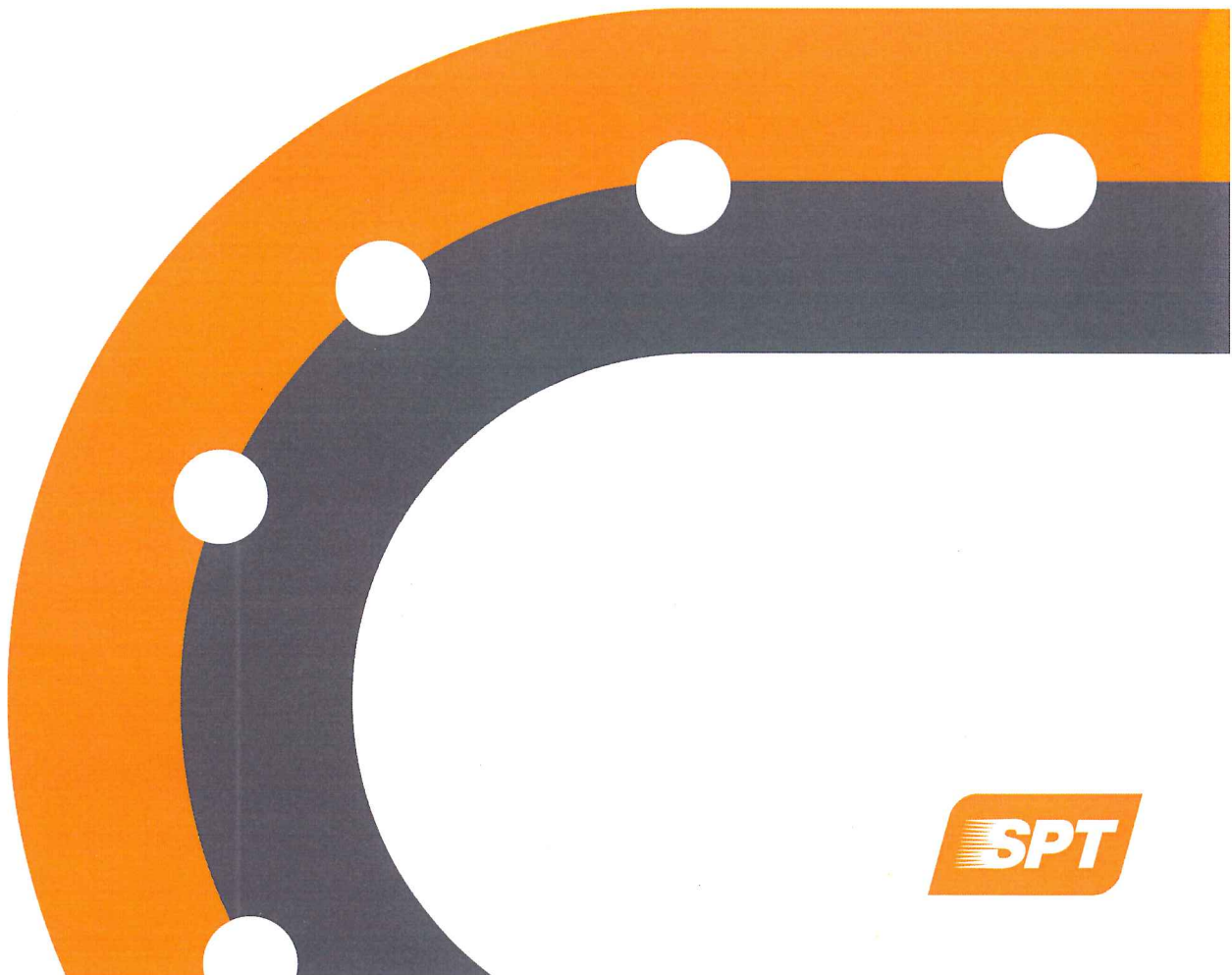




Strathclyde Partnership for Transport  
**SUBWAY SAFETY PLAN**  
2019 - 2020



# Subway Safety Plan 2019-20



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**Issue**            Final

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**Approved by**    Antony Smith



## 1. Introduction

### 1.1 Document Purpose

The purpose of this document is to set out the annual Safety Plan for SPT Subway for the period from 1<sup>st</sup> April 2019 to 31st March 2020. The plan describes the safety aims and objectives for the Subway along with specific strategies and action plan for achieving the targeted performance.

### 1.2 Delivery of the Plan

The Subway Management Team is responsible for ensuring the actions identified are monitored and completed. In doing so, the Subway Management Team will work closely with stakeholders, the Subway Safety Committee and staff representatives to ensure the key messages are communicated and all related safety matters are dealt with in a timely manner to ensure SPT maintains its approach to continuous improvement in safety management. The SPT Health and Safety Department will assist the Subway Management Team and Safety Committee in achieving these aims through centralised reporting, monitoring and support, as necessary, in each area.

### 1.3 Basis of the Plan

The plan has been established based on a review of previous year's safety performance and taking cognisance of the year of activity ahead associated with planned Operational and Subway Modernisation improvements.

### 1.4 Previous Year's Summary

The financial year 2018/19 saw the continued delivery of day to day operations with an ageing fleet and increased patronage.

The Subway Modernisation programme is still on-going and as such there were differing operational and management challenges over and above the day to day/ 'static' business challenges. Modernisation continued to bring permanent change to the Subway system through further station refurbishments and preliminary intrusive and non-intrusive survey across both tunnels and stations in preparation for the installation works associated with the new rolling stock and control system project delivery.

All of this presented challenges to possession management and managing construction works within a live operational environment.

With continued patronage increase, on-going construction work and change activity, it was encouraging that there has been a decrease in recorded associated accident/incident events and minimum complaints received from passengers during this period.

There has also been a continued improvement in the reporting of 'near misses' by SPT staff and contractors. This has presented the opportunity for positive intervention to help prevent similar events resulting in injury to employees or contractor staff. This has been further strengthened by the introduction of a 'near miss' initiative, including the introduction of a specific electronic reporting form for recording these type of events on the on-line axiom portal.



## 1.5 Look Ahead

In the year ahead, changes and improvement to the Subway system will continue as part of the Subway Modernisation and Operational Readiness programmes.

Station refurbishment and other building improvements works will continue with further refurbishment work at stations and continuation of works to the depot buildings in preparation for the new rolling stock and control systems. This will include the introduction under depot enhancement of a wheel lathe, car wash plant, automatic train inspection equipment (ATI), inspection pits and lift jacks and extension of the current stabling shed to accommodate additional trains.

The Rolling Stock and Control Systems project will progress works relating to the manufacture and delivery of the initial fleet vehicles, completion of the new OCC building, completion of the manufacturer's site facility at Edmiston Drive, and commencement of the installation and testing of wayside and signalling and control equipment throughout the entire system. With commencement of the installation of new systems within the Subway, there will be a substantial increase on engineering work being carried out during night time possessions in both operational buildings and the sub-surface tunnels.

SPT now have an operational readiness plan in place which will ensure acceptance of the new assets being delivered by the Project and this will focus on additional and new processes, systems and the change to how day to day Subway business is conducted. As such, it will be another busy and challenging year, with a continuation of onsite activity throughout the Subway system and Broomloan Depot.

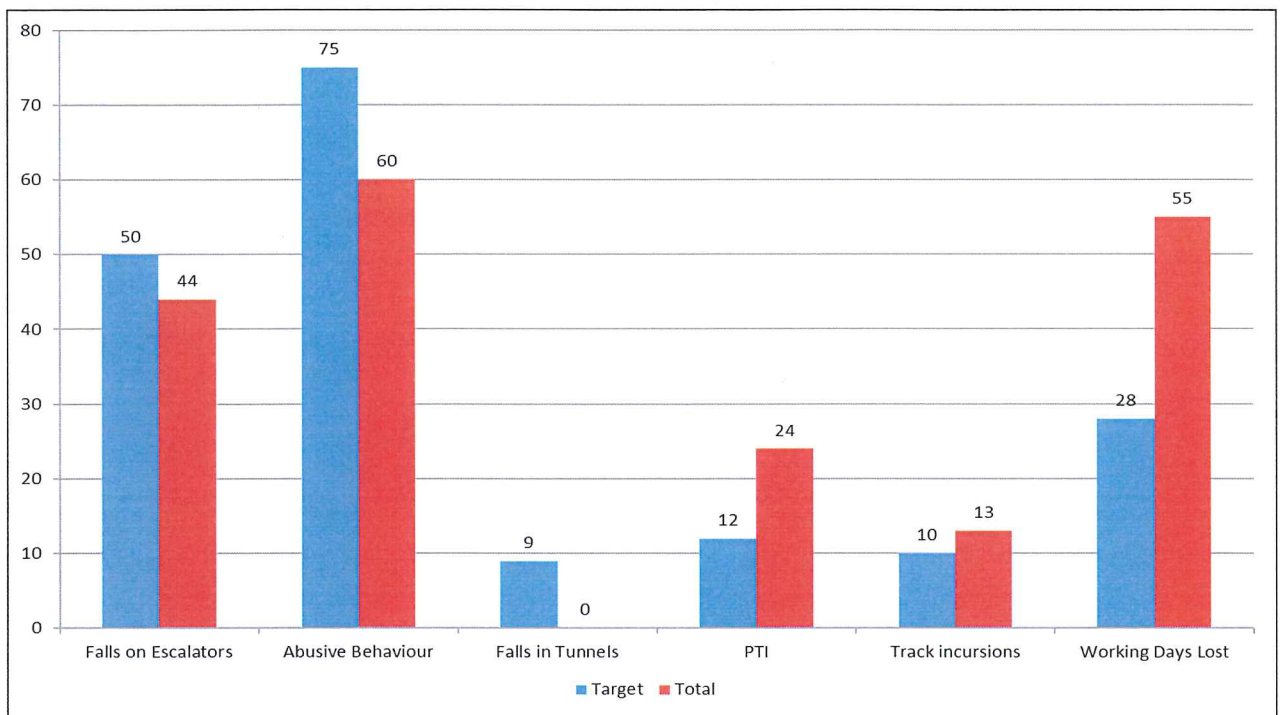
The focus on continual improvement of day to day operations and maintenance will continue this year targeting: service reliability, availability and passenger retention. The continuation of 'My Glasgow, My Subway' and the 'Customer Promise' initiatives will seek to increase patronage to the system and as such sustaining a safe and customer friendly environment is paramount.





## 2. Safety Performance Reflection & Anticipation

A detailed review of the safety performance for the year 2018/19 was undertaken in April 2019 with Subway Senior Management Team and SPT's Health and Safety Manager. The result of this review identified decreases in half of the category targets set, with increases recorded in the remaining categories, key areas are identified in the graph below.



Those categories where increases are recorded are as follows:

### (PTI) - Passenger Train Interface

The PTI category is in relation to two separate event types, those being:

- **Trapping in train doors** - involving passenger body parts and property. The increase in these events on review of the axiom report forms and in conjunction with a review of the associated CCTV footage, can be attributed to customer behaviour, ranging from late boarding or alighting and passengers under the influence as doors are closing.
- **Passenger slips in the gap between train and platform at door areas** – involving passenger feet or legs entering the minimal gap present at this interface point. The increase in these events on review of the axiom report forms and in conjunction with a review of the associated CCTV footage, can be attributed to customer behaviour, mainly the lack of due care and attention when boarding or alighting trains.

### Track Incursions

The track incursion events are split into two separate precursor causes, those being:

- **Dropped property on to tracks** – this involves passengers entering the track to retrieve property that has been dropped onto the track.
- **Anti-social behaviour** – this involves wilful acts by passengers when entering the track area within station platform areas, attributed generally to intoxication.



These events, including the recorded increase are all attributed to customer behaviour, with over half relating to passengers retrieving property dropped onto the track.

### **Working Days Lost**

Working days lost recorded are in relation to two activity types, those being:

- **Manual Handling activities** – These events involved activities in relation to maintenance of our rolling stock vehicles, resulting in muscle strains to employees. There were two recorded events accounting for fifty-three days of the total realised.
- **Slips, trips and falls** – This event was accountable to an employee dropping a plastic folder, then proceeding to slip on the folder. This accounted for the remaining two days recorded.

The management of these absences are monitored via the departmental absence management meetings to ensure that employees are fully assisted in their return to work.

Acknowledging trends in recent performance and the anticipated activities in the year ahead, has directed SPT Subways focus in the following areas:

### **People on Trains & In Stations**

The day to day operational key safety risk areas are associated with 2 trends observed from previous years:

- **Passengers & Public:** Passenger accidents on escalators remain the most common accident type among passengers (i.e. slips, trips and falls)
- **Workforce:** Anti-social behaviour and verbal abuse remain a prevalent concern towards the safety of SPT's operational, customer facing staff.

### **Working within the Subway System**

Construction and maintenance activity in the system will see numbers of construction personnel increase over the coming year with maintenance staff numbers remaining static. The year ahead will see new site works commencing and an increase in new contractor staff on site, with routine and enhanced maintenance activity also on-going. Resultant temporary and permanent changes in the working environment and impacts to hazard awareness and mitigation management will be a key focus again in the year to come.

There will be a focus applied to raising awareness for the sub-surface tunnel environment, depot and yard areas and station buildings. These areas have inherent constraints and hazards and it is important that there is an on-going drive to ensure a safe working environment for all staff, contractors, visitors and members of the public.

Key areas of focus will include:

- **Workforce:** Hazards associated with working when within Subway premises including Broomloan depot/yard, stations and the tunnel system (both for internal and agency maintenance staff and external contractors). There are two main contributing factors which have contributed to accidents – awareness of the existing system hazards (external workforce) and maintaining focus and acknowledgement of the existing hazards observed within works methodology and execution (internal and external workforce)
- **Asset Protection:** Ensuring that all fixtures, fixings and infrastructure including structures are not detrimentally affected during the course of the activities being undertaken.
- **Possession Irregularities** – Due to the introduction of new rolling stock units for mainline testing and an increase in external contractor personnel and work activities, there will be a





requirement to review and adapt as required, the current possession management process to safely manage the movement of trains and worksite activities.

### **Train Operations**

With respect to the train operations there remain 2 key train/platform interface risks:

- **Passengers & Public:** there was an increase in reported events over the past year in the following types of Accidents and Incidents with a continuation of the following types:
  - trapping of property and person within doors
  - passenger slips in the gap between train and platform at door areas.

### **Trespass**

Whilst illegal access out-with operational hours is not identified as an area of concern, trespass onto the line within stations during operational hours remains a concern based on the evidence from last year:

- **Passengers & Public:** Incidents involving passengers stepping down onto track to retrieve lost property has increased without any bodily harm being recorded. However, distraction (from portable devices), a lack of hazard awareness amongst our passengers and customer behaviour including the effects of alcohol all are contributory factors in this incident type

### **Absence related to workplace accidents**

Accident and incident statistics from last year highlights an increasing trend on absence rates from workplace accidents, this will remain an area focus for SPT as a proactive employer:

- **Workforce:** Staff absence from work due to musculoskeletal has increased. In an ever changing and busy work environment, the wellbeing of the workforce is a key consideration.

### **Change and Risk Management**

With the on-going and increasing levels of change being brought about by the Subway Modernisation programme, internal improvement activity and organisational change ensuring our processes are robust and keep abreast of the change to assets, technology, operations and people are a key focus and risk area:

- **Process & Procedure:** There is a continued requirement to ensure the SMS and Change Management processes are current, robust and procedures are adhered to consistently.

### **Proactive Health and Safety Culture**

Whilst improvement continues within the overall safety culture within Subway, there is a need to continue the development of this through strengthening our proactive activities.

- **'Near Miss' reporting:** Continue to encourage near miss reporting by all staff, with management teams leading by example within their respective department. Ensure that the information submitted is actioned and that feedback is provided to demonstrate the effectiveness of the process. There were 109 near miss reports raised which resulted in the ability for positive corrective action/intervention being implemented to ensure that these events did not result in injury, damage or loss.
- **Initiatives:** Develop the use of health and safety related initiatives to increase staff awareness and engagement.



### 3. Safety Aims & Objectives

Acknowledging the assessment of past and anticipated safety performance, the following aims and objectives have been set for the 2019/20 plan:

1. Reduce the number of passenger accidents within stations in particular, accidents relating to escalators.
2. Reduce the number of incidents of anti-social behaviour and abuse.
3. Reduce the number of occurrences of accidents and incidents within all SPT environments.
4. Reduce the risk of train/platform interface accidents and incidents in particular, passenger slips in the gap between train and platform at door areas.
5. Reduce the number of occurrences resulting in damage/impairment of SPT assets from external contractor's work activities resulting in service disruption.
6. Prevent illegal incursion onto the track from station platforms by passengers during operational hours.
7. Prevent the potential for track possession irregularities during new rolling stock mainline testing and worksite activities.
8. Reduce the number of work days lost due to workplace accidents for employees
9. Continually improve process and procedures to maintain safety and proactively manage risk through adherence to the change management process.
10. Nurture a proactive safety culture through increasing and improving near miss reporting to better inform safety management, planning and engagement activity.

### 4. High Level Strategies

In order to achieve the aims and objective as set, the following high level strategies have been identified.

<b>Aim</b>	<b>High Level Strategy</b>
<b>1</b>	Increase Passenger Hazard Awareness, Maintain a Safe Environment
<b>2</b>	Proactive Communications, Staff Training & Awareness
<b>3</b>	Increase Contractor Hazard Awareness, Robustly challenge works methodologies, improve behavioural safety
<b>4</b>	Increase Passenger & Staff Hazard Awareness around train/platform interface
<b>5</b>	Robustly challenge works methodologies, improve behavioural safety
<b>6</b>	Increase Passenger Hazard Awareness
<b>7</b>	Increase staff and contractor awareness and continually review processes to ensure effectiveness
<b>8</b>	Targeted Welfare Campaigns, Staff & Manager Awareness & Management Training
<b>9</b>	Fit for Purpose Reviews, Gap Analysis, Audit, Operational Readiness Programme
<b>10</b>	Increase and improve on Near Miss Reporting and Proactive Interventions.



## 5. Action Plan

To deliver on the strategies identified the following action plan has been agreed. All actions to be achieved throughout 2019-20 reporting year. Progress on action plans will be monitored throughout the year as part of the periodic reporting process.

<b>Aim 1</b>	<b><i>Reduce the number of passenger accidents within stations</i></b>		
<b>Strategy</b>	Increase Passenger Hazard Awareness, Maintain a Safe Environment		
<b>Action Ref:</b>	<b>Action Description</b>	<b>How this will be measured</b>	<b>Owner</b>
SP2019/20 A1-001	Proactive social media campaigns to increase passenger safety awareness  Staff training & intervention.  Continue to display board messages and On-board and Station PA announcements.	Weekly recording of accident stats  Subway Performance Periodic Review  Monitoring by H&S Quarterly	D Christie F Kelly A Thompson
SP2019/20 A1-002	Evaluate feasibility and implement any additional enhancements that will improve current escalator safety measures	Weekly recording of accident stats  Subway Performance Periodic Review  Trials for adopted enhancements to assess effectiveness	D Christie F Kelly
<b>Outcome</b>	Improve safety performance at stations including escalator use		

<b>Aim 2</b>	<b><i>Reduce the number of incidents of anti-social behaviour and abuse</i></b>		
<b>Strategy</b>	Proactive Communications, Staff Training & Awareness		
<b>Action Ref:</b>	<b>Action Description</b>	<b>How this will be measured</b>	<b>Owner</b>
SP2019/20 A2-001	Poster campaigns in prominent positions within stations.  "Zero Tolerance" approach to unacceptable behaviours.  Staff intervention applying the principles of conflict management training provided to diffuse the potential for events to escalate	Weekly recording of accident stats.  Subway Performance Periodic Review	D Christie
SP2019/20 A2-002	Promote staff reporting of incidents and near miss events  Conflict resolution training/refresher provided for staff  Continue development of staff competency of report completion to	Safety rep feedback and staff briefings and training  Sample checking and audit of completed forms	D Christie F Kelly



	ensure consistency and robustness of incident reports		
SP2019/20 A2-003	Work in collaboration with BTP to target antisocial behaviour  Improved presence (number and timing) of British Transport police within the system and targeted campaigns for football events	Review meetings with BTP  Specific feedback on football and larger events through BTP monitoring across Subway.	D Christie
<b>Outcome</b>	Safer passenger and working environment		

<b>Aim 3</b>	<b><i>Reduce the number of occurrences of accidents and incidents within all SPT environments</i></b>		
<b>Strategy</b>	Increase Staff/Contractor Hazard Awareness, Robustly challenge works methodologies, improve behavioural safety		
<b>Action Ref:</b>	<b>Action Description</b>	<b>How this will be measured</b>	<b>Owner</b>
SP2019/20 A3-001	System wide review of current hazards and identifying emerging hazards to ensure inherent hazards within SPT environments are communicated and emphasised during HAZ-ID workshops and PTS training.  Review of manual handling activities within all areas of Subway to identify where the introduction of mechanising the process could be implemented to reduce the associated risk to as low as reasonably practicable	Weekly recording of accident stats.  Subway Performance Periodic Review  Production and status monitoring of manual handling review plan.  Training/workshop feedback	J Campbell S McMillan A Cuke D Christie F Kelly
SP2019/20 A3-002	Overhaul safety communications in line with hazard review exercise to deliver a more proactive and appropriate safety communication and awareness programme of activity to share knowledge with SPT teams and external contractors	Subway Performance Periodic Review	A Cuke S McMillan F Kelly
SP2019/20 A3-003	Continue to challenge contractor works method statements and risk assessments and share feedback	Weekly recording of accident stats.  Subway Performance Periodic Review	S McMillan A Cuke D Christie F Kelly
SP2019/20 A3-004	Continue to review and re-brief work instructions and risk assessments for in maintenance activity	Weekly recording of accident stats.  Subway Performance Periodic Review	A Cuke





SP2019/20 A3-005	Improve supplier / contractor management processes and contract award and management approaches  Review of associated processes and documentation including Control of Contractor / Code of conduct for Contractors procedures	Weekly recording of contractor accidents / incidents and near misses  Health and Safety audits against process and procedure to ensure effectiveness.	S McMillan F Kelly A Cuke D Christie
<b>Outcome</b>		Safer working environment	

<b>Aim 4</b>		<i>Reduce the risk of train/platform interface accidents and incidents in particular, passenger slips in the gap between train and platform at door areas.</i>	
<b>Strategy</b>		Increase Passenger & Staff Hazard Awareness	
<b>Action Ref:</b>	<b>Action Description</b>	<b>How this will be measured</b>	<b>Owner</b>
SP2019/20 A4-001	Monitor effectiveness of train departure procedures and associated risk assessments.  Staff refresher training/briefing.  Continue development of staff competency of report completion to ensure consistency and robustness of incident reports  Station and on board PA announcements  Annual review of the suitability and effectiveness of driver aids used for dispatch purposes including mirrors, screens and other visual aids.  Dispatch aspects of design for new fleet to be challenged and informed by the practical experience of the existing system	Monitoring of actions arising from review to ensure closed off  Evidence of supervision of work carried out to ensure adherence to procedures  Weekly recording of accident statistics.  Subway Performance Periodic Review  Audit of staff refresher training content and attendance  Records of defect reports and maintenance contract actions including corrective actions and close out monitoring  Monitoring of items raised in regards to dispatch for the new fleet to ensure suitable close out, through the design acceptance and safety verification of the project.	D Christie S McMillan F Kelly
SP2019/20 A4-002	Use of additional platform stewards at special events.	Review of performance and lessons learned post events	D Christie
<b>Outcome</b>		Safer passenger environment	





<b>Aim 5</b>	<b><i>Reduce the number of occurrences resulting in damage/impairment of SPT assets from external contractors work activities resulting in service disruption.</i></b>		
<b>Strategy</b>	Robustly challenge works methodologies, improve behavioural safety		
<b>Action Ref:</b>	<b>Action Description</b>	<b>How this will be measured</b>	<b>Owner</b>
SP2019/20 A5-001	Continue to challenge submitted methodologies and risk assessments where they do not take account of impact on SPT assets	Weekly recording and monitoring of event reports	S McMillan F Kelly A Cuke D Christie
SP2019/20 A5-002	Improve supplier / contractor management processes and contract award and management approaches	Weekly recording of contractor accidents / incidents and near misses  Health and Safety audits	S McMillan F Kelly A Cuke D Christie
SP2019/20 A5-003	Ensure events are robustly investigated and that suitable corrective actions are identified and implemented  Implementation of a dedicated SPT team to undertake a programme of removal of redundant equipment and cabling to aid not only the identification of live assets but to also free up more space for new equipment required for the new control systems.	Review of performance and lessons learned post events  Measurement against planned versus actual of the defined programme of removal works to ensure target dates are met.	S McMillan A Cuke D Christie F Kelly
<b>Outcome</b>	Safer working environment		

<b>Aim 6</b>	<b><i>Reduce the number of incidents of illegal incursion onto the track from station platforms by passengers during operational hours</i></b>		
<b>Strategy</b>	Increase Passenger Hazard Awareness		
<b>Action Ref:</b>	<b>Action Description</b>	<b>How this will be measured</b>	<b>Owner</b>
SP2019/20 A6-001	Staff awareness and intervention.  Social media campaign	Weekly recording of accident stats.  Subway Performance Periodic Review	D Christie F Kelly
SP2019/20 A6-001	Review wording of live rail stencilling  Continue refresh of live rail stencilling	Weekly recording of accident stats.  Subway Performance Periodic Review	D Christie A Cuke J Campbell F.Kelly
	Social media campaigns to raise passenger awareness of hazard associated with accessing the track	Weekly recording of accident stats.  Subway Performance Periodic Review	D Christie A Thomson F Kelly
<b>Outcome</b>	Safer passenger environment		



<b>Aim 7</b>	<b><i>Prevent the potential for track possession irregularities during new rolling stock mainline testing and worksite activities.</i></b>		
<b>Strategy</b>	Increase staff and contractor awareness and continually review processes to ensure effectiveness		
<b>Action Ref:</b>	<b>Action Description</b>	<b>How this will be measured</b>	<b>Owner</b>
SP2019/20 A7-001	Review the effectiveness of the internal IBP process and address any issues identified	Review of performance at weekly IBP planning meetings  Monitoring of weekly incident/near miss reports	J Campbell S McMillan A Cuke F Kelly
SP2019/20 A7-002	Develop a night by night possession plan against which actual work is monitored. Identify deficiencies, near misses and problems to ensure system is subject to continuous improvement	Close monitoring of work activity plans to understand possession management actual performance against planned performance  Review of performance at weekly IBP planning meetings  Subway Performance Periodic Review of KPI status	J Campbell S McMillan A Cuke F Kelly
<b>Outcome</b>	Safer passenger environment		

<b>Aim 8</b>	<b><i>Reduce the number of work days lost due to workplace accidents</i></b>		
<b>Strategy</b>	Targeted People Management Campaigns, Staff & Manager Awareness & Management Training,		
<b>Action Ref:</b>	<b>Action Description</b>	<b>How this will be measured</b>	<b>Owner</b>
SP2019/20 A8-001	Review of trends and cases with Occupational Health provider to develop joint action plan  Improve near miss reporting process and follow on actions	Periodic review with OH provider  Monitor and review of joint action plan  Monitoring of actions arising from review to ensure close off	A Cuke D Christie S McMillan F Kelly
SP2019/20 A8-002	Increase staff awareness and continue training programmes for manual handling activities	Weekly recording of accident stats.  Subway Performance Periodic Review	A Cuke F Kelly
<b>Outcome</b>	Healthier working environment, improved wellbeing		





<b>Aim 9</b> <i>Continually improve process and procedures to maintain safety</i>			
<b>Strategy</b>	Fit for Purpose Reviews, Gap Analysis, Audit, Operational Readiness Programme		
<b>Action Ref:</b>	<b>Action Description</b>	<b>How this will be measured</b>	<b>Owner</b>
SP2019/20 A7-001	Continued review and update of all SMS/QMS and Operational procedures  Procure external resource to review and update Subway operational rules and regulations  Communicate changes to procedures to staff	Monitoring of actions arising from reviews to ensure satisfactory close out  Audit outputs of internal and external work streams to ensure effective close out and implementation.  Subway Performance Periodic Review	J Campbell A Cuke D Christie F Kelly
<b>Outcome</b>	Better and more robust systems to ensure safety for all		

<b>Aim 10</b> <i>Improvement of safety culture</i>			
<b>Strategy</b>	Improvement of near miss reporting process and introduction of safety initiatives/engagement programmes.		
<b>Action Ref:</b>	<b>Action Description</b>	<b>How this will be measured</b>	<b>Owner</b>
SP2019/20 A8-001	Improve near miss reporting process and follow on actions  Introduction Further development and augmentation of safety initiative programmes including staff engagement processes	Weekly recording monitoring of near miss reports  Monitoring of actions arising from reports to ensure close out and feedback  Monitoring of initiative effectiveness and inputs from staff engagement processes.	A Cuke D Christie S McMillan F Kelly
<b>Outcome</b>	Improved safety culture, communication and staff engagement		





## 6. Safety Targets/ KPIs

Subway Safety Performance overall will be monitored and reported on a Period basis to the Safety Committee and Management Groups against established Key Performance Indicators (KPIs). Based on the aims and objectives set and an average of the last years' performance figures, the success of the action plan will be measured against the following KPIs:

Aim	KPI	Previous Years Performance	Current Year Target
1	Falls on Escalators	44	40
2	Abusive Behaviour Incidents (Verbal, Physical & Anti-Social)	60	55
3	Contractor Accidents within SPT environments	22	19
4(a)	Passenger Door/ Platform Interface Accidents (trapped in train doors)	11	10
4(b)	Passenger Door/ Platform Interface Accidents (platform/train gap)	13	11
5	SPT asset damage from work activities resulting in service disruption	5	4
6	Track Incursions	13	12
7	Track Possession Irregularities	0**=	2
8	Working Days Lost in relation to workplace accidents events	55	0
9	No. of Systems, Process and Procedures under review	Continuation of review process to ensure suitability and effectiveness	
10	Increase in Near Miss Reporting	Continued monitoring of NRM and analysis of impact to safety initiatives and staff engagement processes.	

\*\*= - No events recorded for previous 3 years



Technical safety performance of Subway assets operationally will also be monitored via safety metrics.

This is undertaken in compliance with Engineering Safety Management Procedure OP/Q/031 Control of High Risk Technical Incidents which defines all safety-related defects, reporting categories and subsequent requirements for testing and corrective action.

The target for safety related defects relating to all RIDDOR reportable events for 2018/19 is zero.

SPT is committed to ensuring a safe, clean and welcoming environment for all our passengers and staff. The Safety Plan and measurable targets is evidence of our continued commitment towards achieving this, each and every day of operation

Signed:

A handwritten signature in black ink, appearing to read 'Antony Smith', with a horizontal line underneath.

Antony Smith  
Director of Subway

