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Rail Enhancements & Capital Investment Strategy

March 2018



Ministerial Foreword

Our railways are a national asset, they connect communities, enhance our quality of life and spread prosperity. Rail is well placed to play a pivotal role in the wider strategic context including the review of the National Transport Strategy, the work on the Strategic Transport Projects Review, our wider ambitions in the Climate Change Plan and the promotion of active travel.

Investment in our railways remains a priority for this Government. Since 2007 nearly £8 billion has been spent maintaining, improving and expanding the rail network. The value of that investment, as we've seen from the recently re-opened Borders Railway, delivers significant social and economic benefits not only for those communities directly served by stations but also further afield. And as we look forward, we will experience further improvements on our network, with more and better trains, increased services, greater electrification and new and improved stations.

The Government's commitment to investing in our railway remains undiminished but the recent experience of increased costs and delays to our infrastructure programme has been concerning. Whilst we have not had to cancel projects in the current Control Period (2014-2019), we cannot have a repeat of that experience because failure to deliver improvements efficiently and on time simply weakens the case for future investment. We have also had to face a real terms cut in the availability of capital funding for rail from 2019, as a direct consequence of UK Government funding decisions.

Accordingly, we have developed this Strategy which will outline a more efficient and rigorous approach to the specification and oversight of future rail projects bringing greater accountability and greater levels of assurance.

I am confident that the Strategy with its robust governance, decision-making and oversight structure will enable us to make the right investment decisions at the right time to the benefit of passengers, freight customers, taxpayers, and our railway ensuring the delivery of sustainable and inclusive economic growth throughout Scotland.

A handwritten signature in black ink, appearing to read 'H. Yousaf', written in a cursive style.

HUMZA YOUSAF

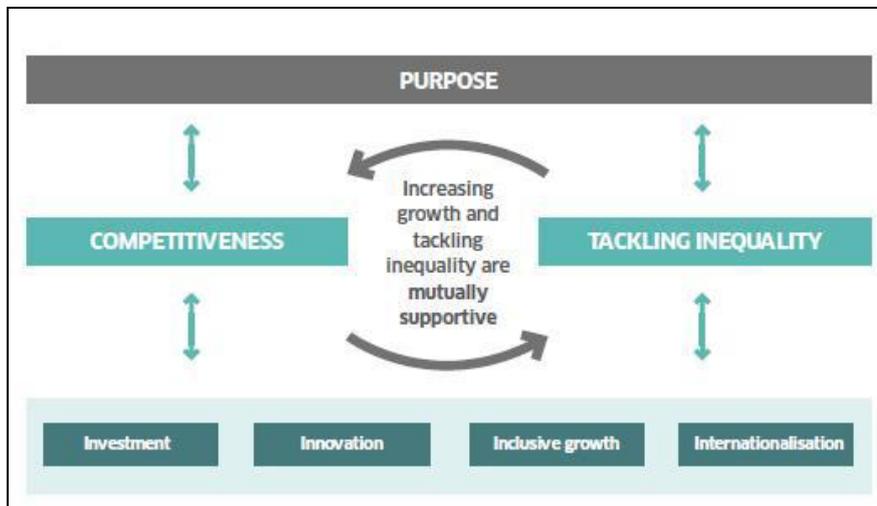
Minister for Transport and the Islands



Introduction

The [High Level Output Specification](#) for Scotland’s railways was published, and well received, in July 2017 and sets out a very clear statement of the Scottish Government’s continued commitment to a safe, high-performing and sustainable railway. The popularity of rail that has been witnessed in recent years is expected to increase further and place additional demands on our network and together with the rail industry we’ve been planning how to accommodate this growth.

Through this Rail Investment Strategy we are setting out our new approach to planning and funding rail projects. The Strategy looks beyond the traditional 5-year railway industry planning cycle and takes a strategic approach to all rail capital investments with a particular focus on making best use of the opportunities presented by major renewals. Our approach to investment remains within the context of the Government’s overarching ambitions for Scotland which are encapsulated in our [Economic Strategy](#) with its two mutually supportive goals of increasing competitiveness and tackling inequality in Scotland.



Why we invest in rail

Scotland’s railway makes a significant contribution to inclusive economic growth. The challenge is to ensure that the social and economic benefits delivered by our investment in the railway are shared spatially and across all sectors of society, and that they are recognised both as drivers and objectives for future rail investment.

Why we need a new approach

In Scotland there has been a successful track record of delivering rail projects on time and within or close to budget. However, more recent experience with rail infrastructure projects has been mixed with cost increases and programme delays affecting several key projects. We initiated a review in 2016 of Network Rail's work programme which identified a number of areas, including Network Rail's development processes and internal governance arrangements, which had contributed to a less than satisfactory outcome.

We also know from recent experience, validated by independent reviews as well as responses to [our recent consultation](#), that we need to improve the control of rail projects to fully inform business cases and consequently ensure that there is a high level of assurance on costs, risks and the deliverability of benefits before authority is given to proceed at the design and development stages. The capability to deliver efficiently and effectively and to ensure benefits realisation from projects is key.

Whilst the evidence is clear that the manner by which rail projects are developed has to change, the [grant funding arrangement](#) in place from 2019 gives us additional stimulus to look afresh and establish a new and better way of working across the industry. Future rail investment will now have to compete more directly with other public spending priorities in transport and across other areas such as health and education. Accordingly, tighter scrutiny will be applied to all aspects of appraisal, design, development and delivery of rail projects including the articulation of how they optimise value for money in terms of economic, social and environmental benefits.

We need a new approach to rail investment to apply the lessons and experience of past approaches so that we have:

- A focus on value for money and the identification of whole-life costs in addition to initial capital expenditure
- Investment in rail interventions (e.g. services or infrastructure) only where they clearly represent the optimum value for money solution in terms of economic, social and environmental outcomes
- Assurance from whole-system specification, making sure that the infrastructure, rolling stock and timetabling all work together
- Confidence for the supply chain through steady work-banks, promoting employment, training opportunities and innovation
- Optimum coordination of all enhancement and major renewals projects
- Decisions taken for the long-term
- Rail corridors assessed holistically
- Improved modal integration
- An environment which allows rail operators to deliver their franchise commitments
- Environmentally sustainable connections

What we are planning

Network Rail has a key role in the rail industry's long-term planning process. Working with the rail industry Network Rail has been planning how to meet future capacity for rail and has been developing a pipeline of future rail projects which are at different stages. Network Rail's considerations have been informed not only by the [Scotland Route Study](#) and the [Rail Industry's Advice](#) but also how they might address the Scottish Ministers' wider social and economic aspirations, as well as commitments within the ScotRail and Sleeper franchises.

The development work also includes those strategic projects we asked Network Rail to develop in the [2012 High Level Output Specification](#) to an appropriate level to inform investment decisions. These projects contribute to the following objectives:

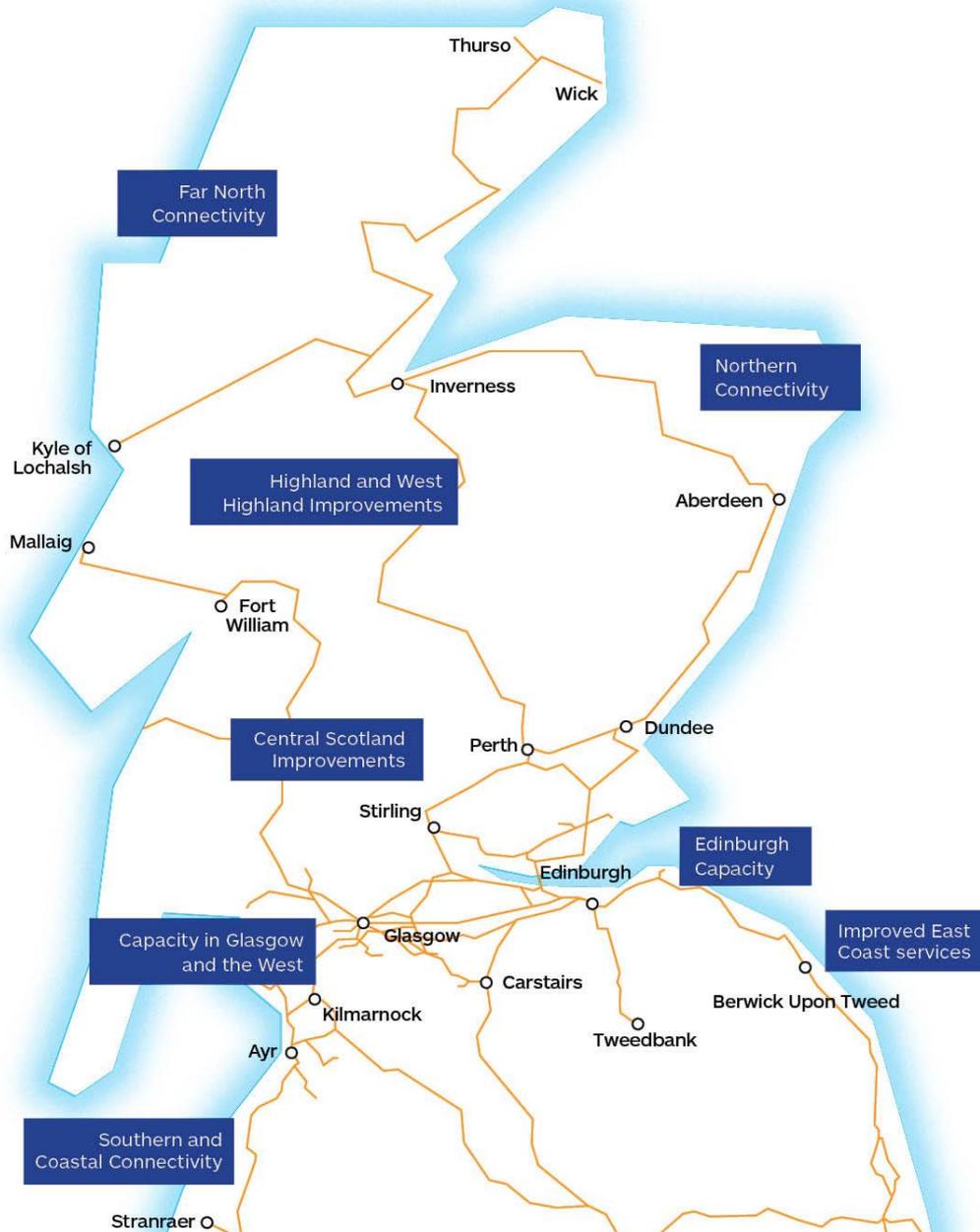
- **Completion** – projects which commenced in Control Period 5 and which are scheduled to complete early in Control Period 6
- **Capacity** – projects which will enhance the capacity of the network and help to meet future forecast demand projections
- **Connectivity** – projects which will improve connectivity including the consideration of new stations and enhanced integration with other modes including cycling and walking
- **Competitiveness** - projects which will further improve the competitiveness of rail as a mode of travel, with a focus on improved journey times and connections between key city hubs, promoting modal shift
- **Committed obligations** – projects which address franchisee obligations
- **Innovation and low-carbon** – projects which address the Government's desire to move towards a low carbon economy by greater use of modern, greener technologies



Rail investment across Scotland, options in the pipeline

The schematic map, below, illustrates corridors and areas of work across Scotland. Project elements within these broader groupings are all at different stages of consideration and development contributing to the six objectives. For example, work on Edinburgh capacity and improving East Coast services aims to meet future forecast demand projections for passengers and freight (capacity-based) whilst improving connectivity with new stations (connectivity-based). These schemes will also seek to improve the competitiveness of rail as a mode of travel with improved services and increased reliability (competitiveness-based).

Improved journey times and connections for passengers and freight between the Central Belt and Aberdeen, Inverness and the Far North is a key outcome as is tackling over-crowded services, further improving rail’s resilience and reliability, maximising the use of greener technologies and improving freight capacity.



Managing the pipeline

We recognise that whilst work has been on-going on the development of some of the current rail pipeline project interventions it may be that not all will represent value for money once overall benefits, costs and deliverability are fully assessed. It may also be necessary to phase the timing of the delivery of projects in order to minimise disruption to passengers and freight customers, to take advantage of evolving rolling stock options, or to reflect the availability of funding at any given time. The timing of projects will also take cognisance of wider investment in our local communities, such as house-building, as well as accommodating customer-promoted freight projects in support of our rail freight strategy and freight growth targets.

The prioritisation of projects will be determined by their rating against the following criteria:

- the ability to derive maximum utility from the existing network through whole industry measures that can make best use of existing railway assets, fully exploiting timetable/service-based opportunities and rolling stock options
- the ability to derive maximum utility from the existing network from opportunities (such as asset renewals or timetable exercises), fully exploiting these to ensure maximum value for money
- efficient and affordable, targeted investment in our infrastructure, in the right location and at the right time centred around whole industry measures to unlock additional capacity on the network
- targeted investment to help reduce inequality and increase inclusive economic growth

Each project will be assessed against the criteria set out above at each stage of its development in order to optimise the progression of all projects. The criteria that we have set out broadly align with the investment hierarchy that applies in the [Strategic Transport Projects Review](#).



How we will treat new rail projects/proposals (pre-pipeline)

Rail projects can be promoted by a number of parties including local authorities, community action groups, developers, rail freight interests, Regional Transport Partnerships, or franchisees as well as by Transport Scotland on behalf of the Scottish Ministers. Promoters are required to use [Scottish Transport Appraisal Guidance \(STAG\)](#) where Government funding support or approval is sought.

STAG supports the Scottish Government's objectives by providing a framework for transport appraisal that is robust, impartial and objective-led and can be consistently and proportionally applied in all transport planning contexts. For projects which do not seek Government funding there are established processes in the Office of Rail and Road's [rail investment framework](#) which will apply.

STAG comprises four sequential phases and is applied proportionally and comprehensively with the level of detail determined by the extent of the study area, the nature and scale of transport problems, potential transport options and the impact of options in the study area.

The process is impartial and objective-led rather than being solution-led which means that STAG provides a robust and consistent evidence base for decision-makers. The four sequential stages are:

- Initial Appraisal: Case for Change
- Preliminary Options Appraisal
- Detailed Options Appraisal (including proposals for monitoring and evaluation)
- Post Appraisal

A completed and robust transport appraisal in line with STAG provides evidence for decision-makers to inform transport investment decisions. Diagrams 1 and 2 (pages 9 and 10) provide an overview of the process which is in two parts: 'Pre-pipeline' and 'Pipeline'. These diagrams show the process in relation to STAG and [Transport Scotland's Guidance on the Development of Business Cases](#) and Network Rail's [GRIP \(Governance for Rail Investment Projects\)](#) processes.

A key principle of STAG is proportionality. The scope and level of detail involved in a transport appraisal will depend on the identified transport problems and the nature and scale of potential transport options considered and the impacts of these options in the study area. If a rail option emerges from a transport appraisal there may be aspects of work undertaken as part of the transport appraisal which contribute to elements of the early stages of the GRIP process, particularly GRIP stages 1 and 2.

A new fund is being introduced, a 'pre-pipeline local rail fund', to be held and disbursed by Transport Scotland. Calls for funding will be issued by Transport Scotland and up to a total of £2 million will be made available in 2018-2019.

The fund is available to local promoters, such as Regional Transport Partnerships and others, to bid for assistance with the costs of preparing appraisals and business cases which have a rail-connectivity aspect.

DIAGRAM ONE

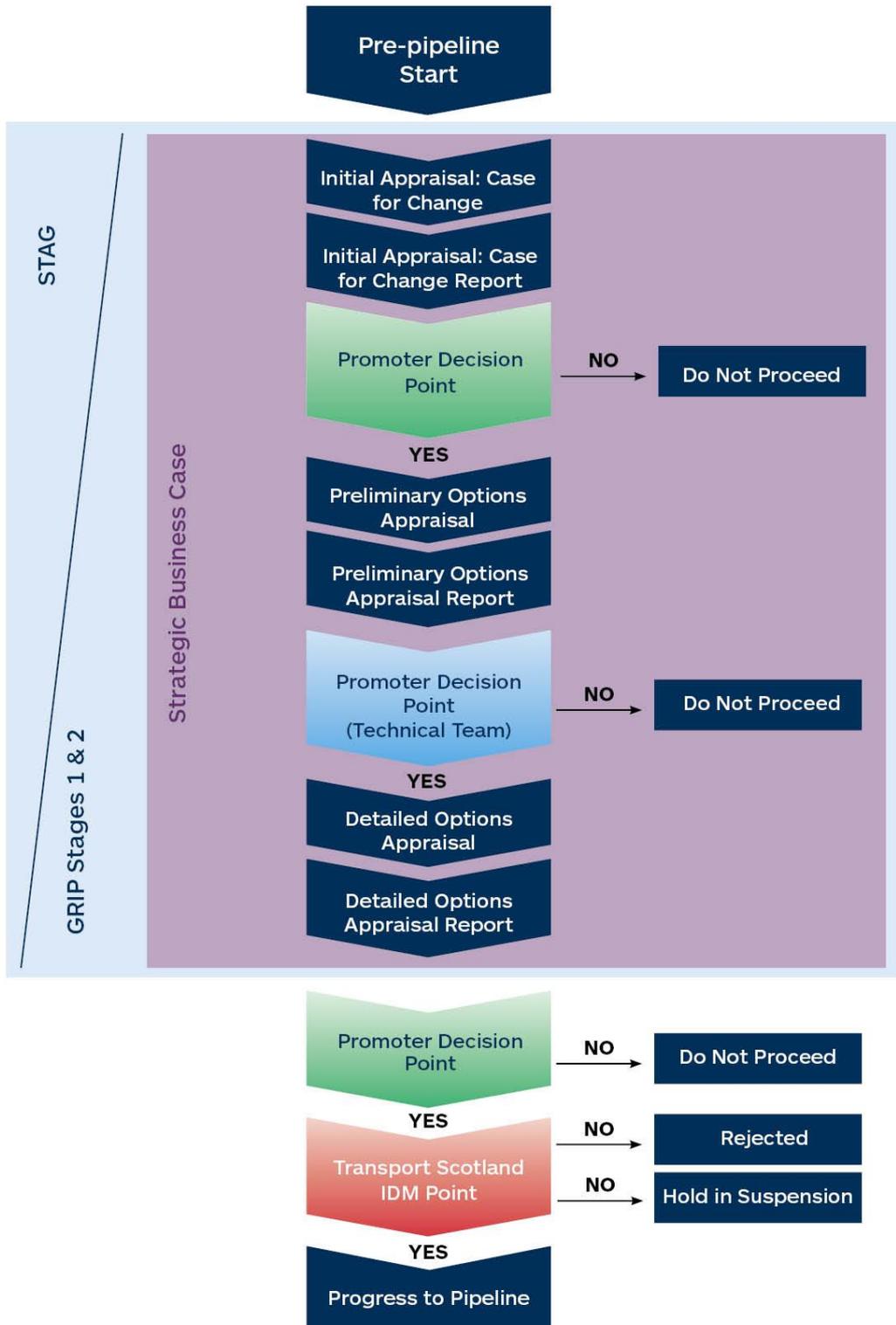


DIAGRAM TWO

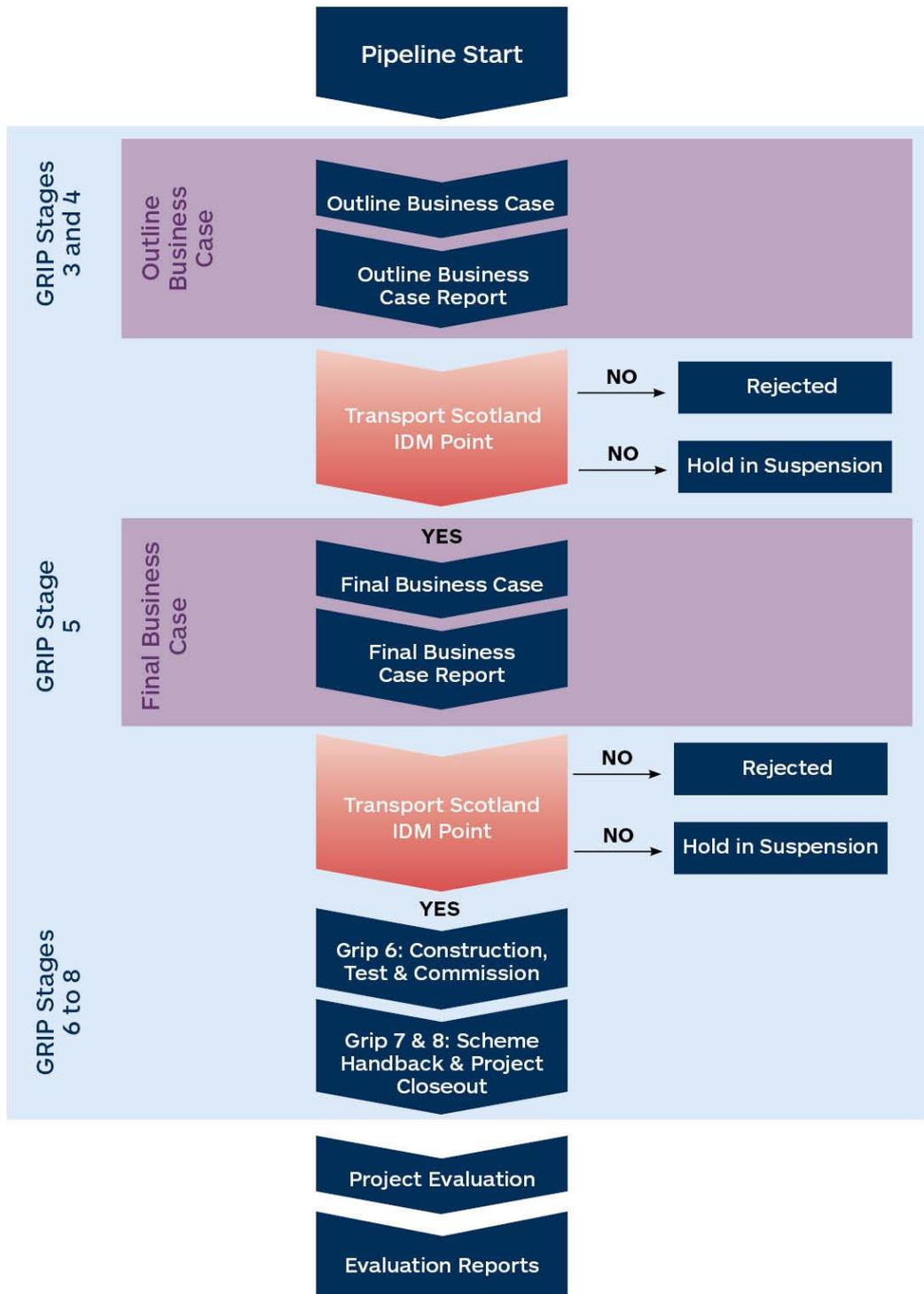


Diagram One

Diagram 1 shows the stages in the pre-pipeline process aligned to STAG and the Strategic Business Case (SBC) Stage. The Initial Appraisal: Case for Change stage includes the analysis and identification of evidenced problems and opportunities in the existing or potential transport network; sets transport planning objectives; and the generation and sifting of transport options. STAG allows established relevant policy directives to be taken into account, such as Scotland’s Economic Strategy, the National Transport Strategy and its supporting documents, and potentially, regional or local transport strategies. It is important that a transport appraisal considers the full range of multi-modal transport options with the potential of meeting the transport planning objectives and addresses evidenced transport problems and opportunities in a study area.

The promoter should review the findings from the Initial Appraisal: Case for Change Stage Report to make an informed decision about whether or not there is sufficient justification to progress and commit further resources to the Preliminary Options Appraisal and Detailed Options Appraisal stages. The findings from the Preliminary Options Appraisal Stage report will assist the promoter’s technical team in determining whether or not to progress as well as the nature and scope of further work required for Detailed Options Appraisal. The reports produced at the end of each of the three stages would be required to inform the SBC.

Transport Scotland’s Strategic Transport Planning team can provide advice on the application of STAG and Transport Scotland’s published

business case guidance. Such advice is given without prejudice to any future decision that Transport Scotland investment decision-makers or Scottish Ministers may make in relation to a particular study or potential transport project. Promoters should engage with the Transport Scotland Strategic Transport Planning team: Scot-TAG_Mailbox@gov.scot

Promoters should engage with Network Rail during a transport appraisal as the application of Network Rail’s GRIP Stages 1, 2 and, potentially, elements of Stage 3 may inform the consideration of any rail-based options. Promoters should contact Network Rail’s Strategic Planning Team in Scotland: SystemOperatorScotland@networkrail.co.uk

A clear and complete SBC will be expected to:

- make a robust case for change
- demonstrate how the emerging scheme/project optimises value for money in terms of economic, social and environmental benefits
- inform the decision on whether the emerging transport option should proceed to development and
- incorporate the Initial Appraisal: Case for Change Report; Preliminary Options Appraisal Report; and Detailed Options Appraisal Report

From pre-pipeline to pipeline

The SBC will give the promoter robust evidence to enable a decision to be made either to proceed to make an application for consideration into the rail pipeline process (to secure government funding and pursue further development of the proposition) or not to proceed. Only rail-related projects will progress through the rail pipeline.

Promoters requiring Scottish Government funding, support or approval to deliver their objective(s) are therefore requested to send their completed SBC by email to Transport Scotland:
Rail.Infrastructure.Strategy@transport.gov.scot

There is a number of projects already in the process (pre-pipeline stages) due to Network Rail rail-industry development work already underway. As part of their license conditions, Network Rail plan for forecast demand on the network for both passenger and freight traffic: this work is rail-focused and is not multi-modal and is planned based on a number of studies looking at the capacity of the rail network against forecast demand. These projects will also be subject to the different Business Case stages and governance as well as the GRIP stages. A number of these projects align with the recommendations of the Strategic Transport Projects Review. In line with the criteria for prioritising projects (page 7) investment in rolling stock and service provision may be pursued in preference to investment in infrastructure.

Transport Scotland will consider in detail and either accept or reject the SBC. If rejected it will be for promoter to decide whether to revise their SBC. A decision to accept will have two outcomes: either an Agreement to Proceed to Outline Business Case (OBC); or an Agreement in Principle to Proceed to OBC. The Agreement in Principle means that the project has merit but when set against competing priorities, affordability and available funding it cannot at that time be progressed. Transport Scotland will provide an explanation as to the reasons for the assignment of SBCs to Agreement in Principle to Proceed.

Those proposals designated as being Agreement in Principle will be held pending until a decision is made that they can proceed to the next stage.

Transport Scotland will discuss with promoters the balance of resource contribution between the promoter and the Scottish Government and whether the promoter should retain or Transport Scotland assume responsibility for the promotion of the project, the production of the OBC and any subsequent activity. If Transport Scotland assume responsibility it will therefore become the promoter of the scheme or project.

Diagram Two

On the basis that the decision is to proceed to OBC then Transport Scotland or the promoter will initiate the development and design work necessary to inform the OBC (**Diagram 2**). That development and design work could be undertaken by Network Rail or by Network Rail in conjunction with another party or another party with more limited Network Rail engagement.

The purpose of the OBC is to revisit the SBC to identify a preferred option which optimises and demonstrates value for money. In GRIP terms this stage, particularly if a single option has not been determined at SBC, may incorporate both GRIP 3 (Option Selection) and GRIP 4 (Single Option Development).

Once the OBC has been produced it will be considered and a decision made to reject, proceed or hold it in suspension due to competing priorities and funding considerations. A key consideration of Transport Scotland's investment decision-makers (IDM) will be the extent and attribution of funding

between parties required to deliver the scheme or project. Investment decision-makers may, particularly when schemes or projects are of high value, of high risk or are novel, request a Gateway Review to help inform their decisions. A Gateway Review delivers a "peer review" in which independent practitioners use their experience and expertise to examine the progress and likelihood of successful delivery of the scheme or project.

A decision to proceed to Final Business Case (FBC) means that activity may proceed to undertake detailed design (GRIP 5) and the appropriate procurement and contracting strategy.

Once the FBC has been produced it will be considered by the investment decision-makers and again a determination made whether to reject, proceed or hold in suspension.

Any decision taken to approve means the proposed project will enter the construction, test and commission phase (GRIP 6) and then the hand-back phase (GRIP 7) at which time the proposal is incorporated as part of Scotland's railway infrastructure. The promoter will require confirmation that contracts have been settled, and all operational warranties are in place before final close out of the scheme or project (GRIP 8).

The promoter will also undertake a post project evaluation, including the assessment of benefits delivered, in terms consistent with the SBC, OBC and FBC.



Value for money

All future rail investments will align with the Transport Scotland processes for investment decision-making in line with the Scottish Public Finance Manual.

Ensuring value for money through all the stages of transport appraisal, project development and delivery will be essential in addition to expert technical assessment of options and minimising exposure to risks. In line with established processes, projects may also be subject to the Scottish Government Gateway Review process.

Transport Scotland's decision-making processes will be supplemented by formal arrangements which govern the processes through which industry advice and guidance on rail projects can be secured.

How we will link rail projects with major renewals projects

Renewal works on our railways are a vital component of a safe, high performing and sustainable railway. They also account for the largest expenditure in the Scottish Government rail infrastructure budget, with in excess of £2bn projected spend in Control Period 6 (2019-2024)

Renewal works present an opportunity not only to sustain the current railway, but with additional funding, to improve services for passengers and freight customers. This is very often the least disruptive and most efficient way to invest in our railways. Work is underway by the ORR in seeking efficiencies from Network Rail's renewals' work-banks from 2019 onwards; we will continue to make links with this work to ensure optimum outcomes.

How we will manage ring-fenced funds

In Control Period 5 we introduced a wide range of ring-fenced funds. However, the outcomes from this approach have been mixed. This, alongside the move to a pipeline-based approach, means that we will be undertaking a thorough evaluation of our approach to ring-fenced funding. Full details of our approach will be confirmed and published later in 2018.

How we will ensure that benefits are realised

Benefits realisation and securing return on investment is a critical part of planning significant capital investment. Lessons are being learned through the evaluation of recently completed rail projects which will be used to inform the development of future projects and decision-making. We will ensure good practice is both promoted and applied.



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