

ScotRail Performance Improvement Plan

Making Things Better, Every Single Day.



ScotRail is operated by
abellio 

 **ScotRail**
SCOTLAND'S RAILWAY

INTRODUCTION



Scotland's railway is undergoing enormous change.

Right now, engineers here in the UK and in Japan are building our new fleet of Class 385 faster, longer, greener trains. These new electric units will arrive with us in September 2017 – less than a year from now – and will mean more seats, more space and shorter journey times for our customers.

In order to operate these electric trains, we need to electrify many of the lines that connect the towns and cities in central Scotland. This is a massive undertaking – one of the largest programmes of rail modernisation undertaken on our railway since Victorian times. When it is complete, rail travel will be transformed.

Change of this scale brings with it disruption. While we are doing everything we can to minimise the disruption to everyday services brought about by this transformation programme (such as during the Winchburgh and Queen Street Tunnel projects) our train service punctuality and reliability has moved from just above 90% to 89.6% in recent months.

That drop of just under a percentage point is why Transport Scotland have asked us to produce this plan to bring it back up to the level they – and we – expect it to be.

The measures contained in this plan are not just here for the short term. They are sensible, practical ideas that we are implementing right now and will retain for the long term. These actions will enable us to improve performance despite this current period of unprecedented change.

One of the biggest concerns that customers express to me is one of capacity. We will add an extra 200 carriages to our network over the next two years – an increase of over 20%. It also means that we can cascade our fleets to other parts of the country. This will allow us to revolutionise rail travel across all of our routes in Scotland.

By 2019 capacity between Inverness and Aberdeen will be increased by 75%; between Glasgow and Edinburgh by 51%; between Aberdeen and the Central Belt by 66%; between Inverness and the Central Belt by 43%; in Borders and Fife by 33%; in East Lothian by 11% and in Strathclyde by 7%.

This is a transformation. We have added 20,000 week day seats to our network since we took over the franchise – made possible, in part, by the introduction of seven additional electrical trains in and around Glasgow. But we will do more. We will increase capacity from the 506,191 seats that were in service every week day in May 2015 to 616,000 in December 2019. All of this starts with the first new electric train brought into service in September next year.

We are proud of the job that we do to connect the people of Scotland with their jobs, their friends and their families. We are not just a company made up of metal boxes, wooden sleepers or concrete buildings. Our teams and our people are committed, hard working and dedicated – they take great pride in what they do and they come to work every day to do their very best for our customers.

It is their hard work and dedication to continued improvement and excellence that will ensure the success of this plan.

Phil Verster
Managing Director

WHAT IS PERFORMANCE?

There are two aspects that make up our overall performance: punctuality and reliability.

Performance relates to whether or not a train turns up when it is scheduled to do so.

Reliability relates to whether or not the services we say will run actually do so.

Both **performance** and **reliability** are measured in the same manner right across Great Britain. The industry's punctuality is measured by the PUBLIC PERFORMANCE MEASURE (PPM), which is automatically determined through the extensive signaling infrastructure. Every Train Operating Company in the country uses this measure to report on its performance to the public and to Government.

So, what is counted within that PPM measure?

Punctuality is measured as the percentage of our trains that have arrived at their final destination within five minutes of the advertised time. When a specially advertised revised timetable is in operation, at times of engineering work for example, we are measured against the revised times.

Reliability is measured as the percentage of our advertised train services that operate.

Both of these two elements affect the PPM value of every train operator every day.

We are committed to being transparent about our performance. That is why we publish, every single day, how we did the day before. We do this for Scotland as a whole, but also break it down into the service groups that make up our Network:

Express Services

Edinburgh to Aberdeen

Edinburgh to Falkirk to Glasgow

Glasgow/Edinburgh to Inverness

Glasgow to Aberdeen

Suburban East Services (Formerly East Coast)

Edinburgh to Bathgate, Dunblane, Fife Circle, Tweedbank and North Berwick

Suburban West Services (Formerly Strathclyde and Central Groups)

All Services starting or terminating at Glasgow Central High Level

All Services via Glasgow Central Low Level

All Services via Glasgow Queen Street Low Level

Glasgow Queen Street to Falkirk Grahamston/Cumbernauld/Dunblane/Maryhill/Annie'sland

Kilmarnock to Ayr/Girvan/Stranraer

Motherwell to Cumbernauld

Rural Services (Formerly South West and Highland Groups)

Glasgow to Stranraer

Glasgow/Stranraer/Girvan to Dumfries to Carlisle/Newcastle

Inverness to Aberdeen, Kyle of Lochalsh and Wick/Thurso

The West Highland Lines

In addition to publishing this daily information online, we also do a period report. The railway in Great Britain operates on a 4-weekly cycle known as a period. So, in addition to publishing our PPM result on a daily basis, we also aggregate that into a period report that shows how we have performed over those four weeks. Again, we break that down into the service groups that make up our network.

In order to allow Government and the public to get a sense of how we are performing on an annual basis, we also produce a rolling annual average figure called the MOVING ANNUAL AVERAGE (MAA). This is, basically, the average of our PPM results for the past 13 railway periods. It is this MAA that we have a regulatory responsibility to report to Transport Scotland and the Scottish Government.

This MAA shows us how we are doing in terms of meeting the annual target that has been written into our contract. It is the dip in our MAA from 90.3% to 89.6% that has prompted Transport Scotland to ask us for this Performance Improvement Plan.



OUR PERFORMANCE: WHERE ARE WE NOW?

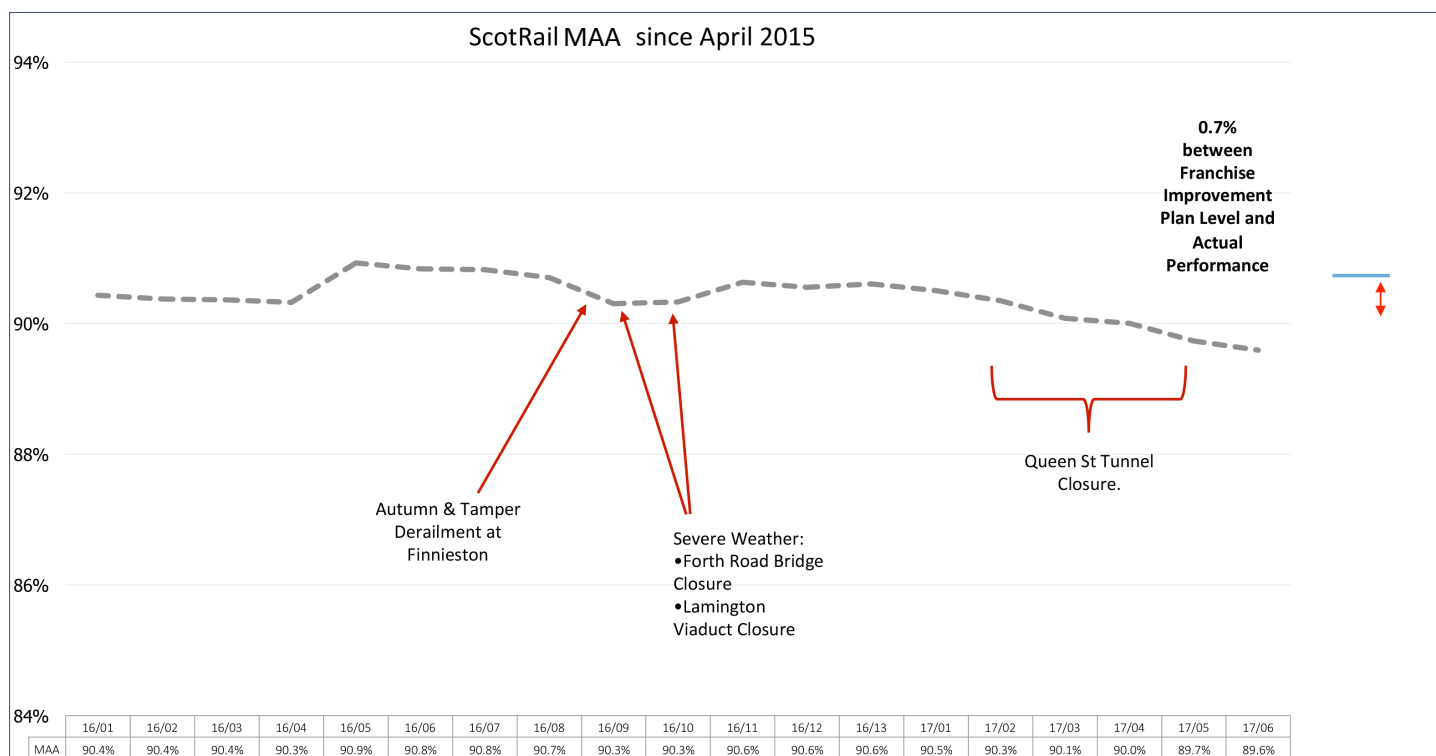
The railway calendar runs in four-week periods from April to March. We have just completed period seven. The Scotland-wide PPM for the period was 90.2%. This means that our MAA remains unchanged at 89.6%.

The chart, below, shows the MAA figure since Abellio assumed stewardship of the Abellio franchise in April 2015. As you can see, performance is affected by seasonal variations, with the Autumn and Winter seasons being the most difficult in terms of delivering high performance. This affects all trains across all parts of Great Britain.

The impact of events such as the Forth Road Bridge closure, the damage to the Lamington Viaduct, and the closure of Queen Street Tunnel is evident from the rolling MAA.

The impact of the Queen Street Tunnel closure has had an even greater impact as it took place during periods when the railway would, typically, operate at its optimum level.

As the chart shows, our current MAA of 89.6% is 0.7% below the point in which the Performance Improvement Plan is triggered.

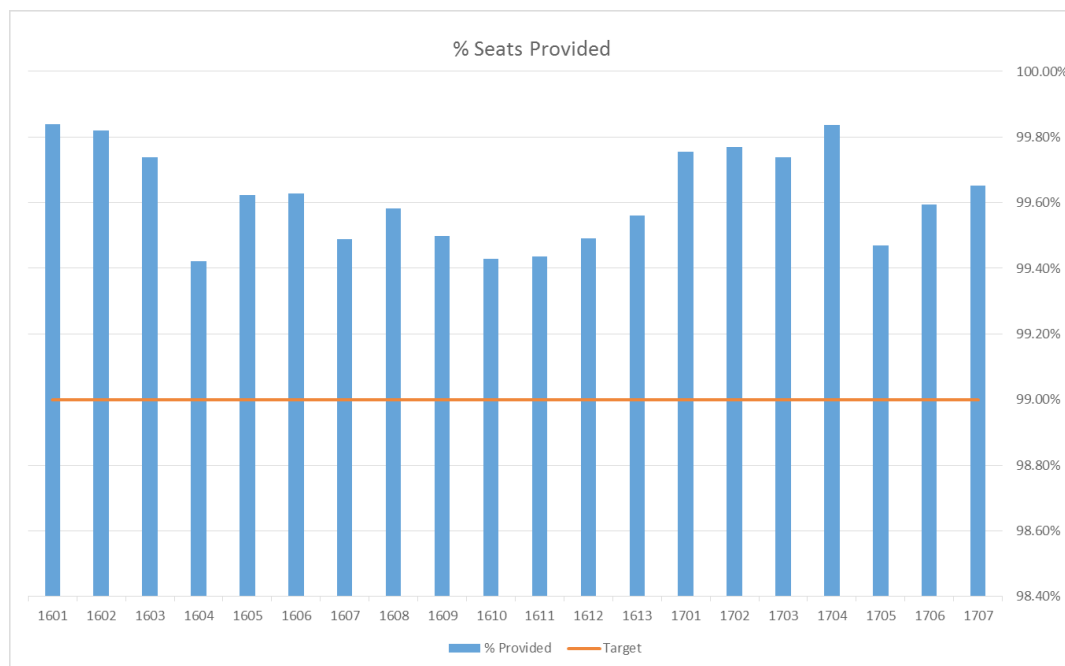


WHAT ABOUT CAPACITY?

We know that punctuality and reliability are not the whole story when it comes to delivering what our customers want. People don't just want their train to run on time, they want to get a seat wherever possible.

Given that people travel mostly during the morning and evening peaks, our trains are always going to be busy during these peak periods.

The chart below shows we reduce cancellations in a tightly controlled manner. In the past 12 months, we have delivered 99.6% of the seats we are contracted to offer.



We also work hard to make sure that every train that we have is on the network working for our customers. We don't have yards full of unused train carriages. If it is working, it is out running.

We often hear the challenge that we should just buy more trains and bring them onto the network. That is precisely what we are doing with our new Class 385 faster, longer, greener trains that will arrive from September 2017. In addition, we will be retaining 13 of the Class 170 diesel trains that were due to leave us after the arrival of the electric trains and, of course, in 2018 we will be introducing our intercity High Speed Train fleet.

Combined, this investment is worth £475m and will add thousands of seats to some of the busiest routes on our network.

However, we know that these new fleets seem some way off – and that people are expecting action now. Again, we are taking action. We have signed a contract for seven Class 320 trains to join our network. Four of these trains are already with us, with the other three due to be in service over the course of the next few months. This will give us an additional 1500 seats on a weekday.

We will also be looking for ways to make things easier for our customers while we work through the current period of change. Measures will include giving better information to customers about train choices, and carrying out passenger counts and surveys to make sure we have the correct amount of rolling stock in the right area.

THE PERFORMANCE IMPROVEMENT PLAN:

WHAT DO WE NEED TO DO?

In simple terms, we need to bring our MAA up to a level that is in line with our contractual obligations.

We are not just sitting back and waiting for performance to improve of its own accord. We know that we have to take actions that will drive the short term improvements we need – but will also be the platform to deliver even greater performance in the future.

In terms of where we can take action, there are three main areas:

Our Trains: Our electric and diesel trains, their maintenance and reliability.

Our Infrastructure: Our track and signaling systems, their maintenance and reliability.

Our Operations: Our timetable, our control systems and how our people work.

We have produced separate, but collaborative action plans for all three of these areas. All of these action plans are being closely monitored by teams led by an operational Director of the ScotRail Alliance. Twice daily, cross business, conference calls make sure that remedial action is taken to address issues as and when they arise.

The action plans have been presented to – and accepted by – Transport Scotland. They will be monitoring the progress of each of the plans to ensure that all of the actions are delivered and that the expected performance benefits are realised.



THE FLEET IMPROVEMENT PLAN

We have two main train fleets: our electric units and our diesel units. Both of these fleets are made up of trains that are of different type, age and technical specifications.

We have conducted a root and branch review of all of our trains in order to assess how they are performing and how we might be able to make them ever more reliable.

The chart, below, summarises some of the main areas of work that are included in the Fleet Improvement Plan.

Action Plan	Description	Measures
Diesel Fleet Improvement Plan	Following a comprehensive examination of the entire diesel fleet – remedial actions have been put in place to tackle the most common issues affecting: Class 156 Class 158 Class 170	Class 156: upgrades on doors, coolant systems and radiators. Class 158: upgrades on doors, radiators, operating controls and systems that may cause engines to shutdown. Class 170: upgrades to battery control systems, door control software and turbo systems.
Electric Fleet Improvement Plan	Following a comprehensive examination of the entire electric fleet – remedial actions have been put in place to tackle the most common issues affecting: Class 314 Class 318 Class 320 Class 334 Class 380	Class 314: upgrades to doors, traction systems and batteries. Class 318: upgrades to doors and traction systems. Class 320: upgrades to relay systems and cab window replacement programme. Class 334: Coupler upgrade programme. Upgrades to doors, CCTV systems and driver seats. Class 380: upgrades to CCTV system, door operation equipment and wiper motors.

THE INFRASTRUCTURE IMPROVEMENT PLAN

We run a huge and diverse network across Scotland. The ScotRail Alliance has responsibility for running and maintaining 358 stations, 2800km of track and 495 level crossings – much of which is in remote parts of the country that is often exposed to the harshest of weather.

Every single day, we have thousands of people out on the network replacing broken parts, fixing faults and making sure that all of our systems achieve optimum performance.

In recent months, while all of the work has been going to upgrade and improve the rail network, we have been putting a lot of our infrastructure under enormous pressure. We have seen more failures than normal and this has had an impact on train performance.

At the same time, we have seen a marked increase in trespass incidents on our network.

The chart, below, summarises some of the main areas of work that are included in the Infrastructure Improvement Plan.

Action Plan	Description	Measures
Asset Improvement Plan	An £8m rolling annual programme to replace and/or enhance key pieces of critical railway infrastructure.	Upgrades to key infrastructure to ensure that it retains optimum performance. The key driver for any upgrades will be performance i.e. if it is critical we will replace and enhance it early and regularly.
Edinburgh & Borders Infrastructure Improvement Plan	<p>A specific action plan to tackle localised infrastructure issues in and around Edinburgh and down into the Borders:</p> <p>Track upgrades</p> <p>Signals improvements</p> <p>Points improvements</p> <p>Cabling improvements</p> <p>Level crossings</p> <p>Rapid response</p>	<p>Track upgrades: Fouldubs switch renewal and lubrication upgrade, Stirling re-rail, improvements at Haymarket East.</p> <p>Signals improvements: relay re-servicing and renewals scheme.</p> <p>Points improvements: hydraulic actuator renewals, point reliability action plan.</p> <p>Cabling improvements: upgrades at Hilton, Longannet, Winchburgh and Slateford.</p> <p>Level Crossings: improvements at Kingsnowe, Markle and Kirknewton.</p> <p>Rapid response: restructuring of teams to ensure that they are best placed to respond quickly to critical infrastructure fails.</p>

Action Plan	Description	Measures
Glasgow & West Infrastructure Improvement Plan	<p>A specific action plan to tackle localised infrastructure issues in and around Glasgow and the West of Scotland:</p> <p>Track upgrades</p> <p>Vegetation clearance</p> <p>Signals improvements</p> <p>Rapid response</p>	<p>Track upgrades: line renewal at Bridge of Orchy</p> <p>Vegetation clearance: clearance prioritised around key signals and junctions, clearance at Mallaig branch, clearance of vegetation on or near circuit breakers.</p> <p>Signals improvements: prioritised TPWS renewals programme, low voltage testing programme.</p> <p>Rapid response: restructuring of teams to ensure that they are best place to respond quickly to critical infrastructure fails.</p>
Lanarkshire Infrastructure Improvement Plan	<p>A specific action plan to tackle localised infrastructure issues in and around Lanarkshire:</p> <p>Track upgrades</p> <p>Signals improvements</p> <p>Points improvements</p> <p>Rapid response</p>	<p>Track upgrades: improvement works at Bowhouse and Bolquhap, action to address track circuit failures due to IBJ failures.</p> <p>Signals improvements: replacement of defective LED Light Engines, action to address Ground Signal Lamp failures and mechanical signal failures.</p> <p>Points improvements: upgrade work at Barrhead, Newton, Carstairs and Mossend.</p> <p>Rapid response: restructuring of teams to ensure that they are best place to respond quickly to critical infrastructure fails.</p>
Perth, Dundee and Tayside Improvement Plan	<p>A specific action plan to tackle localised infrastructure issues in and around Perth, Dundee and across Tayside:</p> <p>Track upgrades</p> <p>Signals improvements</p> <p>Points improvements</p> <p>Rapid response</p>	<p>Track upgrades: Monifieth – Carnoustie improvement works, repeat failure action plan.</p> <p>Signal improvements: Signal Lamp improvement programme</p> <p>Points improvements: Kingussie No 5 signal upgrade scheme, repeat failure action plan.</p> <p>Rapid response: Rapid response: restructuring of teams to ensure that they are best place to respond quickly to critical infrastructure fails.</p>
Trespass Prevention Plan	<p>A multi-agency approach to reducing the number of people trespassing on the railway.</p>	<p>Increased fencing at trespass hotspots, greater collaboration with BTP, improved lighting and de-vegetation.</p>

OPERATIONAL IMPROVEMENT PLAN

ScotRail runs one of the largest and most complex railways in Great Britain. Every single day 4500 of our people work together to provide over 2300 services using 800 train carriages. Each and every week we deliver almost 2 million passenger journeys – connecting people with jobs, with friends and with families.

It is a huge logistical exercise.

We have been looking at every aspect of how we work in order to assess what we can do to make things better. This has involved looking at how we operate our timetables, at which trains have the greatest impact if they are disrupted and at how our people are working.

At the same time, we are also revising our guidance and practices so that we can greatly reduce the incidences of ‘skip stopping’ and the need for us to cancel trains at short notice.

The chart, below, summarises some of the main areas of work that are included in the Operations Improvement Plan.

Action Plan	Description	Measures
Timetable and Golden Trains Action Plan	<p>A plan to examine – and address – those trains and areas of the timetable that have the greatest impact on overall performance:</p> <p>Timetable adjustments</p> <p>Golden Trains</p>	<p>Operation of timetable: review of timetable performance in Borders, Far North, Argyle Street and North Clyde lines.</p> <p>Golden Trains: identification of those trains that, if delayed, have the biggest impact on the rest of the network, actions in our Control Centre to monitor and protect those Golden Trains.</p>
Operational Planning Action Plan	<p>Working with our staff and trade unions, this is a plan to ensure that we are making the best use of our systems and people:</p> <p>Train crew</p> <p>Train diagram planning</p> <p>Business wide system review</p>	<p>Train Crew: review of current methods of rostering staff to cut down on ‘train crew unavailable’</p> <p>Train diagram planning: review of all current rules governing train diagrams</p> <p>Systems review: better link up with infrastructure teams to respond to critical incidents, devolution of action plans to local teams, new ‘delay’ app for staff</p>
On-Time Railway Action Plan	<p>An internal staff campaign to ensure that all activities are aligned to delivering a railway that runs on time:</p> <p>Staff info campaign</p> <p>Management visibility</p> <p>Depot visits & performance workshops</p>	<p>Staff info campaign: ‘Every Single Second’ campaign to champion punctuality</p> <p>Management visibility: managers out of offices and onto the network to assist front line staff.</p> <p>Depot visits/Performance Workshops: in support of the ‘Every Single Second’ campaign, localised training events to be held at depots</p>

