, Metrol must consider the Driver in the High Risk category for the movement of the train (with extreme caution to the next location and Driver relieved) then contact the Manager of Safety, Training & Compliance to receive further instructions.

11 Train Controller & Signaller Instructions

When a Category A SPAD incident has occurred the following instructions are mandated and must be followed.

11.1 Signaller Location

11.1.1 Controlling Signaller

Place all signals controlling conflicting train movements to the STOP position.

Make contact with the Driver (e.g. train radio system), ensure the train has stopped and direct the Driver to not move the train until authorised.

Inform the Train Controller, Metrol immediately of the circumstances and provide the details of the SPAD.

11.1.2 Train Controller, Metrol

Liaise with Controlling Signaller and Driver involved to obtain all details of the SPAD.

Inform the Senior Network Controller, Metrol of the SPAD and await further instructions.

Provide instructions to the Driver and/or the Controlling Signaller as directed by the Senior Network Controller, Metrol for authorising further movement of the train.

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11.2 SPAD Incident Location

11.2.1 Train Controller, Metrol

- Confirm with Controlling Signaller that all signals controlling conflicting train movements have been placed to the STOP position.

- Confirm the train involved in SPAD has stopped.

- Record the information on the Train Working Graph or Log Book, including the Driver's shift number, employee number and depot.

- Report the SPAD and provide details to Senior Network Controller, Metrol.

- Provide instructions to the Driver as directed by the Senior Network Controller, Metrol for providing relief or authorising further movement of the train.

11.2.2 The Network Operations Duty Manager or Senior Network Controller, Metrol

After being advised by the Train Controller, Metrol of the SPAD the Manager/Senior Network Controller, Metrol must carry out the following:

- Complete [L4-OPS-FOR-030] Network Operations Duty Manager/Senior Network Controller SPAD Immediate Response Form

- Assess the Driver Risk Profile Report before deciding on the instructions to provide to the Driver

- Inform the Train Controller, Metrol/Controlling Signaller of the details of the instructions based on the outcome of the review of the Driver Risk Profile Report

- Inform the Train Services Officer - Principal Driver Specialist of the circumstances and provide the details of the SPAD

- At interlocked locations prior to any movement of the train the Duty Manager /Senior Network Controller must ensure that any points pertaining to the route are set for the train movement.

11.2.3 Instructing the Driver to Move the Train

If the Driver has been deemed fit to continue, and in accordance with the appropriate category in the Driver Risk Profile Report, the Driver will be directed by the Train Controller, Metrol of the next location for the train to be moved to, and the operating restrictions under which the train is to be moved.

Where a Driver deems themselves unfit to move the train, arrangements must be made to have the Driver relieved on site.

12 Train Driver Instructions

12.1 Train Driver Instructions Category A SPAD

When a Category A SPAD incident has occurred the following instructions are mandated and must be followed.

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12.1.1 Driver Actions

In the event of a Category A SPAD the Driver must:

- Immediately bring the train to a stand and secure the train
- Assess the situation in relation to potential risk to other trains
- If there is a risk to other trains, make a DTRS REC call to stop all trains in the vicinity of the SPAD location
- Not move the train unless instructed to do so
- Contact the Controlling Signaller or Train Controller, Metrol, and state "I have had a category A SPAD. The Driver must provide the required information, then act under instructions of the Controlling Signaller or Train Controller, Metrol

12.1.2 Information to be Provided

The following information must be provided to the Controlling Signaller/Train Controller, Metrol/Senior Network Controller/Network Operations Duty Manager once contact has been made:

- Name and Employee Number
- Depot
- Shift Number
- Leading motor number
- Train Descriptor Number
- Originating and destination stations
- Signal location
- Current train stopping point past the signal
- Answers to any further questions asked by the Train Controller, Metrol

12.2 Train Driver Instructions Category B SPAD

When a Category B SPAD incident has occurred the following instructions are mandated and must be followed.

12.2.1 Driver Actions

In the event of a Category B SPAD the Driver must:

- Immediately bring the train to a stand and secure it
- Not move the train unless instructed to do so
- Contact the Controlling Signaller or Train Controller, Metrol, provide details of the SPAD, then act under instructions of the Controlling Signaller or Train Controller, Metrol
- Fill out a *Report of Signal Reverting to 'Danger' for a SPAD/No SPAD Incident* before the completion of the shift and submit it to their Depot Train Driver Manager or to the Train Services Officer – Principal Driver Specialists.

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12.2.2 Moving the Train

Once the Driver has contacted the Controlling Signaller or Train Controller, Metrol and has been instructed to move the train, the Driver may continue on the journey.

Where the Driver deems themselves unfit, arrangements must be made to have the Driver relieved.

13 Related Documents

- Operations Duty Manager/Senior Network Controller Metrol SPAD A Immediate Response Form (L4-OPS-FOR-030)
- SPAD Management Standard (L0-SQE-STD-001)
- SPAD Incident Recording Form (L4-SQE-FOR-109)

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	REPORTING OF FIXED SIGNALS REVERTING TO THE 'STOP' POSITION	
L2-SQE-PRO-285	Version: 2	Effective from: 20 th May 2016

Approval

Document Author	Name	Position	Signature
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Approving Manager	David Ward	Manager Network Safety	

Amendment Record

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16/04/2012	1	Formally cmt-8.13-PR-420.
20/05/2016	2	Formally L2-SWS-PRO-008. Form L4-SWS-FOR-017 also withdrawn. Title alterations.

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	REPORTING OF FIXED SIGNALS REVERTING TO THE 'STOP' POSITION	
L2-SQE-PRO-285	Version: 2	Effective from: 20 th May 2016

1. Purpose and Scope

This procedure provides actions to be taken in the event of a fixed signal reverting to the 'Stop' position on the approach of a train, potentially resulting in a Category 'B' 1, 2 or 3 SPAD.

2. Responsibilities

Responsibilities in this procedure extend to Drivers, Train Controllers, Signallers, Train Service Officers (Signaller Specialist), Train Service Officer (Principal Driver Specialist), Signal Fault Centre and the Rail Safety Manager/Manager Network Safety.

3. SPAD Categories

B1	When a SPAD has occurred because a 'Proceed' indication was reverted to 'Stop' because of infrastructure failure (ie: <i>signalling or level crossing equipment has failed</i>)
B2	When a SPAD has occurred because a 'Proceed' indication was displayed or reverted to 'Stop' in error.
B3	When a SPAD has occurred because a Stop indication was not displayed in sufficient time for the train to be stopped safely at the Signal, due to it being restored automatically or in an emergency.
B4	When a SPAD has occurred because vehicles without any traction unit attached, or a train which is unattended, have run away past the Signal at Stop.

4. Procedure**4.1 Driver:**

If a Driver observes a fixed signal revert to the 'Stop' position whilst their rail traffic movement is on the approach to the signal, the Train Controller at Metrol must be immediately notified.

If the movement passes a Home, Disc or Dwarf signal at 'Stop' as a result of the signal reverting, the Driver must obtain the approval of the controlling Signaller before the movement is permitted to continue.

Prior to completion of the shift for that day, the Driver reporting the irregularity must submit form L4-SQE-FOR-126 - 'Report of Fixed Signals Reverting to the 'Stop' Position' and submit it to their manager.

4.2 Train Controller at Metrol:

- Ascertain full details from Driver.
- Ascertain the location where the signal reverted to 'Stop'.
- In automatic signalled areas – Where there is no known reason why the Automatic signal reverted to 'Stop', authorise the Driver to proceed in accordance with Rule 1 – Section 3 – 'Detention at Fixed Signals'.
- If the Signal is controlled by a Signaller – Contact the controlling Signaller to ascertain any reason why the Home, Disc or Dwarf signal reverted to 'Stop' on the rail traffic movement's approach to the signal.

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- Advise the Signal Fault Centre of the incident and obtain a Fault Number.
- If the rail traffic movement involved is a MTM Passenger train (which includes the Stony Point Passenger service), advise the Train Service Officer (Principal Driver). For non MTM Passenger trains, the Rail Safety Manager/Manager Network Safety will deal directly with the Operator of the rail traffic movement.
- Advise the Train Service Officer (Signaller Specialist) if the incident has occurred at a signal controlled by a Signaller.
- Advise the Rail Safety Manager/Manager Network Safety.
- Prepare a PRS Item.

4.3 Signaller

- Advise the Train Controller of the signal which has reverted to 'Stop', together with any apparent cause.
- Advise the Signal Fault Centre of the incident and obtain a Fault Number.
- Record the details of the event in the Train Register Book.
- If a rail traffic movement passes a Home, Disc or Dwarf Signal at the 'Stop' position as a result of the signal reverting, ensure that the points in the route are correctly set and it is safe for the movement to proceed, prior to authorising the Driver to proceed.

4.4 Train Service Officer (Principal Driver Specialist):

Liaise with the MTM Train Driver, compiling details on L4-SQE-FOR-126 - 'Reporting of Fixed Signals Reverting to the 'Stop' Position'. After compiling the information, provide a copy of this report to the Signal Fault Centre (Fax No.15790) and Rail Safety Manager/Manager Network Safety.

4.5 Train Service Officer (Signaller Specialist):

Where a Signaller has inadvertently restored a fixed signal to the 'Stop' position, causing a SPAD or NO SPAD incident, the Train Service Officer (Signaller Specialist) is to attend the Signal Box. A Drug & Alcohol Assessment must then be conducted as detailed in Procedure LO-HMR-PRO-044 and a full detailed report obtained. The Signaller is to undertake any remedial training as directed by the Rail Safety Manager/Manager Network Safety.

4.6 Signal Fault Centre:

Liaise with Signal Maintenance Technician attending the fault passing on information on L4-SQE-FOR-126 - 'Reporting of Fixed Signals Reverting to the 'Stop' Position', and arrange for signal logging and/or 'Event Playback' of the incident.

4.7 Rail Safety Manager/Manager Network Safety:

Designate any immediate action required.

5. Documents

L4-SQE-FOR-126 'Reporting of Fixed Signals Reverting to the 'Stop' Position'.

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1. SIMS INCIDENT No:

PRS Item No:

2. INCIDENT

2.1 Date of occurrence 2.2 Time of occurrence:

2.3 Signal number: 2.4 Signal Location:

2.5 Weather condition (sunny, drizzle, heavy rain etc.)

2.6 Rail Traffic I.D.: Time: T.D. Number:

From: To:

3. CONSIST

3.1 Type of train: ☐ Comeng ☐ Siemens ☐ Xirapolis ☐ Hitachi ☐ Other ☐

3.2 Number of cars: 6 3 Other

4. DRIVER DETAILS

4.1 Name:

4.2 Departmental No: 4.3 Depot:

4.3 Company:

5. DETAILS OF INCIDENT

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6. EXPLANATION

7. FEEDBACK TO DRIVER BY: _____ DATE: _____

8. EMAILED TO FAULT CENTRE
(#DL-Signal Fault Centre)

9. Fault Office ADVISED
(#2999 - Prompt 1)

☐ Yes	☐ No
☐ Yes	☐ No

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Driver Training Stage 2

Session 4 Lessons to Refresh



 METRO	COMENG MAIN LINE PREPARATION	
L3-TSD-WOI-006	Version: 2	Effective from: 1 st November 2012

Approval

Document Author	Name	Position	Signature
Document Author	Peter Boyle	Train Driver Manager, Fleet Standards	
Document Endorser	Peter Boyle	Train Driver Manager, Fleet Standards	
Approving Manager	Perry Ramsey	Manager Train Service Delivery	

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01/08/2012	1	First issue Metro. This version supersedes: - cml-8.13-tsg-026 - Comeng Train Full Preparation - Revision 00, dated 12/08/2005 This version introduces: - Table of pressures. - Altered brake piston travel range. - Simoco train radio test reference. - Observation of pantograph test from ground. - Cab door secondary spring bolt lock test. - VICERS equipment test. This version removes: - Mobile vehicle adaptor reference. This version modifies: - Pantograph lowering time. - Brake pipe full service pressure. - Main reservoir operating pressures. - Control governor test pressures. - Trip test pressures. - Continuity test pressure. - Control reservoir minimum pressure.
01/11/2012	2	This version modifies: - Entire preparation procedure - Title from Comeng Full Safety Preparation

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1. Purpose and Scope

To provide structured equipment testing procedures, sequence and preparation times for the Main Line Preparation of a three or six car Comeng train and ensure that it enters service in a safe and rail worthy condition. .

2. Abbreviations and Acronyms

- BC Brake Cylinder
- BP Brake Pipe
- BVICS Brake Valve Isolating Cock & Switch
- DDU Drivers Display Unit
- EC Emergency Cock
- FMP Fault Management Procedure
- MA Motor Alternator
- MCB Miniature Circuit Breaker
- MR Main Reservoir
- PLC Programmable Logic Control
- TDN Train Descriptor Number
- TMM Train Malfunction Message

3. Responsibilities

- Train Drivers and Trainee Train Drivers

4. Introduction

- 4.1 A Main Line Preparation is the designated preparation for a train that will enter service for the first time that day.

NOTE: If the train has undergone a Post Maintenance Preparation earlier that same day, a Revenue preparation is required in lieu of a Main Line preparation.

- 4.2 Drivers are to obtain docking arrangements according to procedures Train Allocation and Preparation.

- 4.3 The allotted time allowance for a Comeng Main Line Preparation is:

- 29 minutes for a 6 car consist.
- 19 minutes for a 3 car consist.

- 4.3.1 All perceived Critical defects noted during the following procedure should be rectified or isolated where possible by the Driver and must be reported to the Train Controller immediately as per the FMP.

- 4.3.2 Attempts to rectify, isolate or report Serious and Maintenance faults must not cause delays to the docking of the train.

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5. Table of Pressures

NOTE: All air pressure values throughout this instruction as indicated on the Driver's pressure gauges are nominally +/- 20 kPa and apply to a train at tare weight on level track.

NOTE: Relay Brake Comeng operate at the same pressures as shown for Tread Brake Comeng with the exception of brake cylinder EMERGENCY pressure, which is 300 kPa on both motors and trailers.

Comeng	Tread Brake		Disc Brake	
	Motor kPa	Trailer kPa	Motor kPa	Trailer kPa
Brake Pipe operating pressure	550	550	550	550
Brake Pipe minimum reduction	50	50	50	50
Brake Pipe FULL SERVICE Reduction	380 - 410	380 - 410	380 - 410	380 - 410
EP STEP 1	75	75	67	66
EP STEP 2	75	75	67	66
EP STEP 3	110	110	103	99
EP STEP 4	145	145	136	131
EP STEP 5	180	180	171	164
EP STEP 6	215	215	205	197
EP STEP 7	250	250	240	230
EMERGENCY	275	275	265	255
Main Reservoir operating pressure	585 - 725	275	585 - 725	
Trip lower - BP above	500		500	
Trip reset - BP at	0		0	
Control Reservoir minimum pressure	490		490	
Safety Apparatus test - BP must fall below	290		290	
Control Governor opens	310 - 340		310 - 340	
Control Governor closes	400 - 430		400 - 430	
Trip test - BP must fall below	150		150	
Continuity test - BP must fall below	300		300	

6. Procedure 6 Car

6.1 Commencement of Preparation at Leading Motor

- 6.1.1 Prior to entering the leading cab, inspect the condition of the trip apparatus, cable and striking lever as well as checking that the trip is firmly secured to the bogie.
- 6.1.2 Unlock & open the B side cab door (V29P Key) and enter the cab.

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6.2 Train Start Up & Leading Cab Visual Inspections

6.2.1 Check the following equipment:

- TMM clip for any reported train malfunctions, relevant notices or deferment periods
- Cab for notices advising of any modifications or tests being carried out on the train
- Check preparation log book
- Trip latching lever is in the raised position
- Park brake is applied
- Brake controller is in the RUNNING & RELEASE position
- BVICS is CLOSED
- Master controller is locked in the OFF position
- All MCBs and isolating switches are in their normal operating position
- First Aid Kit is sealed (where applicable)

6.2.2 Raise pantograph and start MA as instructed in *Raising and Lowering Pantographs*

6.2.3 Press the saloon lights on button.

6.2.4 Place the marker light switches to ON and RED

6.2.5 Ensure VICERS fault indicator is not illuminated.

6.2.6 Take the switch stick and exit the cab through the B side cab door

6.2.7 Proceed around the train in a clockwise direction towards the leading centre motor and begin external inspections.

6.3 Leading Motor - External Inspections

6.3.1 Check the following isolating cocks are in the NORMAL position:

- Red emergency circuit cock
- Yellow TECH cock
- Main reservoir to brake controller isolating cock

6.3.2 On the Scharfenberg coupler, check:

- Electrical coupling doors are closed
- Ripcord is locked with a 5P padlock
- Electrical coupling lever under the rubber dust protection cover is pointing to the A side
- Brake pipe, main reservoir and brake pipe sensor rubber mouthpieces are in place and in good condition
- Condition of train cable and air hoses
- Main reservoir and brake pipe end cocks are in the OPEN position

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6.3.3 Check the condition and serviceability of the following equipment:

- Destination indicator is functioning
- Marker lights are illuminated RED
- Transition coupler is secured and locked with a 5P padlock
- Underframe equipment isolating cocks are OPEN
- Wheels, brake blocks, rigging and general bogie condition
- Air levelling valves, indicators and suspension air bags
- External condition of saloon doors, windows and lights
- Green light is illuminated in the spin/slide equipment box (where applicable)
- Equipment case covers are closed and secure
- Pantograph interlock cock, auxiliary and main isolating switches are in the NORMAL position
- Drain fluid from all air reservoirs and dirt collectors
- PLC By-Pass status indicator lights above No's 3 & 4 doors are illuminated
- Emergency lighting battery status LEDs on battery box (where applicable)
- Condition of pantographs for grooving in the pantograph head/pan and missing or damaged carbon strips
- Listen for and locate any prevalent air leaks

6.3.4 Inspect the following equipment between the motor and trailer is in serviceable condition:

- Main reservoir and brake pipe flexible hose couplings
- Main reservoir and brake pipe end cocks are OPEN
- Semi-permanent coupler for any obvious damage
- Train cables are connected
- Footplates for any obvious damage
- Safety chains and communication door and saloon end windows are in place

6.4 Leading Trailer - External Inspections

6.4.1 Check the condition and serviceability of the following equipment:

- Underframe equipment isolating cocks are OPEN
- Wheels, brake blocks, rigging and general bogie condition
- Air levelling valves, indicators and suspension air bags
- Green light is illuminated in the spin/slide equipment box (where applicable)
- Equipment case covers are closed and secure
- Drain fluid from all air reservoirs and dirt collectors
- External condition of saloon doors, windows and lights
- PLC By-Pass Switch status indicator lights above No's 3 & 4 doors are illuminated

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- Emergency lighting battery status LEDs located on battery box
- Listen for and locate any prevalent air leaks
- Ladder is secure and locked in position with 5P padlocks

6.4.2 Inspect the condition of equipment between the leading trailer and leading centre motor as described in paragraph 6.3.4.

6.5 Leading Centre Motor - External Inspections

6.5.1 Continue external inspections as previously

- Underframe equipment isolating cocks are OPEN
- Wheels, brake blocks, rigging and general bogie condition
- Air levelling valves, indicators and suspension air bags
- External condition of saloon doors, windows and lights
- Green light is illuminated in the spin/slide equipment box (where applicable)
- Equipment case covers are closed and secure
- Drain fluid from all air reservoirs and dirt collectors
- PLC By-Pass Switch status indicator lights above No's 3 & 4 doors are illuminated
- Emergency lighting battery status LEDs located on battery box (where applicable)
- Condition of pantographs for grooving in the pantograph head/pan and missing or damaged carbon strips
- Listen for and locate any prevalent air leaks

6.5.2 On arrival at the front of the leading centre motor, check that both units are correctly coupled by observing the following:

- Coupling indicators are aligned
- Electrical coupling heads are coupled and sealed
- Main reservoir and brake pipe end cocks are OPEN
- Condition of train cables and hoses

6.6 Leading Centre Motor Cab - Visual Inspections

6.6.1 Prior to entering the leading centre motor cab, inspect the condition of the trip apparatus, cable and striking lever as well as checking that the trip is firmly secured to the bogie.

6.6.2 Unlock & enter the cab through the B side cab door.

6.6.3 Carry out cab visual inspections as previously described in section 6.2.1 with the exception of the log book.

6.6.4 If necessary, raise the pantograph and start MA as instructed in *Raising and Lowering Pantographs*.

6.6.5 Prior to leaving leading centre motor check the following:

- Trip latching lever is raised

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- Marker lights are OFF
- Headlights are OFF
- Mirrors are folded in
- All blinds are lowered
- All unnecessary equipment is switched OFF
- Check the tool kit if applicable

6.6.6 Exit cab through the B side door ensuring all doors are locked and proceed to the trailing centre motor cab.

6.7 Trailing Centre Motor Cab - Visual Inspections

6.7.1 Unlock & enter the cab through the A side cab door.

6.7.2 Carry out cab visual inspections as previously described in section 6.2.1 with the exception of the log book.

6.7.3 If necessary, raise the pantograph and start MA as instructed in *Raising and Lowering Pantographs*.

6.7.4 Prior to leaving leading centre motor check the following:

- Trip latching lever is raised
- Marker lights are OFF
- Headlights are OFF
- Mirrors are folded in
- All blinds are lowered
- All unnecessary equipment is switched OFF
- Check the tool kit if applicable from this cab

6.7.5 Exit cab through the A side door ensuring all doors are locked and proceed to the rear motor cab.

6.8 Trailing Centre Motor - External Inspections

6.8.1 Conduct external inspections as previously described in section 6.3

6.9 Trailing Trailer - External Inspections

6.9.1 Conduct external inspections as previously described in section 6.4.

6.10 Trailing Motor - External Inspections

6.10.1 Conduct external inspections as previously described in section 6.3.

6.11 Trailing Motor Cab - Full Inspections & Tests

6.11.1 Prior to entering the trailing motor cab, inspect the condition of the trip apparatus, cable and striking lever, as well as checking that the trip is firmly secured to the bogie.

6.11.2 Unlock & enter the cab through the B side cab door.

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6.11.3 Carry out cab visual inspections as previously described in section 6.2.1.

6.11.4 Ensure all pantographs are raised and all MAs are running.

6.11.5 When main reservoir pressure reaches operating pressure, open the BVCS.

6.11.6 Once the brake pipe charges to operating pressure, lower the trip and note brake pipe pressure reduces rapidly.

6.11.7 Move the brake controller to EMERGENCY and completely drain the brake pipe to 0 kPa to reset the trip.

NOTE: To ensure that the trip resets, the brake pipe must be completely drained to 0 kPa and the audible flow of air must have stopped before recharging.

6.11.8 Move the brake controller to RUNNING & RELEASE and fully recharge the brake pipe.

6.11.9 Move the brake controller to STEP 7 EP.

6.11.10 Inspect and/or test the condition of the following equipment in the van area:

- Emergency marker light switch box is sealed and the status light is illuminated. If the status light is not illuminated, press the button located above the light to check battery charge
- A side windscreen wiper & washer operate (where provided)
- Local park brake can be released and applied using the local controls
- The six isolating cocks in electrical cabinet are in the OPEN position
- Pantograph storage reservoir is fully charged to main reservoir operating pressure and the wheel valve is CLOSED
- Two way cock is NORMAL (vertical)
- Pantograph battery operated compressor functions
- Condition of the van area seat (where provided)
- All sunblinds are in place and in good working order
- Confirm tool kit (where provided) is sealed. If unsealed, inspect for the following contents:
 - Hammer
 - Shifter
 - Chisel
 - Rope
 - Wooden bungs
 - Park brake socket & brace (tread brake only)
- A side window opens, closes and latches
- A side mirror is clean and not loose, damaged or distorted
- Van area heater and lights are operational
- Operate the van area emergency cock and observe a rapid reduction of brake pipe pressure, then close the cock

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- A side cab door opens, latches open, closes and locks. Check secondary spring bolt lock engages to secure door closed. Secure bolt in disengaged position
- Audible Track Warning Signals:
 - Are locked
 - Minimum of 12
 - Expiry date
- Condition of Instructor's seat
- Red and green flags
- Emergency Track Circuit Jumper Cable
- Bulkhead door opens from both sides, and locks closed
- Wheelchair ramp is present and in good condition
- B side cab door opens, latches open, closes and locks. Check secondary spring bolt lock engages to secure door closed. Secure bolt in disengaged position

6.11.11 Inspect and/or test the condition of the following equipment in the Driver's compartment:

- Driver's seat condition & operation in all positions
- Fire extinguisher:
 - Ensure seal is intact
 - Needle on gauge is displaying in the charged (green) area
 - Maintenance Record is up to date on tag
- Lanyard and switch sticks are present
- Sunblinds are in place and in good working order
- B side window opens, closes and latches
- B side mirror is clean and not loose, damaged or distorted
- The three isolating cocks under the Driver's console are in the OPEN position
- Whistle operates
- Windscreen wiper and washer operate effectively
- Headlight beam status indicators on the console operate correctly for HIGH and LOW beam
- Gauge dimmer switch and cab light switch
- Press the Control Governor By-pass button and check it illuminates after 30 seconds
- Press doors A & B release and check that the buttons illuminate
- Press the doors closed button on the Driver's console for 2 seconds
- Listen for the door closed tone and check the button is illuminated
- Bell button, isolation switch and bell operation
- Press fault light test button and check all fault lights illuminate
- Supply light is illuminated

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- Control reservoir gauge is registering a minimum of 490 kPa
- Ensure the train lined park brake can be released and then re-applies when reverser is placed to the OFF position
- Press saloon lights OFF button, and observe saloon lights are off
- Press saloon lights on button and observe lights illuminated
- Door indicator Hi/Low switch
- Memory aid device button flashes and tone sounds
- Brake pipe test switch is in the NORMAL position
- Drivers foot well heater
- Air conditioning booster fan operates

6.11.12 After completion of cab equipment tests conduct the following functionality tests.

6.11.13 Fixed Train Radio, PA & CCTV Tests

- Test the operation of the fixed radio as described in work instruction Simoco Fixed and Portable Train Radios.
- Switch on PA cab speaker isolation switch and test the PA via the Push to Talk (PTT) button on the Driver's Interface Unit.
- Turn off PA cab speaker isolation switch
- Ensure the DDU is on line and displays the couple feature in the bottom left corner and that no Fault codes are present

6.11.14 Brake Tests.

- Conduct Full EP Brake Test as per the Comeng Brake Controller tests document
- Conduct Automatic Air Brake Test as per the Comeng Brake Controller tests document

6.11.15 Safety Apparatus Tests

- Conduct Hand/Foot Pilot Valve & Control Governor Tests as per the Comeng Safety Apparatus test procedure
- Conduct Full Trip Apparatus Tests as per the Comeng Safety Apparatus test procedure
- Conduct VICERS Tests as per the Comeng Safety Apparatus test procedure

6.11.16 After Completion of Cab Equipment Tests and Functionality Tests.

- Raise the trip, place the brake controller to EMERGENCY, close the BVICS and return the brake controller to RUNNING & RELEASE.
- Exit the cab through the B side door
- Ensure Trip has fully raised.

6.12 Trailing Unit - External Inspections

- 6.12.1 Proceed around the train in a clockwise direction towards the trailing centre motor conducting external inspections as previously described in sections 6.3 and 6.4.

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6.13 Trailing Centre Motor

6.13.1 Inspect the condition of the trip apparatus, cable and striking lever as well as checking that the trip is firmly secured to the bogie.

6.14 Leading Unit - External Inspections

6.14.1 Proceed to the leading motor cab conducting external inspections as previously described in sections 6.3 and 6.4.

6.15 Leading Motor Cab - Full Inspections & Tests

6.15.1 Upon arrival at the leading motor cab, enter through B side door, set marker lights to ON and WHITE

6.15.2 Conduct full cab equipment inspections as previously described in sections 6.11.4 to 6.11.15.

6.16 Continuity, Pantograph & Emergency Lighting Test

6.16.1 Ensure the brake controller is in STEP 7 EP, the BVICS is OPEN, brake pipe is at operating pressure and the train-lined park brake is applied.

6.16.2 Exit cab through the B side door and proceed around the train in a clockwise direction towards the leading motor.

6.16.3 Whilst walking to the rear motor:

- Ensure marker lights are illuminated white
- Inspect all **EP brakes** are applied and BC piston travels on tread brake trains are correct as described in work instruction *Brake Block Wear and Piston Travels*
- Also check that the EP brakes are applied by observing the brake cylinder pressure gauges on trailers

6.16.4 On arrival at the rear motor cab, enter cab and observe BC pressure is at STEP 7 EP and BP is at operating pressure.

6.16.5 Open the van area emergency cock for 15 seconds and observe BP pressure reduces to below 300 kPa.

6.16.6 Close the van area emergency cock and observe BP pressure rises to a minimum of 425 kPa within 40 seconds for 6 cars or 20 seconds for 3 cars.

6.16.7 Ensure saloon lights are on and then press the pantograph down button on the Driver's console.

6.16.8 Observe where possible the pantographs have lowered within approximately 10 seconds.

6.16.9 Observe the DC supply light has extinguished.

6.16.10 Observe a reduction in brake pipe pressure equivalent to a full service application and a corresponding increase in brake cylinder pressure

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6.16.11 Prior to leaving rear motor ensure that:

- Trip latching lever is raised
- Marker lights are on RED
- Headlights are OFF
- All blinds are lowered
- All unnecessary equipment is switched OFF

6.16.12 Exit the cab through the B side door after ensuring all cab doors are locked.

6.16.13 Continue around the train in a clockwise direction towards the lead motor

- Ensuring all pantographs have lowered
- Inspect emergency lighting is operational in every car
- Inspect all **automatic brakes** are applied and BC piston travels on tread brake trains are correct as described in the work instruction *Brake Block Wear and Piston Travels*
- Observe BC pressure gauges on trailers

6.16.14 Upon arriving at the lead motor cab, raise all pantographs and start all MAs.

6.17 Train ready for departure

6.17.1 Enter the TDN into the DDU and fixed radio.

6.17.2 Comeng full safety preparation is now complete.

6.17.3 Perform Train Register procedures appropriate for the location.

7. Procedure 3 Car

7.1 The full preparation of a Comeng three car consist is the same as for a six car consist with the following exceptions:

- The time allowance is 19 minutes.
- There are no centre motor cars to inspect.

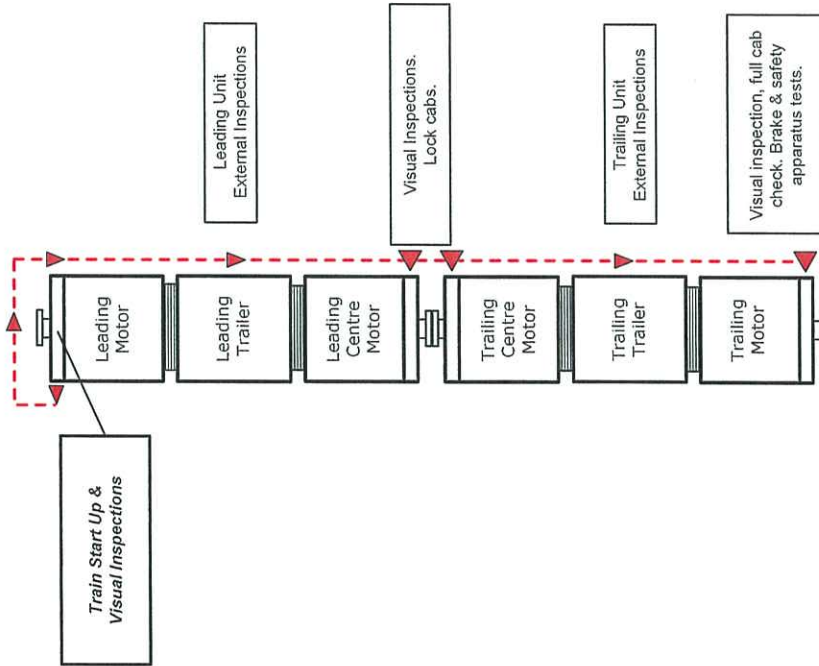
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8. Diagrams

8.1 Main Line Preparation Sequence Diagram 6 Car Comeng

8.1.1

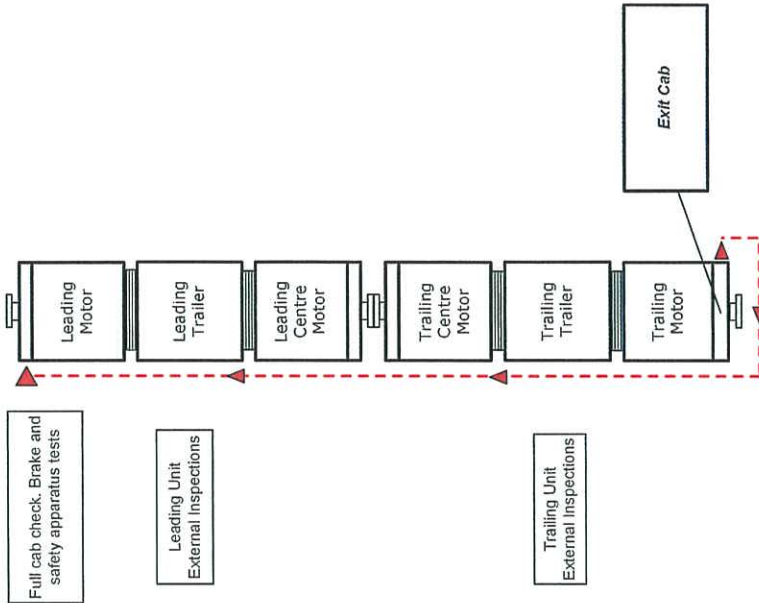


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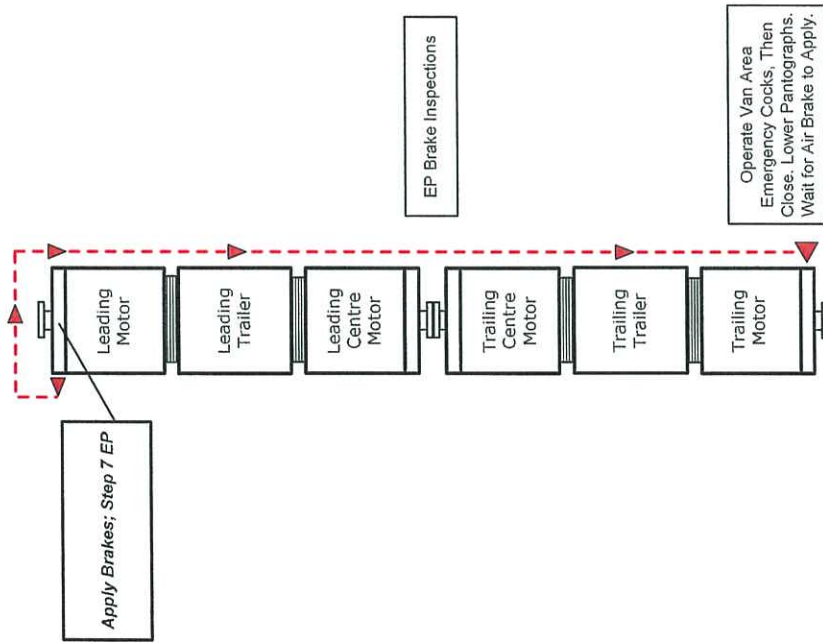
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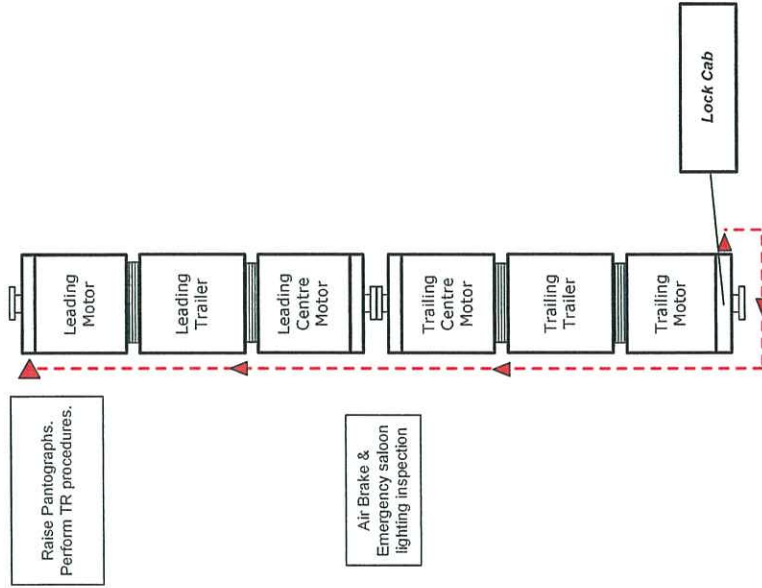
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8.1.4

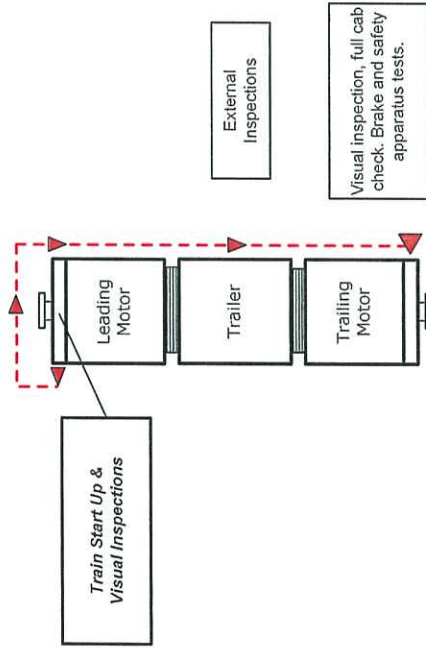


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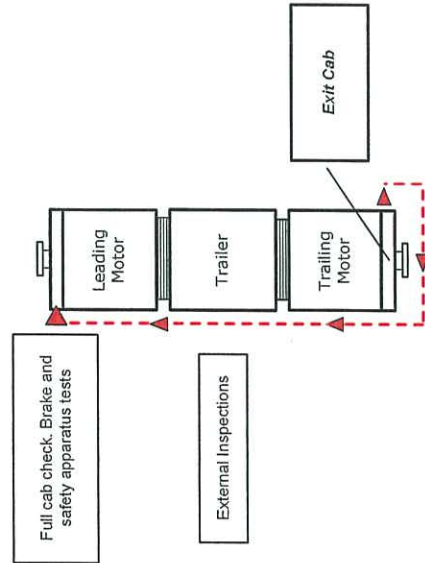
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8.2 Main Line Preparation Sequence Diagram 3 Car Comeng

8.2.1



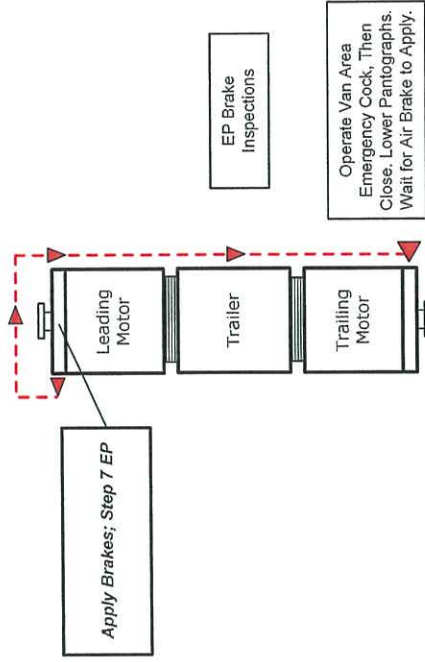
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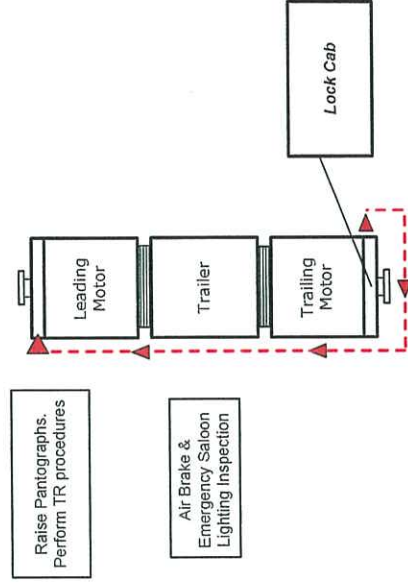
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8.2.3



8.2.4



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9. Records and Enquiry

Item	Retained by	Period of Retention
Development Folder	Train Driver Standards Officer	3 years
Obsolete master copies	Train Driver Standards Officer	6 years
Distribution lists	Train Driver Standards Officer	3 years

Enquiries about this document are to be directed to Train Driver Standards Officer TSD.

10. Related Documents

- Train Allocation and Preparation
- Rectification of Faults Suburban Electric Trains
- L1-SQE-PRO-007 Storage and Handling of Audible Track Warning Signals
- L1-TSD-PRO-003 Fault Management Procedure
- L3-TSD-WOI-016 Brake Block Wear and Piston Travels
- L3-TSD-WOI-018 Drivers Display Unit Operation
- L3-TSD-WOI-019 Raising and Lowering Pantographs
- L3-TSD-WOI-024 Simoco Fixed and Portable Train Radios
- L3-TSD-WOI-025 Comeng Safety Apparatus Tests
- L3-TSD-WOI-026 Comeng Brake Controller Tests

11. References

- UFD5 110101 - Fleet Data Sheet Pneumatic Equipment Settings/Pressures

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Approval

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	Perry Ramsey	Manager Train Service Delivery	<i>Perry Ramsey</i>

Amendment Record

Approval Date	Version	Description
12/06/2012	1	First issue Metro. This version supersedes: • cmt-8.13-tsg-005 - X'Trapolis Train Full Safety Preparation. • TS-380 X'Trapolis Safety Loop Test Modified Lights Display Please dispose of all copies. This version introduces: • Table of Pressures • Simoco train radio test reference. • Saloon seats & PIDS check. • Pantograph test observation from ground. This version modifies: • FULL SERVICE brake cylinder pressure. • Holding brake cylinder pressure • Brake and vigilance test order to align all trains. • Pantograph lower time. • Status indicators displayed in safety loop test. This version removes: • Mobile vehicle adaptor reference. • Tool kit check.
05/11/2012	2	This version supersedes: • L3-TSD-WOI-017 - X'Trapolis Full Safety Preparation Please dispose of all copies. This version modifies • Entire preparation procedure • Title from X'Trapolis Full Safety Preparation

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1. Purpose and Scope

This document provides structured equipment testing procedures, sequence and preparation times for the Main Line Preparation of a three or six car X'Trapolis train to ensure that it enters service in a safe and rail worthy condition.

2. Abbreviations and Acronyms

- BC Brake Cylinder
- DDU Drivers Display Unit
- ESB Emergency Stop Button
- FMP Fault Management Procedure
- MCB Miniature Circuit Breaker
- MR Main Reservoir
- TDN Train Descriptor Number
- TMM Train Malfunction Message

3. Responsibilities

- Train Drivers and Trainee Train Drivers

4. Introduction

- 4.1 A Main Line Preparation is the designated preparation for a train that will enter service for the first time that day.

NOTE: If the train has undergone a Post Maintenance preparation earlier that same day, a Revenue preparation is required in lieu of a Main Line preparation.

- 4.2 Drivers are to obtain docking arrangements according to *Train Allocation and Preparation* procedure.

- 4.3 The allotted time allowance for an X'Trapolis Main Line Preparation is:

- 29 minutes for a 6 car consist.
- 19 minutes for a 3 car consist.

- 4.4 All perceived Critical defects noted during the following procedure should be rectified or isolated where possible by the Driver and must be reported to the Train Controller immediately as per the FMP.

- 4.5 Attempts to rectify, isolate or report Serious and Maintenance faults must not cause delays to the docking of the train.

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5. Table of Pressures

NOTE: All air pressure values throughout this instruction, as indicated on the Driver's pressure gauges are nominally +/- 20 kPa and apply to a train at tare weight on level track.

	kPa
Full Service Brake Cylinder Pressure	190
Emergency Brake Cylinder Pressure	210
Holding Brake Cylinder Pressure	120
Main Reservoir Operating Pressures	750 - 900

6. Procedure 6 Car

6.1 Commencement of Preparation at Leading Motor

6.1.1 Prior to entering the leading cab, inspect the condition of the trip apparatus, cable and striking lever and that the trip is firmly secured to the bogie.

6.1.2 Open the auxiliary pneumatic panel cover and ensure the following 5 isolating cocks are in the normal position:

- Whistle
- Automatic Coupler (pneumatic uncoupling)
- Trip (reset mechanism)
- Trip (raising and lowering cylinder)
- Auxiliary Pneumatic Panel

6.1.3 Unlock (V29P key) and open B side cab door, check step light illuminates, indicating presence of permanent line voltage, and enter cab.

6.2 Train Start Up & Leading Motor Cab Visual Inspections

6.2.1 Check the following equipment:

- Car Cleaners key switch (If a key is inserted, arrange for the cleaner to remove it prior to inserting the master key)
- *Other Cab Active* status indicator is not illuminated
- Inspect TMM clip for reported train malfunctions, relevant notices or deferment periods
- Inspect cab for notices advising of any modifications or tests being carried out on the train
- Inspect preparation log book
- MCBs and turret switches on the electrical equipment panel are in their NORMAL operating position
- ESB is not pushed in
- Emergency trainset mode switch is in 2 - NORMAL position
- Local & trailing pantograph control buttons are not latched in

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- Trip cock switch is in the RAISED position

6.2.2 Insert the controller key into master controller switch and turn it to ON to automatically raise pantographs and initiate the electrical start up sequence.

6.2.3 Check the following equipment:

- *Auxiliary Fault* and *Battery Charger Fault* status indicators extinguish in approximately 20 seconds, during which time the controller key must remain in the master controller switch and turned to ON
- *Battery voltage* indicator displays above ninety volts (90V)
- Saloon lights control switch is in 1 position for full saloon lighting throughout the train
- Brake cylinder gauge is displaying emergency pressure and main reservoir pressure is between 750 and 900 kPa or rising
- Fault and status indicator panels have only the following indicators illuminated:
 - *High Voltage Presence*
 - *Emergency Brake Applied*

6.2.4 Turn marker light switch from AUTO to WHITE.

6.2.5 Release saloon doors to enable external inspection of green LED on door open buttons.

6.2.6 Remove and retain controller key.

6.2.7 Exit via the B side cab door.

6.2.8 Proceed around the front of the train in a clockwise direction and begin external inspections.

6.3 Leading Motor - External Inspections

6.3.1 Inspect the following on the Scharfenberg coupler:

- Ripcord is secured and locked with 5P padlock
- Electrical coupling heads are CLOSED
- Electrical coupling isolating cock is in the HORIZONTAL position
- Brake pipe, main reservoir and brake pipe sensor rubber mouthpieces are present and in good condition
- Main reservoir and brake pipe end cocks are OPEN
- Condition of train cable and air hoses

6.3.2 Check the following equipment is in correct operational condition:

- Marker lights display WHITE
- Destination indicator
- External brake cylinder LED indicators located at each end of the car display RED
- Transition coupler is secured with 5P padlock and air hoses are attached to dummy couplings

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- External condition of saloon doors & windows
 - Saloon lighting is fully illuminated
 - Green LED door open buttons are illuminated
 - External emergency door release tri-key locks are in the NORMAL position (indicator groove horizontal)
 - Underframe equipment isolating cocks are OPEN
 - Brake blocks, brake equipment, brake rigging and bogies
 - Shock absorbers, piping and secondary suspension springs
 - Park brake manual release handles are in place and secured with a padlock
 - Underframe equipment is serviceable and equipment case covers are CLOSED and secure
 - Emergency ladder is locked with a 5P padlock
 - High voltage supply switch is in the vertical POWER SUPPLY position
 - Listen for and locate any prevalent air leaks
- 6.3.3 Inspect the following equipment between the leading motor and leading trailer is in serviceable condition:
- Main reservoir and brake pipe flexible hoses
 - Semi-permanent coupler
 - Train cables
 - Passenger intercommunication gangway, bellows and footplates

6.4 Leading Trailer - External Inspections

- 6.4.1 Check the following equipment is in correct operational condition:
- External brake cylinder LED indicators display RED
 - External condition of saloon doors and windows
 - Saloon lighting is fully illuminated
 - Green LED door open buttons are illuminated
 - External emergency door release tri-key locks are in the NORMAL position (indicator groove horizontal)
 - Underframe equipment isolating cocks are OPEN
 - Brake blocks, brake equipment, brake rigging and bogies
 - Shock absorbers, piping and secondary suspension springs
 - Underframe equipment is serviceable and equipment case covers are CLOSED and secure
 - Listen for and locate any prevalent air leaks
 - Pantograph for grooving in the pantograph head/pan, missing or damaged carbon strips and all conducting straps are connected

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- 6.4.2 Inspect the following equipment between the leading trailer and the leading centre motor is in serviceable condition:
- Main reservoir end cock OPEN
 - Main reservoir and brake pipe flexible hoses
 - Semi-permanent coupler
 - Train cables
 - Passenger intercommunication gangway, bellows and footplates

6.5 Leading Centre Motor - External Inspections

- 6.5.1 With the exception of the transition coupler, high voltage supply switch and emergency ladder, conduct the leading centre motor external inspections, as previously described in section 6.3.

- 6.5.2 On arrival at the front of the leading centre motor check that both units are correctly coupled by observing the following:

- Coupling indicators are aligned
- Electrical coupling heads are coupled and sealed
- Ripcord is locked with a 5P padlock
- Electrical coupling isolating cocks are in the HORIZONTAL position
- Main reservoir and brake pipe end cocks are open
- Condition of train cable and air hoses
- Marker and headlights are EXTINGUISHED

6.6 Leading Centre Motor Cab - Visual Inspections

- 6.6.1 Prior to entering the leading centre motor cab, inspect the condition of the trip apparatus, cable and striking lever and that the trip apparatus is firmly secured to the bogie.

- 6.6.2 Unlock and open B side cab door, check step light illuminates and enter cab.

- 6.6.3 Carry out visual inspections as previously described in 6.2.1 with the exception of the log book

- 6.6.4 Ensure VICERS fault indicator is not illuminated.

- 6.6.5 Prior to leaving the leading centre motor, ensure:

- Mirrors are folded in
- Blinds are lowered
- All unnecessary equipment is switched OFF
- A side cab door is secured

- 6.6.6 Exit the leading centre motor via B side cab door and proceed to the trailing centre motor.

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6.7 Trailing Centre Motor Cab – Visual Inspections

- 6.7.1 Unlock and open A side cab door, check step light illuminates, and enter cab.
- 6.7.2 Carry out visual inspections as previously described in section 6.2.1 with the exception of the log book
- 6.7.3 Ensure *VICERS Fault Indicator* is not illuminated.
- 6.7.4 Prior to leaving the leading centre motor, ensure:
- Mirrors are folded in
 - Blinds are lowered
 - All unnecessary equipment is switched OFF
 - B side cab door is secured

- 6.7.5 Exit the trailing centre motor via A side cab door and conduct trailing centre motor external inspections.

6.8 Trailing Centre Motor - External Inspections

- 6.8.1 Conduct trailing centre motor external inspections as previously described in section 6.3.

6.9 Trailing Trailer - External Inspections

- 6.9.1 Conduct trailing trailer external inspections as previously described section 6.4.

6.10 Trailing Motor - External Inspections

- 6.10.1 With the exception of the transition coupler, high voltage supply switch and emergency ladder, conduct trailing motor external inspections as previously described in section 6.3.

6.11 Trailing Motor Cab - Visual & Full Inspections

- 6.11.1 Prior to entering the trailing motor cab, inspect the condition of the trip apparatus, cable and striking lever and that the trip apparatus is firmly secured to the bogie.

- 6.11.2 Open the auxiliary pneumatic panel cover and ensure the 5 isolating cocks are in the NORMAL position.

- 6.11.3 Unlock and open the B side cab door, check step light is illuminated, and enter cab.

- 6.11.4 Carry out visual inspections as previously described in section 6.2.1 with the exception of the log book

- 6.11.5 Insert the controller key into the master controller switch and turn ON to activate the cab.

- 6.11.6 Turn the trip cock switch to the LOWER position and then hold against spring tension in the RESET position to reset the trip.

- 6.11.7 Ensure fault and status indicator panels have only the following indicators illuminated:

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- High Voltage Presence
- Emergency Brake Applied

- 6.11.8 Press lamps test button to check all status indicator lamps illuminate.

- 6.11.9 Inspect and/or test the condition of the following equipment:

- Front sun blind is in place and good condition
- Toolkit seal, if unsealed check contents:
 - Red and green flags present
 - Emergency track circuit jumper cable
 - First Aid Kit is sealed (higher motor number only)
- A side mirror is clean and not loose, damaged or distorted
- A side cab door opens, latches open, closes and locks
- A side cab door sun blind is in place and good condition
- A side cab door window opens, closes and latches
- A side wall mounted door close button operates

- Coat hooks

- Audible Track Warning Signals:

- Are Locked
- Minimum of 12
- Expiry date

- Fire extinguisher:

- Ensure seal is intact
- Needle on gauge is displaying in the charged (green) area
- Maintenance Record is up to date on tag

- Switch stick

- Instructor's seat is in good condition

- Bulkhead door opens from both sides, and V29P key operates door lock

- Wheelchair ramp (if not located in saloon area)

- Coat hooks

- B side wall mounted door close button operates

- B side mirror is clean and not loose, damaged or distorted

- B side cab door opens, latches open, closes and locks

- B side cab door sun blind is in place and good condition

- B side cab door window opens, closes and latches

- All functions of the Driver's seat

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6.11.10 Inspect and/or test the following controls & equipment on the Driver's console:

- Tacho by-pass switch is sealed in NORMAL position
- Auto vigilance by-pass switch is sealed in NORMAL position
- Safety loop by-pass switch is sealed in NORMAL position
- Cab heater/air conditioner thermostat dial
- Air conditioner booster fan (if fitted)
- Windscreen demister
- PA Cab Volume Dial (if fitted)
- Cab lighting switch positions OFF, CAB, DESK and back to OFF, observing lights operate accordingly
- Windscreen wiper switch positions OFF, INT, 1, 2, and then back to OFF, and windscreen washer
- Whistle LOW, HIGH and low note (if fitted)
- Operate headlight switch from OFF to LOW, HIGH, and then back to OFF, observing blue status LED illuminates in HIGH position
- Memory aid device button flashes and tone sounds
- Foot pilot valve status indicator is extinguished
- Gauge light dimmer switch to OFF, LOW, HIGH, then back to OFF
- Marker light switch is set to AUTO
- Door status indicator light dimmer switch in LOW and HIGH positions
- Traction test button/light is extinguished
- Open bulkhead door and observe all saloon lights operating
- One Car Operation switch (where fitted) is in NORMAL position
- Traction fault isolation switch is in NORMAL position
- Operate A & B side door release and close buttons
- Driver's foot-well fan heater

6.12 Fixed Train Radio, PA, Cab to Cab Feature & DDU Tests

6.12.1 Test the operation of the fixed radio as described in work instruction *Simoco Fixed and Portable Train Radios*.

6.13 PA test for Un-Modified Units

6.13.1 Ensure cab speaker switch is not in ISOLATE (if fitted), press the PA button, and test the operation of the PA system using the Push to Talk button.

6.13.2 Place the cab speaker switch to ISOLATE, and test the operation of PA again, noting that cab speaker is isolated. Place the cab speaker switch back to ON.

6.13.3 Press the PA button a second time to cancel the PA.

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6.14 PA test for Modified Units

- 6.14.1 Press the PA button so it illuminates.
- 6.14.2 Test the operation of the PA system using the PTT button.
- 6.14.3 Press the PA button a second time to cancel the PA.
- 6.14.4 Press the cab to cab button once to initiate a call and note that the button flashes. Press the button a second time to cancel and note that the button has extinguished.
- 6.14.5 Ensure the DDU is on and that there are no Fault Messages present

6.15 Brake Test

6.15.1 Conduct a brake test as per the work instruction *X'Trapolis Brake Controller Tests*.

6.16 Safety Apparatus Tests

6.16.1 Conduct an Emergency Stop Button Test as per the work instruction *X'Trapolis Safety Apparatus Tests*.

6.16.2 Conduct a Hand & Foot Pilot Valve Test as per the work instruction *X'Trapolis Safety Apparatus Tests*.

6.16.3 Conduct an Emergency Auto Vigilance By-pass Test as per the work instruction *X'Trapolis Safety Apparatus Tests*.

6.16.4 Conduct a Full Trip Test as per the work instruction *X'Trapolis Safety Apparatus Tests*.

6.16.5 Conduct a Safety Loop Test as per the work instruction *X'Trapolis Safety Apparatus Tests*.

6.16.6 Conduct a VICERS Test as per the work instruction *X'Trapolis Safety Apparatus Tests*.

6.17 After completion of Cab Equipment Tests & Functionality Tests

6.17.1 Take the controller Key and exit cab via B side cab door.

6.18 Trailing Unit - External Inspections

6.18.1 Proceed around rear of the train in a clockwise direction towards trailing centre motor cab. Continue external inspections as previously described in sections 6.3 and 6.4.

6.19 Trailing Centre Motor Cab

6.19.1 Inspect the condition of the trip apparatus, cable and striking lever and that the trip apparatus is firmly secured to the bogie.

6.20 Leading Unit - External Inspections

6.20.1 Proceed to the leading motor cab conducting external inspections as previously described sections 6.3 and 6.4.

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6.21 Leading Motor Cab - Full Inspections

- 6.21.1 Enter leading motor via B side cab door. Insert controller key into master controller switch and turn ON to activate cab.
- 6.21.2 Turn marker light switch from WHITE to AUTO.
- 6.21.3 Conduct full cab inspections and tests as previously described in section 6.11.5 to 6.11.10
- 6.21.4 Conduct functionality, safety apparatus and brake tests as previously described in sections 6.12, 6.13, 6.14, 6.15 & 6.16.

6.22 Traction Test

- 6.22.1 With saloon doors closed and reverser in FORWARD, depress the hand pilot valve and move the master controller to FULL SERVICE.
- 6.22.2 Observe brake cylinder pressure gauge displays holding pressure.
- 6.22.3 Keeping the hand pilot valve depressed, push the traction test button and observe that it illuminates yellow.

NOTE: The hand pilot valve must remain depressed and the master controller in FULL SERVICE until the traction test button light extinguishes.

- 6.22.4 When the traction test button light extinguishes, return master controller to COAST and release hand pilot valve.
- 6.22.5 Observe fault status indicator panel for any fault indications when the test is complete.
- 6.22.6 Return the reverser to NEUTRAL.

NOTE: Any faults indicated by fault status indicators remaining illuminated must be reported as per current FMP.

6.23 Continuity, Pantograph & Emergency Lighting Test

- 6.23.1 Press the ESB and observe brake cylinder pressure gauge displays emergency pressure and *Emergency Brake Applied* status indicator is illuminated.
- 6.23.2 Release A and B side saloon doors.
- 6.23.3 Remove and retain the controller key.
- 6.23.4 Taking the portable train radio and keys, proceed via bulkhead door through the saloon areas and inspect the condition of the following equipment:
- Full saloon lighting is ON
 - Passenger seating
 - All door release indicators are working
 - Saloon windows
 - Saloon door windows
 - Door Emergency release handles are in the SET position and sealed

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- Passenger information displays
- All cabinets are CLOSED and secured
- Inspect all gangways in between cars for damage to sliding doors and door glass, foot plates or bellows

6.23.5 Enter the leading centre motor cab via bulkhead door ensuring it closes. Exit via B side door ensuring both cab doors are CLOSED.

6.23.6 Enter trailing centre motor cab via A side door. Ensure both cab doors are CLOSED then enter saloon via bulkhead door ensuring it closes.

6.23.7 Continue through train conducting internal saloon checks as previously described in section 6.23.4.

6.23.8 On arrival at trailing motor, enter cab via bulkhead door ensuring it closes.

6.23.9 Insert the controller key into the master controller switch and turn it to ON to activate the cab, close doors, LOWER and RESET trip.

6.23.10 Depress either the hand or foot pilot valve, observe brake cylinder pressure gauge displays emergency pressure and *Emergency Brake Applied* status indicator remains illuminated

NOTE: If emergency brake releases on the train, the safety loop is defective and the fault must be reported as per the FMP.

6.23.11 Return reverser to NEUTRAL.

6.23.12 Latch both local and trailing pantograph control buttons, observe that buttons illuminate RED and the *High Voltage Presence* status indicator extinguishes, and *One or More Pantograph Down* status indicator illuminates.

6.23.13 Obtain the best view of pantographs and observe that both leading and trailing pantographs have LOWERED (pantographs should lower in approximately 10 seconds).

6.23.14 Unlatch both local and trailing pantograph control buttons and observe RED button lights extinguish and observe both leading and trailing pantographs have RAISED

6.23.15 Observe the *High Voltage Presence* status indicator has illuminated and *One or More Pantograph Down* status indicator has extinguished.

6.23.16 Press the *Train Stabling Button* to enable the emergency saloon lighting to be checked whilst returning to the lead cab

6.23.17 Observe that the *High Voltage Presence* status indicator extinguishes, and *One or More Pantograph Down* status indicator illuminates.

6.23.18 Remove and retain controller key and ensure trip is raised. Prior to leaving the trailing motor, ensure:

- Blinds are lowered
- All unnecessary equipment is switched OFF
- A side cab door is secure

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6.23.19 Exit the cab using the B side door and return in a clockwise direction to the lead motor.

6.23.20 When returning to the leading motor:

- Observe all pantographs have LOWERED
 - Inspect emergency lighting is operational in every car
- 6.23.21 Upon arriving at the lead motor cab insert and turn controller key to activate cab, pull out the ESB and reset the Safety Loop

6.24 Train Ready For Departure

6.24.1 Enter the TD number into the DDU and fixed radio.

6.24.2 X'Trapolis Post Maintenance Preparation is now complete.

6.24.3 Perform Train Register point procedure appropriate for the location.

7. Procedure 3 Car

7.1 A Main Line preparation of an X'Trapolis 3 car consist is the same as for the relevant carriages and sides of a 6 car consist, with the following exceptions:

- The time allowance is 19 minutes
- There are no centre motor cars to inspect

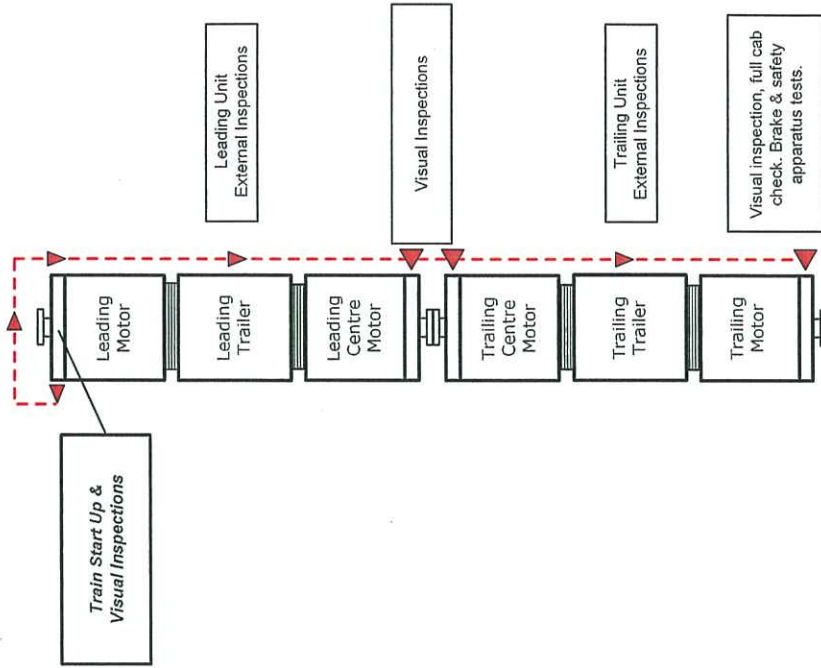
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8. Diagrams

8.1 Main Line Preparation Sequence Diagram 6 Car X'Trapolis

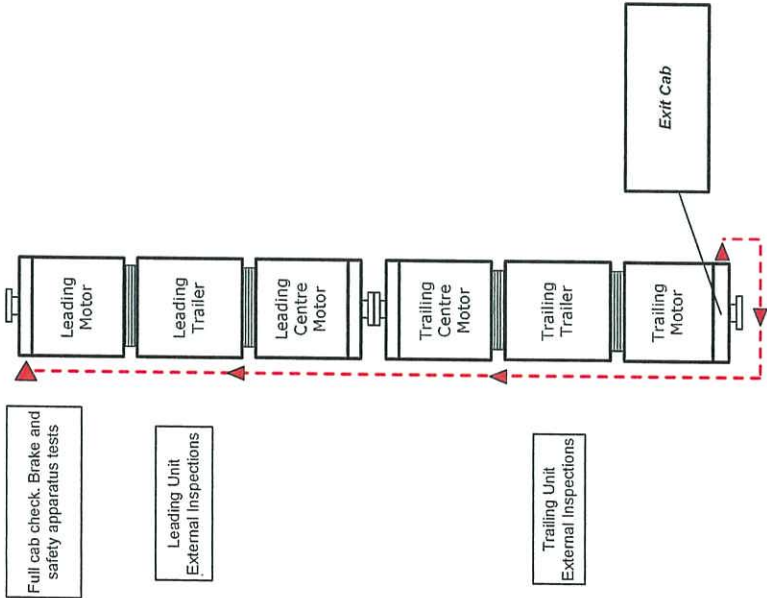
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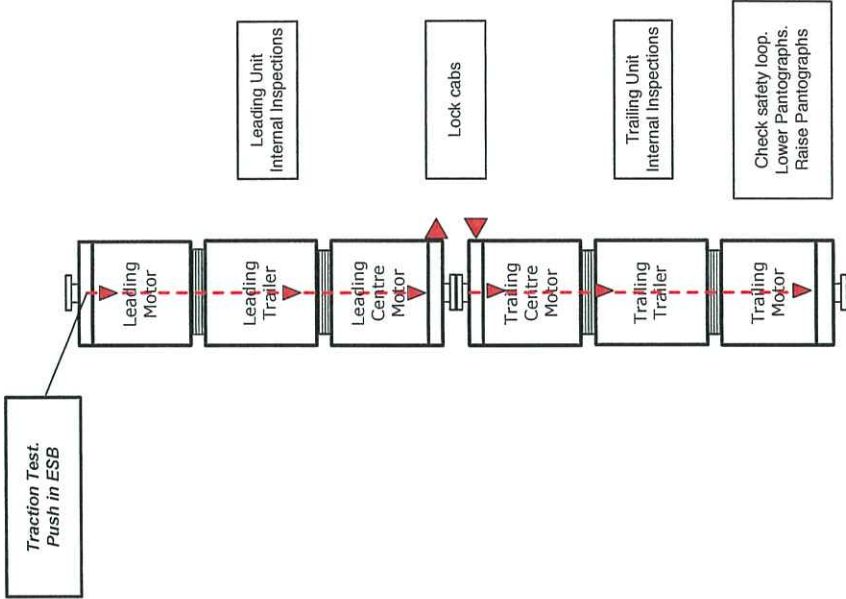
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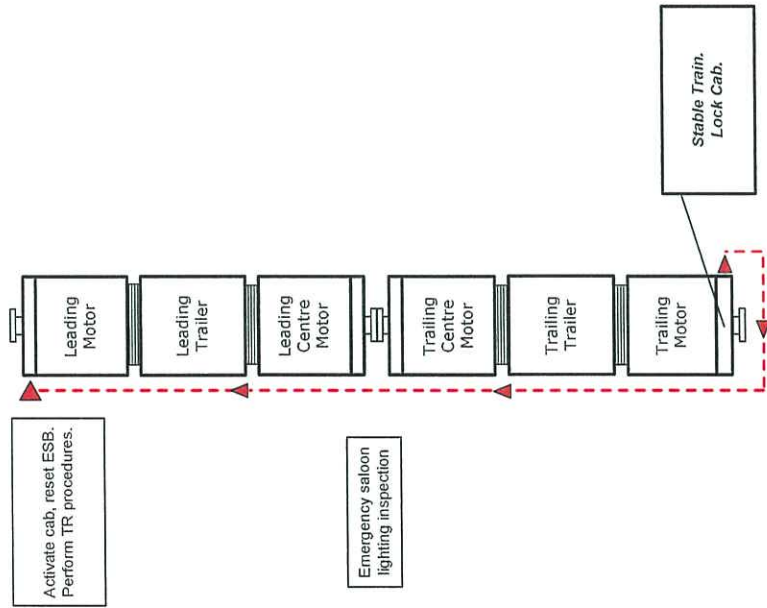
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8.1.4

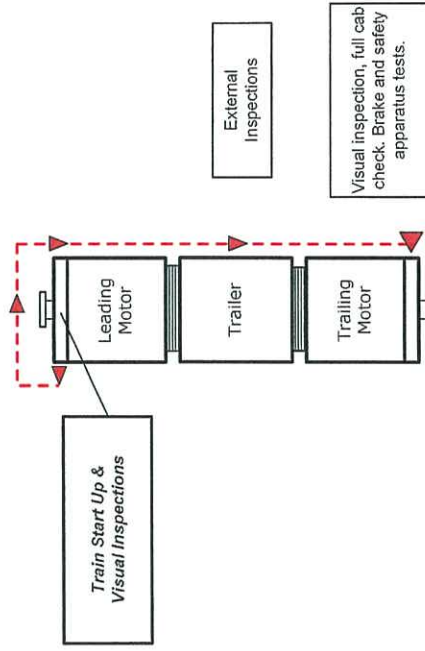


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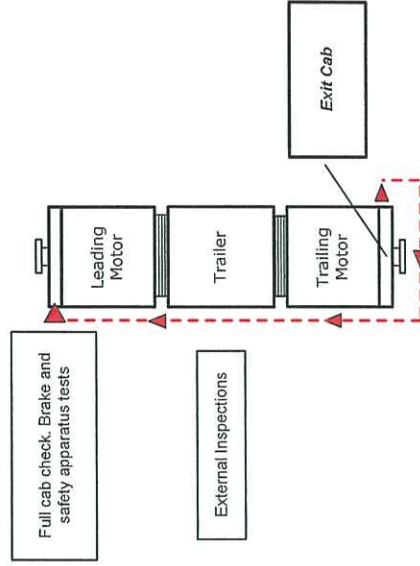
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8.2 Main Line Preparation Sequence Diagram 3 Car X'Trapolis

8.2.1



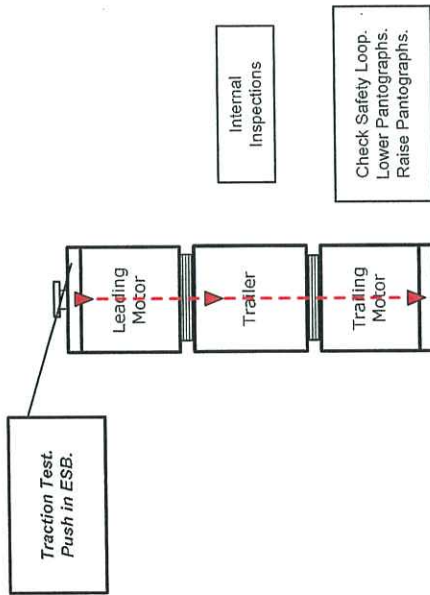
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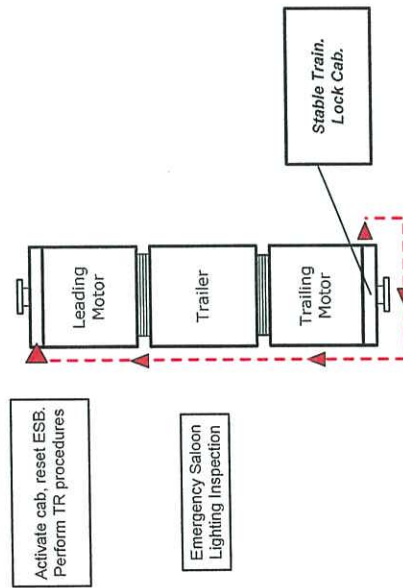
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8.2.3



8.2.4



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9. Records and Enquiry

Item	Retained by	Period of Retention
Development Folder	Train Driver Standards Officer	3 years
Obsolete master copies	Train Driver Standards Officer	6 years
Distribution lists	Train Driver Standards Officer	3 years

Enquiries about this document are to be directed to Train Driver Standards Officer TSD.

10. Related Documents

- EMU Preparation Safety
- Train Allocation and Preparation
- Rectification of Faults Suburban Electric Trains
- L1-SQE-PRO-007 Storage and Handling of Audible Track Warning Signals
- L1-TSD-PRO-003 Fault Management Procedure
- L3-TSD-WOI-007 Siemens Sanding Equipment
- L3-TSD-WOI-018 Drivers Display Unit Operation
- L3-TSD-WOI-019 Raising and Lowering Pantographs
- L3-TSD-WOI-024 Simoco Fixed and Portable Train Radios
- L3-TSD-WOI-036 X'Trapolis Brake Controller Tests
- L3-TSD-WOI-037 X'Trapolis Safety Apparatus Tests

11. References

- UFDS 110101 - Fleet Data Sheet Pneumatic Equipment Settings/Pressures

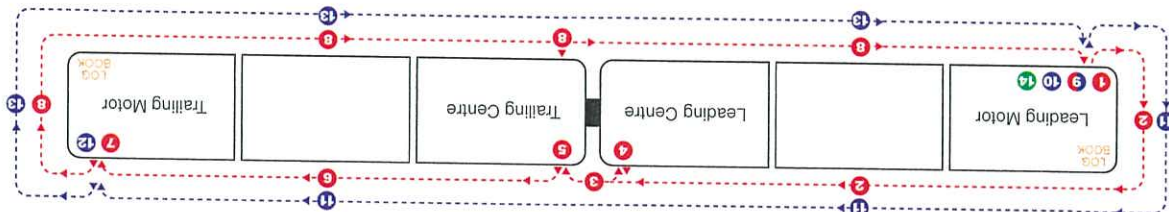
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Coming Mainline Preparation

A Main Line Preparation is the designated preparation for a train that will enter service for the first time that day.

NOTE: If the train has undergone a Post Maintenance Preparation earlier that same day, a Revenue preparation is required in lieu of a Main Line Preparation.



- 12 Enter Trailing Motor Cab and observe BC pressure displays Step 7 EP operating pressure & BP displays normal operating pressure. Open the van area emergency cock for 15 seconds and observe BP pressure reduces to below 300kPa. Close the van area emergency cock and observe BP pressure rises to a minimum of 425kPa within 40 seconds for a 6 car consist OR 20 seconds for a 3 car consist.
- 11 Ensure saloon lights are ON then perform Pantograph test and observe, where possible, that the pantographs have ALL lowered within 10 seconds.
- 10 Ensure cab is secure prior to leaving.
- 9 Exit Trailing Motor Cab and proceed around train in a clockwise direction towards the Leading Motor checking all pantographs have lowered.
- 8 Automatic brakes have applied
- 7 Piston travel on all bogies (30-65mm)
- 6 Brake Cylinder gauge on Trailer Cars
- 5 Enter Leading Motor Cab, raise all pantographs & start all MAs. Ensure BP is charged to 550kPa. Leave Brake Controller Handle in Step 7 EP Brake, enter TD Number into DDU & Fixed radio. Perform train reporting procedure appropriate for location.

Functionality Tests

Fixed Train Radio test, PA test & DDU checks
Brake Controller tests
Safety Apparatus tests are: Hand/Foot Pilot Valve & Control Governor test, VICERS test & FULL Trip test.

Danger Men at Work label prior to commencement of preparation.

Driver must place a **RED FLAG** in the holder at the front of the train, at the departing end of the siding, at the commencement of the preparation. Flag must be removed upon completion of preparation.

- 1 Prior to entering Leading Motor Cab, inspect Trip Apparatus, enter cab & perform Cab Visual Inspections & Train Start Up. Raise all Pantographs and start all MAs.
- 2 Proceed around the front of the train in a clockwise direction and conduct External Inspections.
- 3 Prior to entering Leading Centre Motor Cab, check units are correctly coupled, then inspect Trip Apparatus.
- 4 Enter Leading Centre Motor Cab & perform Cab Visual Inspections. Proceed to Trailing Centre Motor Cab.
- 5 Enter Trailing Centre Motor Cab and perform Cab Visual Inspections.
- 6 Exit Trailing Centre Motor Cab and continue External Inspections.

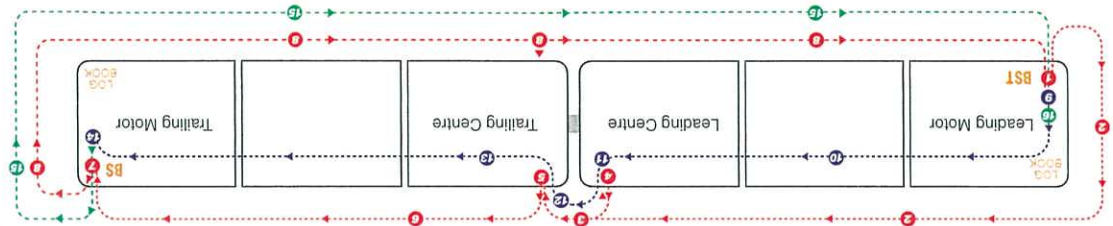
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Circular Ref: L3-TSD-WCI-006



X'Trapolis Mainline Preparation

A Main Line Preparation is the designated preparation for a train that will enter service for the first time that day.

NOTE: If the train has undergone a Post Maintenance Preparation earlier that same day, a Revenue preparation is required in lieu of a Main Line Preparation.



- 16 Enter Trailing Motor Cab via bulkhead door and complete illuminated.
- 15 Conduct Pantograph Test by pressing both local and trailing pantograph control, watching buttons and observe, where possible, that the pantographs have ALL lowered within 10 seconds. Raise pantographs have ALL lowered within 10 seconds. Pressing the Train Start button. Observe High Voltage Presence Down light illuminates for at least 5 seconds before removing control key from master controller.
- 14 Pantograph Lighting is operational and confirm that ALL Saloon Lighting is operational and confirm that ALL pantographs have lowered.
- 13 Enter Leading Motor Cab, raise pantographs and reset the Emergency Stop button.
- 12 Leave cab in active state and enter the TD number into the DDU and fixed radio. Perform train reporting procedure appropriate for location.

Functional Tests

Safety Apparatus tests are:
Brake Controller, Safety Apparatus, Traction

- 6 Exit Trailing Centre Motor Cab and continue External Inspections.
- 7 Prior to entering Trailing Motor Cab, inspect the Auxiliary Pneumatic Panel isolating cocks & Trip Apparatus then conduct Cab Visual Inspections, Full Cab Inspections & Functionality Tests - BS
- 8 Exit Trailing Motor Cab and proceed towards the front of the train in a clockwise direction and continue External Inspections. Inspect Trip Apparatus on Trailing Centre Motor (Not required to check Auxiliary Pneumatic Panel)
- 9 Enter Leading Motor Cab and conduct Full Cab Inspections & Functionality Tests - BST
- 10 Initiate Continuity Test by pressing the Emergency Stop button and observing brake cylinder gauge displays emergency pressure. Release saloon doors on both sides.
- 11 Exit Leading Motor Cab through bulkhead door and conduct Saloon Internal Inspections.
- 12 Enter Leading Centre Motor Cab via bulkhead door. Exit via B side cab door, ensuring all doors are secured.
- 13 Enter Trailing Centre Motor Cab via A side cab door, ensuring all doors are secured and exit via bulkhead door.
- 14 Continue Saloon Internal Inspections.

Danger Men at Work label prior to commencement of preparation.

Driver must place a **RED FLAG** in the receptacle on the front of the train, at the departing end of the siding, at the commencement of the preparation. Flag must be removed upon completion of preparation.

- 1 Prior to entering Leading Motor Cab, inspect the Auxiliary Pneumatic Panel isolating cocks, Trip Apparatus then perform Cab Visual Inspections & Train Start Up. Raise the Pantographs to initiate the electrical start up sequence. Turn Marker Lights switch to WHITE.
- 2 Release saloon doors on both sides.
- 3 Proceed around the front of the train in a clockwise direction and conduct External Inspections.
- 4 Prior to entering Leading Centre Motor Cab, check units are correctly coupled, inspect equipment/cock between units & Pneumatic Panel.
- 5 Enter Leading Centre Motor Cab and perform Cab Visual Inspections. Proceed to Trailing Centre Motor Cab.
- 6 Enter Trailing Centre Motor Cab and perform Cab Visual Inspections.

Revision: 02
Circular Ref: L3-TSD-WCI-017

	RUNNING COMENG TRAINS WITH BRAKES ISOLATED ON BOGIES
L1-TSD-PRO-006	Version: 2 Effective from: 17 th January 2013

Approval

Document Author	Name	Position	Signature
	Peter Boyle	Train Driver Manager, Fleet Standards	
	Peter Boyle	Train Driver Manager, Fleet Standards	
Document Endorsers	Murray Vincent	Acting Fleet Engineering Manager	
	Norm Grady	Chief Engineer	
Approving Manager	Perry Ramsey	Manager Train Service Delivery	

Amendment Record

Approval Date	Version	Description
28/11/2012		First issue This version supersedes: - L3-TSD-PRO-035 Running Trains with Brakes Isolated on Bogies - Instructions for a turned brake head detailed in the Book of Rules 1994 Pages 29-19, 29-20 & 29-21
	1	This version removes: - Hitachi, Siemens and X'Trapolis trains from procedure This version introduces: - FVN Reduced Speed stickers - Altered speed restriction for isolated bogies
17/01/2013	2	This version removes: The requirement for at least one braked bogie on the leading and trailing motors

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	RUNNING COMENG TRAINS WITH BRAKES ISOLATED ON BOGIES
L1-TSD-PRO-006	Version: 2 Effective from: 17 th January 2013

1. Purpose

This work instruction details the procedures and running restrictions for Comeng trains when the brakes on one or more bogies are isolated due to a fault.

2. Scope

It deals with all Comeng types in revenue service.

3. Abbreviations and Acronyms

- FMP Fault Management Procedure
- FVN Fault Warning Notice

4. Responsibilities

- Train Drivers and Trainee Train Drivers

5. Introduction

The brake on one or more bogies of a Comeng may, due to a fault, need to be isolated. These faults must be reported according to the current FMP.

Examples of these faults include and are not limited to:

- Leaking brake system piping
- Missing brake blocks
- Turned brake head
- Sticking brakes unable to be released without isolation

6. Number of Bogies Isolated

Bogies isolated for revenue service may consist of:

- 1 bogie on a 3 car train
- 2 bogies on a 6 car train

7. Speed Restrictions

The speed restriction for a train running in revenue service with isolated bogies as per Section 6 is:

- 10 km/h below the permitted speed for the train over the line concerned. This speed need not be less than 60 km/h, for example:

Designated Track/Signal Speed	Speed Restriction
40 km/h	40 km/h
65 km/h	60 km/h
80 km/h	70 km/h
115 km/h	105 km/h

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8. Fault Warning Notice

8.1 The FWN includes a Bogie Isolated section that **MUST** be completed and placed as instructed in the Fault Management Procedure. This is to inform subsequent Drivers of the necessity for a speed restriction and potentially reduced braking effort.

FAULT WARNING NOTICE		M/T		Date ____ / ____ / ____		Fault Ref	
This form is to be used only for the fault types listed here. After fault is reported to Metro, technical issues may be discussed with TSO-PDS on 720-744.							
☐	End Motor	☐	Centre Motor	☐	Trailer		
☐	Bogie Isolated	☐	No. 1 Bogie	☐	No. 2 Bogie		
☐	Air Bag Deflated	☐	Simmons max 80 km/h	☐	Comeng/Hatchi max 30 km/h		
☐	Lateral Sway	☐	(Travel at reduced speed)				
☐	TECHREC Leading/Trailing Motors	☐	Yes				
☐	Doors Isolated	☐	Yes				
Driver's Name (Print)							

Green Conv. – Driver **Yellow Cones – To be placed in TMM clin of both end cabs of affected train**

9. Fault Warning Notice Reduced Speed Stickers

9.1 When an FWN is used for bogie isolation, the train must run at reduced speed as per Section 7, and an *FWN Reduced Speed* sticker placed directly above the speedometer on both the leading and trailing motors. The *FWN Reduced Speed* sticker must be installed at the same time as the FWN and is used as a reminder to Drivers to run the train at reduced speed.



9.2 FWN Reduced Speed stickers must be carried by Drivers at all times when operating trains. They are to be placed in the Serviceability Criteria, TMM and FWN book. FWN Reduced Speed sticker sheets are individually numbered. Replacement stickers are available from the DAO on request.

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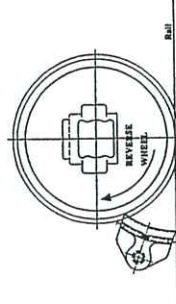
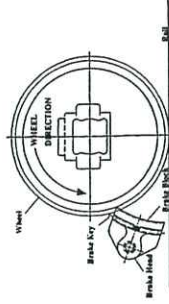
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10. Turned Comeng Brake Head Bogie Isolation Procedure

When a brake block is found jammed against the wheel and rail head:

- The bogie must be isolated
- The train driven back one rotation of the wheel to release the brake block
- The brake block and pin must be removed
- The defect must be reported as per the FMP
- A FWN and FWN Reduced Speed sticker must be placed in both the leading and trailing cabs
- If the brake head cannot be released from the wheel and rail, it must be treated as a skidding wheel/locked axle

11. **Records and Enquiry**

Item	Retained by	Period of Retention
Development Folder	Train Driver Standards Officer	3 years
Obsolete master copies	Train Driver Standards Officer	6 years
Distribution lists	Train Driver Standards Officer	3 years

Enquiries about this document are to be directed to Train Driver Standards Officer TSD.

12. Related Documents

- L1-TSD-PRO-003 Fault Management Procedure

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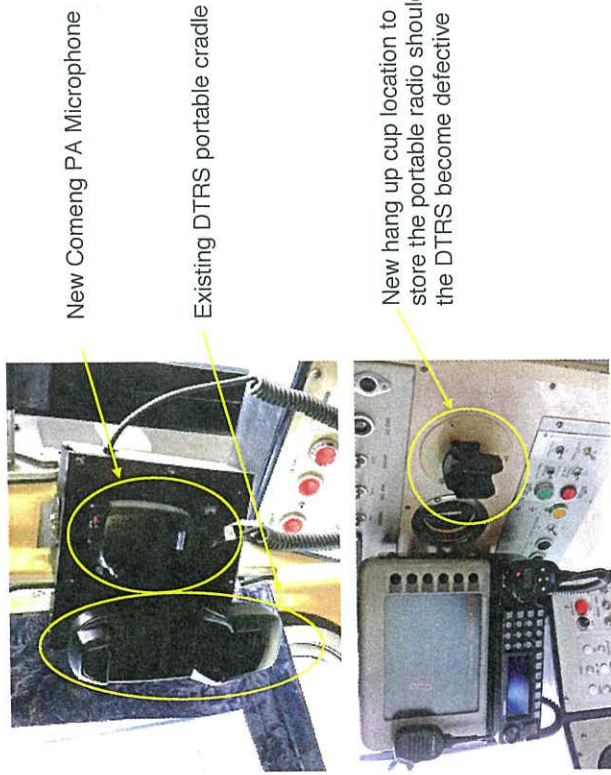
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Drivers Please Note:

To enhance the reliability of the Comeng fleet, a second microphone will be installed to access the PA independent to DTRS. A trial of this independent PA microphone on Comeng trains has proven to be successful. This modification is now due to be rolled out across the entire Comeng fleet and completed about mid-September, 2016.

The second microphone will be located next to the DTRS portable cradle. Similar in design to the Siemens and the X'Trapolis trains, any defects with the DTRS will no longer affect the PA. This will mean that a DTRS fault will no longer cause a Critical fault on the train.



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To use the PA perform the following actions:

1. Press the red on/off button on the top of the microphone.
2. When the PA microphone is active you will see a blue light illuminated next to the microphone.
3. Talk into the PA microphone with the use of either the hand microphone Push To Talk (PTT) or the foot switch PTT.
4. If the PTT has not been pressed for 10 seconds the PA will switch off automatically.
5. Once you have completed the announcement, press the red on/off button to switch the system off or alternatively the PA will switch off automatically after 10 seconds of inactivity.



Best Regards

P. Boyle

Peter Boyle
Technical Support Manager-Train Services

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