Discussion Paper for Ministers, dated 23 December 2021

DISCUSSION PAPER
A9 DUALLING PROGRAMME: APPROACH TO PROCUREMENT OF THE REMAINDER OF THE PROGRAMME

1. Purpose

1.1 To set out for discussion with Ministers issues noted from the process of evaluating the comparative benefits and disbenefits of adopting either a capital funded procurement option or a revenue funded procurement option for delivery of the remaining eight projects within the A9 Dualling Programme.

2. Priority

2.1 Routine

3. Actions Required

3.1 Ministers are invited to comment on the issues noted in this paper and provide any views they would wish to be considered by officials in completing this process of evaluation.

4. Background

4.1 The A9 Dualling Programme consists of eleven projects. Two of these projects are now open for use – Kincraig to Dalraddy (2017) and Luncarty to Pass of Birnam (August 2021). A third project (Tomatin to Moy) has recently commenced procurement as a Design and Build form of contract supported by an allocation of capital funds, leaving the procurement of the remaining eight projects to be determined. A map showing the location of each of these projects is provided in Annex A to this paper.

4.2 In the budget for 2019-20 published in December 2018, Ministers indicated that the National Infrastructure Mission will be financed from a combination of approaches, including traditional capital expenditure, Financial Transactions, capital borrowing, revenue financed investment and innovative finance methods such as Growth Accelerator. In addition, it was indicated that Scottish Futures Trust (SFT) had been asked to examine the use of profit sharing revenue finance schemes, such as the Welsh Government's Mutual Investment Model, to help secure both the investment we need and best value for the taxpayer. It was also stated that all mechanisms available would be utilised appropriately to deliver on priorities, including completion of the A9 dualling.

4.3 In May 2019 Ministers endorsed SFT's recommendation that future revenue funded procurements in Scotland be based on the Welsh Government's Mutual Investment Model (MIM). Following this endorsement, work to consider the use of MIM and other delivery options on the A9 Dualling Programme progressed as follows:

- appointment of specialist legal, financial and commercial advisors: June 2019 to March 2020;
- review of programme and preparation for market consultation: March 2020 to December 2020; and
- market consultation, financial modelling, evaluation of options and identification of emerging findings: January 2021 to September 2021.

4.4 The evaluation undertaken in recent months has considered the comparative benefits and disbenefits of adopting either a capital or revenue funded procurement option for delivery of the remaining eight projects. This process has included consideration of the findings of a market consultation exercise carried out in early 2021, together with quantitative and qualitative assessment of the procurement options. Although this work has not yet been concluded, it has led to the identification of particular emerging findings, as set out in this discussion paper. In addition to the options noted above which were considered in the recent evaluation, it is also noted that options are available involving different combinations of capital and revenue funded procurement approaches. However, these have not been considered in detail at this time, as although limiting the scope of revenue funded packages would reduce the overall demand for revenue funding, it would also reduce the attractiveness of the remaining revenue funded packages and the pipeline as a whole to the market, whilst also increasing the demand for capital funding. It is also noted that the options considered are restricted to those which deliver the whole of the Scottish Government policy of completing dualling of the A9 between Perth and Inverness

4.5 The **capital funded option** evaluated involves progressing each of the eight remaining projects individually via the procurement of eight Design and Build contracts, using Transport Scotland's standard Design and Build terms and conditions. These projects would range in estimated construction contract values from £85m to £325m, at Q3 2019 prices.

4.6 The **revenue funded option** evaluated involves progressing the eight remaining projects in three contract "packages", where the projects are grouped together geographically. Each contract incorporates any intermediate sections of existing dual carriageway within its extent to provide a continuous length of road network for operation and maintenance over the concession period. These three "packages" would each be delivered using a form of contract that is based on the Welsh Government's MIM, adapted to reflect the legislative backdrop in Scotland and developed in discussion with Scottish Futures Trust.

4.7 Although we are aware that the current and near term financial context is very challenging, for comparative purposes, this evaluation has adopted a baseline assumption that sufficient capital and/or revenue funding can be allocated to support implementation of either option in the most efficient timetable achievable. Depending on the option concerned, this baseline position will either require additional capital funding to be allocated within and beyond the current Capital Spending Review period, or a lesser amount of additional capital funding to be allocated beyond the current Capital Spending Review period along with a long-term commitment to additional revenue funding. Both of these options would require re-prioritisation from other budgets and difficult choices about the affordability of other projects – including the emerging recommendations of the STPR2. The financial implications of the options considered in the evaluation are set out in more detail later in this discussion paper.

4.8 Similarly, to provide comparable whole-life costs between the options, operation and maintenance costs over a period of thirty years following completion of construction of the programme have been included for each option. This aligns with the likely length of the concession period for the revenue funded option. For the capital funded option these works would be undertaken under separate network management contracts. In both cases these operation and maintenance costs are assumed to be met from revenue funding.

4.9 Under the terms of the MIM contract, each contract would require an equity investment by the Scottish Government. However, as Transport Scotland would be the contracting party, this investment requires to be made via a separate entity. The cost of that investment would also need to be met by early capital funding, with the return on that investment being received by that separate entity. For financial modelling purposes a 20% equity investment has been assumed, which is the upper end of the equity investment that would be permissible while maintaining an off-debt classification position. A lower equity investment, which would result in a commensurately reduced return on investment, would be possible, as demonstrated by the 15% equity investment made by the Welsh Government on the A465 MIM procurement, which is now under construction.

4.10 Initial discussions have been held with SG Exchequer's Infrastructure Investment Division and SFT regarding plans for the entity that would manage the Scottish Government's equity investment were the revenue funded option selected. It is noted that the evaluation reported in this paper is based on this entity being confirmed in sufficient time to enable it to engage with prospective and confirmed bidders in advance of and during any revenue funded procurement. To do so, further investigation by officials is required to determine the nature, governance structure and type of investment entity which is best placed to manage the Scottish governments investment. There is some experience of such models through the Hub programme for community infrastructure which was managed by SFT and required equity investments which were made through the investments arm of SFT – SFTi. It is understood that a separate submission to follow on the investment entity will discuss this topic in greater detail.

5. Emerging Findings

5.1 The emerging findings from the evaluation of the options considered are set out in Annex B to this paper to allow ready comparison between options.

5.2 In summary, **the emerging findings indicate that the revenue funded option could be completed two years earlier than the capital funded option, and at a slightly lower Net Present Value of cost**. **It is, however, noted that the nominal expenditure over the comparative period would be greater for the**

revenue funded option than for the capital funded option. Table 1 summarises for each option the estimated timetable for completion and the Net Present Value and Nominal costs, with additional information on these issued set out in Annex B.

Table 1

Issue	Capital Funded Option (Design and Build)	Revenue Funded Option (MIM)
Timetable for Completion	2034, subject to availability of funding	2032, subject to availability of funding
Net Present Value of Cost	£2,078m at April 2021 prices	£1,945m at April 2021 prices
Nominal Cost	£4,532m	£7,179m
Capital Funding Required	£2,535m (Nominal)	£360m (Nominal)
Revenue Funding Required	£1,997m (Nominal)	£6,819m (Nominal)

5.3 It is also noted that progressing **the capital funded option** to the most efficient programme identified in the evaluation would require an additional allocation of £380m of capital funds within the current Capital Spending Review period beyond the £135.8m allocated for 2022/23-2025/26, together with a further allocation of £2,020m of capital funds beyond that period. In the absence of such allocations this option would not be capable of achieving the timetable set out in Annex B.

5.4 Similarly, it is noted that progressing **the revenue funded option** to the most efficient programme identified in the evaluation, while not requiring any additional allocation of capital funds within the current Capital Spending Review period beyond the £135.8m allocated for 2022/23-2025/26, would require an allocation of £180m of capital funds beyond that period together with an allocation of £6,819m of revenue funds (£4,822m more than the revenue funding required by the capital funded option). In the absence of such allocations this option would not be capable of achieving the timetable set out in Annex B.

5.5 SG Exchequer has advised that, together with existing spend on revenue funded projects, the estimated additional revenue demand identified in the evaluation would not be expected to result in breach of the position that spend on revenue funded projects should not exceed 5% of the revenue budget. It is also noted that financial modelling of the revenue funded option indicates that this option would be at SFT's guideline estimates for the affordability and sustainability for use of the MIM form of contract.

5.6 It is considered that market interest in delivering revenue funded roads projects makes this an effective method of achieving additionality of funding from private sector sources. Other government projects may be less effective in this area due to factors such as the scale of the project concerned being insufficient to generate market interest or the nature of the project being novel to the market. While it is noted that there is also market interest in delivering capital funded roads, this interest being potentially subject to some changes in terms and conditions, such an approach would not achieve additionality of funding. Further information on market views is provided in Appendix B.

5.7 SG Exchequer has noted that capital and resource budgets are heavily constrained across all portfolios. For capital funding, it has indicated that no further funding can be guaranteed beyond the Capital Spending Review settlement figures already advised and there is some ongoing uncertainty as the overall capital budget is under review in light of recent UK Spending Review allocations, which are lower than anticipated. For revenue funding, it has noted that draft budget allocations have been provided for 2022/23 only, and that the resource funding requirement should be considered alongside other proposals in light of this budgetary envelope, including consideration of the implications of targeted reprioritisation of existing plans within portfolios. SG Exchequer has also noted that no budget for future years can be guaranteed and that if there is any contractual commitment that extends beyond the current spending review period then these costs would need to be set against other priorities during future spending reviews and annual Budgets.

5.8 It is considered that neither the additional capital funding that would be required for the capital funded option nor the revenue funding that would be required by the revenue funded option would be affordable from Transport Scotland’s current capital and revenue funding allocations. TS notes that the capital spending review settlements agreed and published in February 2021 are now under review and TS has been asked to revisit all capital plans to assess affordability alongside new commitments and pressures. The review of Capital Spending Review allocations is likely to take until Spring 2022. On this basis, TS cannot guarantee that current capital funding in place for the A9 work will be available until that review is complete (given the lack of available reprioritisation options and size of new commitments such as in increase in Active Travel budget).

5.9 Similarly, the anticipated future revenue payments would amount to almost 10% of current TS RDEL budget and would be completely unaffordable on current medium term trajectories. Given that these would become contractual obligations, TS would need assurances from SG Exchequer that additional budget would be provided at the time to meet these commitments. Given the nature of TS RDEL expenditure, with almost all of it statutorily or contractually committed, we would not be able to top-slice or protect this required funding from likely future allocations, unless there were radical downwards changes in levels of public transport and subsidy. Given the very clear and consistent links within Transport to achieving key Government outcomes on climate change and child poverty, TS can only assume that spending on key areas of public transport, active travel and climate change measures will continue to grow rather than reduce to allow for MIM road payments to take their place. This would also hold true for the wider NZET portfolio. On this basis the current suggested options for delivery of policy in respect of the A9 Dualling Programme are not affordable for TS or the NZET portfolio without guarantees of additional funding.

5.10 Clearly our current constitutional status, not least our lack of borrowing powers, limits our ability to find our own solutions here. SpAds advise we should consider how we make this clear in all communications around the option we eventually decide to pursue.

5.11 It is noted that further advancement of the procurement of construction projects for the A9 Dualling Programme, beyond the Tomatin to Moy procurement currently in progress, is dependent on decision making on the form of contract/ funding option to be adopted for the remainder of the programme. The timetable for delivery of the overall programme is dependent on confidence in the availability of the funding required for the option selected to allow procurement processes to commence and contracts to be formed with successful bidders.

6. Handling Approach and Issues

6.1 Following decision making on the choice of funding route/procurement option a detailed, integrated handling plan will be implemented. It is anticipated that a statement will be made in parliament confirming details of the selected option, including the associated timetable for completion of construction work. Following this statement, engagement with external bodies, communities and other key stakeholders (including the media) will resume, on the basis of progressing delivery of the remainder of the programme in line with that option.

6.2 If the **capital funded option is selected**, lines will be developed to address the rationale for that decision, in particular addressing issues that may be raised such as:

- its higher cost in terms of Net Present Value;
- its longer timetable for delivery; and
- its impact on other capital funded projects, if progressed to the most efficient timetable achievable as set out in Annex B; or
- the rationale for timetable delay if not progressed to the most efficient timetable achievable as set out in Annex B.

6.3 If the **revenue funded option is selected**, lines will be developed to address the rationale for that decision, in particular issues that may be raised such as:

- its higher cost in nominal terms;
- where additional revenue budget will be found given medium to long term revenue forecasts (showing growing pressures and expanding deficits); and
- its impact on revenue funding availability for other projects/programmes.

6.4 Either option will require lines to be developed setting out reasons for changes in the expected timetable to completion of the A9 Dualling Programme. These reasons include issues such as:

- the period taken to achieve completion of statutory processes being longer than originally anticipated;

- delays to various activities arising from the effects of the coronavirus pandemic; and
- the updated timetable reflecting more recent market feedback about its capacity to deliver the remainder of the programme in view of the current and emerging market conditions.

6.5 The narrative setting out these reasons will highlight that the A9 Dualling Programme is the largest single infrastructure programme ever undertaken in Scotland and the cumulative impact of these interdependent factors in a complex programme of 11 individual infrastructure projects, each of which would be a significant undertaking in its own right. In addition, as part of the announcement strategy, the considerable expected benefits of the programme will be brought to the fore and a schedule of communications and engagement activities and opportunities will be rolled-out to build a positive sense of momentum and progress.

6.6 The expected benefits of the programme include integration of a Social Value Programme (SVP) as part of the approach to procurement and delivery of the A9 Dualling Programme. The SVP is being developed to include four elements:

- Zero9: the overall plan to maximise reduction/elimination of carbon emissions during construction and maintenance periods, recognising that were the revenue funded option selected the 2045 Net Zero target would fall within the concession period;
- A9 Growth Engine: a framework to develop an inclusive pipeline of education, skills, employment and economic opportunities derived from infrastructure investment, providing a meaningful legacy following construction;
- Well9: encouraging contractors to go beyond best practise to promote the health and wellbeing of workers on the project, and of their neighbours in adjacent communities, with a range of initiatives and facilities; and
- A9 Communities & Place: reflecting and realising the value in communities' own sense of place through appropriate enhancements and art and heritage opportunities and promoting meaningful community relationships and neighbourliness between contractor and community.

7. Summary

7.1 This paper sets out for Ministers' consideration issues noted from the process of evaluating the comparative benefits and disbenefits of adopting either a capital or revenue funded procurement option for delivery of the remaining projects within the A9 Dualling Programme, noting wider affordability issues.

7.2 Ministers are invited to comment on the issues noted in this paper and provide any views they would wish to be considered by officials in completing this process of evaluation. If it would be helpful, a meeting with officials can be arranged to discuss in more detail issues set out in this paper.

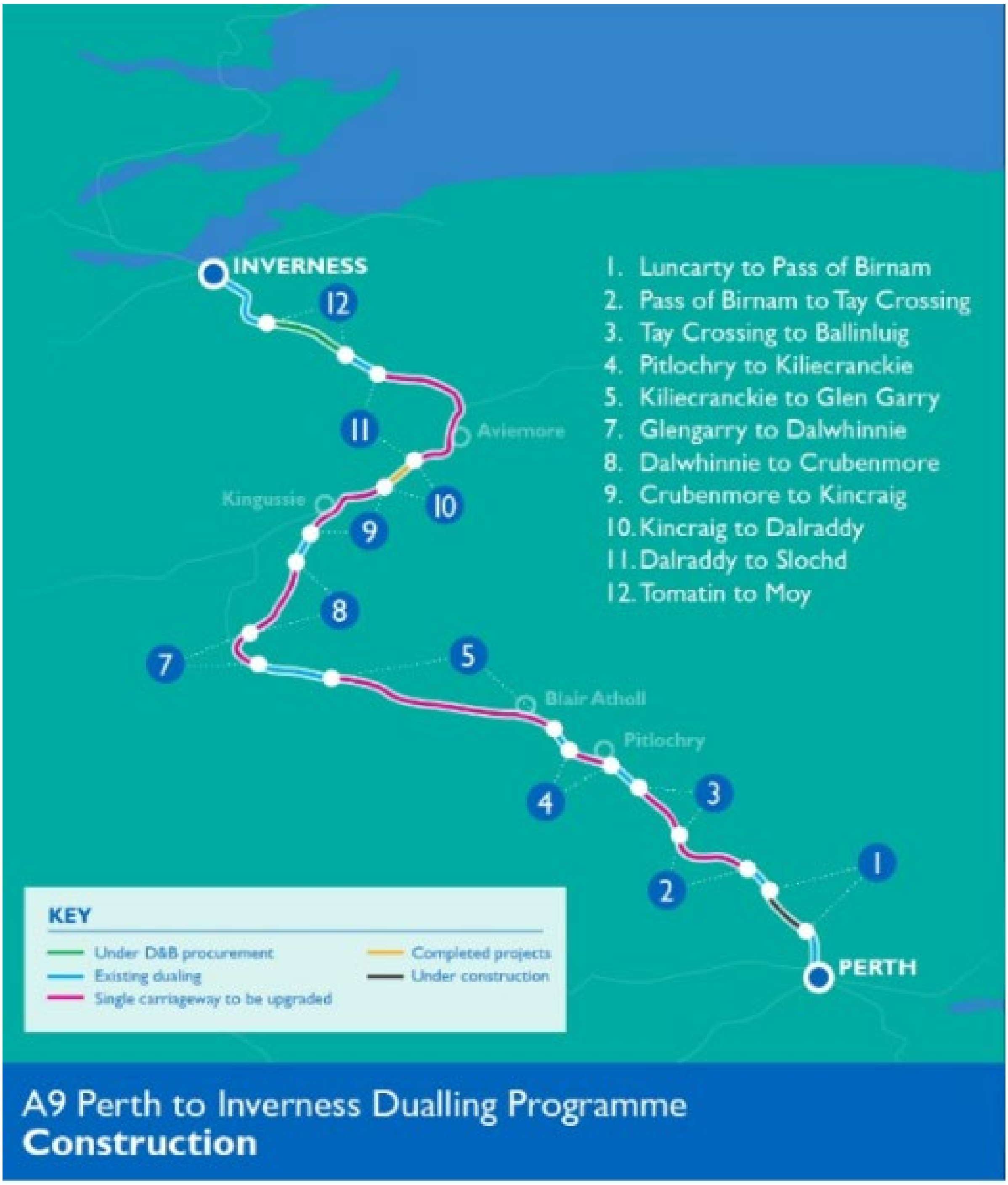
7.3 Following consideration of the issues noted in this paper Ministers may also wish to discuss the way forward with Scottish Green Party representatives.

[REDACTED], A9 Dualling Programme Manager, [REDACTED]

Copy List:	For Action	For Comments	For Information		
			Portfolio Interest	Constituent Interest	General Awareness
Minster for Transport	**X**	**X**			
Cabinet Secretary for Finance and Economy			X		
Cabinet Secretary for Net Zero, Energy and Transport			X		
DG Net Zero					X
DG Economy					X
DG SG Exchequer					X
Hugh Gillies, Chief Executive Transport Scotland					X
Lawrence Shackman, TS Director Major Projects					X
Kerry Twyman, TS Director of Finance and Corporate Service					X
Fiona Brown, TS Director Transport Strategy and Analysis					X
Stewart Leggett, TS Director of Roads					X
Andrew Watson, SG Exchequer					X
Director of Budget and Public Spending					X
[REDACTED], SG Exchequer					X
[REDACTED], SG Exchequer					X
[REDACTED], SG Exchequer					X
[REDACTED], TS Head of Project Delivery					X
[REDACTED], TS Head of Project Design and Development					X
[REDACTED], TS A9 Dualling Programme Manager					X
[REDACTED], TS Head of Design Team 2					X
[REDACTED], TS A9 Dualling Programme Delivery Manager					X
[REDACTED], TS A9 Programme Communications Manager					X
Kate Higgins, Special Adviser					X
Project Delivery Correspondence					X

Inquiry into A9 Dualling Programme – documents provided by Transport Scotland

ANNEX A – PLAN OF PROJECTS COMPRISING A9 DUALLING PROGRAMME



ANNEX B – SUMMARY OF EMERGING FINDINGS

Issue	**Capital Funded Option (Design and Build)**	**Revenue Funded Option (MIM)**
Market Appetite	• Market interest from contractors in delivering via this option; • Range of views on preferred project sizes, from dividing into larger number of smaller projects, which would extend the delivery programme, to combining projects into fewer packages, which would limit the competitors able to deliver. For evaluation purposes the approach of delivering each of the eight remaining projects individually has been assessed; • Views expressed that the market would wish to see changes to TS' standard terms and conditions which would reduce the risk transfer to contractors, noting that a willingness to bid may be affected by a strong UK market and a perception that terms and conditions elsewhere were more favourable. Adopting this approach would result in increased risk allowances being required for the Capital Funding option. For modelling purposes it has been assumed that TS' standard terms and conditions would apply.	• Market interest from both contractors and lenders in delivering via this option, noting a preference that a "pipeline" approach be adopted to procurement; • Overall view that procurement of three rather than two "packages" would be preferred, balancing considerations such as the construction cost of each package with the length of road network to be maintained.

Issue	Capital Funded Option (Design and Build)	Revenue Funded Option (MIM)
Timetable for Completion	• Estimate that most efficient timetable achievable under this option would give a construction completion date of 2034; • This timetable is driven by the ability of this market sector to deliver concurrent work, together with balancing disruption to road users and the challenges of running multiple concurrent procurements e.g. securing sufficient bidders to maintain competitive tension during procurements and addressing resource demands associated with concurrent procurements.	• Estimated that most efficient timetable achievable under this option would give a construction completion date of 2032; • This timetable is driven by a sequence of consecutive procurement activity for the three packages followed by the time to complete construction of the final package procured.
Financial Assessment (Comparison of "NPV" – Net Present Value of all money spent as at specified reference date; and "Nominal" – cost of money spent at time of expenditure.)	• NPV of all capital and revenue costs estimated as £2,078m at April 2021 prices; • Capital demand estimated as £2,535m (nominal); • Revenue demand estimated as £1,997m (nominal); • Combined capital and revenue demand estimated as £4,532m (nominal).	• NPV of all capital and revenue costs, excluding corporation tax and equity investment and return, estimated as £2,025, at April 2021 prices; • Applying reduction in respect of corporation tax income anticipated from contracting entities reduces NPV to £1,965m at April 2021 prices; • Applying cost of 20% equity investment of £25m at April 2021 prices and return on investment of £45m at April 2021 prices further reduces NPV to £1,945m at April 2021 prices; • Capital demand estimated as £360m (nominal); • Revenue demand estimated as £6,819m (nominal); • Combined capital and revenue demand estimated as £7,179m (nominal).

Issue	Capital Funded Option (Design and Build)	Revenue Funded Option (MIM)
Financial Assessment (Capital and Revenue Funding Demand)	• Capital demand over remainder of current Capital Spending Review period is £380m (nominal) higher than current allocation for A9 Dualling Programme, with that additional sum required to be allocated within this period to support progress of the most efficient timetable identified in the evaluation if this option is selected; • Capital demand of £2,020m (nominal) would require to be allocated beyond the current Capital Spending Review period to support completion of the A9 Dualling Programme if this option is selected; • Revenue demand of £1,997m (nominal) would require to be allocated to support completion of the A9 Dualling Programme if this option is selected.	• Capital demand over remainder of current Capital Spending Review period can be met by current allocation for A9 Dualling Programme, to support progress of the most efficient timetable identified in the evaluation if this option is selected; • Capital demand of £180m (nominal) would require to be allocated beyond the current Capital Spending Review period to support completion of the A9 Dualling Programme if this option is selected; • Revenue demand of £6,819m (nominal) would require to be allocated to support completion of the A9 Dualling Programme if this option is selected.
Financial Assessment (Revenue Funded Option Only - SG Exchequer Affordability Envelope and SFT Affordability and Sustainability Ratio Tests)	• Not applicable	• SG Exchequer has advised that, together with existing spend on revenue funded projects, the estimated additional revenue demand identified in the evaluation would not be expected to result in breach of the position that spend on revenue funded projects should not exceed 5% of the revenue budget; • The SFT report on options appraisal to examine profit sharing finance schemes sets out two ratios to test the affordability and sustainability of using the MIM model for infrastructure projects in

Issue	Capital Funded Option (Design and Build)	Revenue Funded Option (MIM)
		Scotland across various sectors; - Cost Multiplier ratio - Calculated as the ratio of 'total revenue commitment over the entire contract length period' to 'total construction cost', with a guideline estimate for this ratio of 3.70; and - Revenue Commitments ratio - Calculated as the ratio of 'First Year Revenue Commitment' to the 'total construction cost' of the Programme, with a guideline estimate of 9-12% for this ratio. • Financial modelling indicates a Cost Multiplier ratio of 3.75 and a Revenue Commitments ratio of 11%, based on which it is considered that the ratios for the A9 Dualling Programme are at the SFT guideline estimates.
Contractor and Employment Opportunities	• The scale of projects included in this option mean that it is unlikely that construction entities based in Scotland would be capable of entering the Design and Build contracts; • It is possible that in some instances construction entities based in the UK with a Scottish presence may be capable of entering the Design and Build contracts; • For the majority of Design and Build contracts it is anticipated that construction entities would require to enter joint ventures, which could result in	• The primary current interest in MIM/PFI contracts is from international construction entities, with many seeking to joint venture for projects of the scale included in this option; • The market has indicated a preference for including Scottish or UK based contractors within their joint venture arrangements, although it is not certain that there is a reciprocal interest from such entities in participating at that level; • Under this option construction entities of different sizes based in Scotland would have

Issue	Capital Funded Option (Design and Build)	Revenue Funded Option (MIM)
	reduced competitive tension by limiting the number of bidders wishing to participate; • The scale of the larger Design and Build contracts is thought not to be sufficiently large to attract significant international interest; • Under this option construction entities of different sizes based in Scotland would have opportunities to bid for and deliver sub-contract packages; • It is expected that contractors of every tier will seek to maximise local employment opportunities to minimise costs associated with use of non-local labour; • It is, however, expected that the majority of the labour force will be non-local, requiring arrangements to be made for suitable temporary accommodation during construction operations; • While procurement regulations limit the ability of the Design and build contracts to require certain levels of economic activity to be required to be delivered in Scotland, consideration is being given to how the Social Value Programme being developed for the A9 Dualling Programme could be framed to encourage this approach.	opportunities to bid for and deliver sub-contract packages; • It is expected that contractors of every tier will seek to maximise local employment opportunities to minimise costs associated with use of non-local labour; • It is, however, expected that the majority of the labour force will be non-local, requiring arrangements to be made for suitable temporary accommodation during construction operations; • While procurement regulations limit the ability of the MIM contracts to require certain levels of economic activity to be required to be delivered in Scotland, consideration is being given to how the Social Value Programme being developed for the A9 Dualling Programme could be framed to encourage this approach.

Issue	Capital Funded Option (Design and Build)	Revenue Funded Option (MIM)
Risks and Opportunities	• Risk: progressing a number of individual procurements concurrently may lead to bidder capacity constraints and adversely affect the number of bidders for a procurement affecting the competiveness of the procurements or achievement of contract award;	• Risk: Completion of statutory processes on the Killiecrankie to Glen Garry section requires to be achieved to enable procurement of the first package of projects proposed for implementation under this option. The Report on the Public Local Inquiry held in respect of this project is awaited at present, having been delayed due to issues arising from redeployment of Reporter's Unit staff in response to the coronavirus pandemic. Consideration is being given to options that would mitigate any delay in completion of statutory processes for this section; • Opportunity: Packaging the projects together as proposed under this option is expected to deliver economy of scale benefits, for example through negotiation of lower unit rates based on a higher purchasing volume, or by achieving a lower cost per person for accommodation costs for non-local labour during construction operation; • Opportunity: The longer-term duration of the contracts resulting from this option provides an opportunity to deliver an enhanced Social Value Programme across the lifetime of these contracts.