

2 Need for the Scheme

2.1 Introduction

2.1.1 This chapter sets out the national context for the A9 Dualling Programme. The intention to improve the existing A9 along the section of the proposed scheme pre-dates the December 2011 Infrastructure Investment Plan¹ (IIP) commitment to upgrade the A9 between Perth and Inverness by 2025 and this background is provided in Section 2.3 (National Context for Dualling) of this chapter.

2.1.2 Section 2.4 (A9 Dualling Programme Review) and Section 2.5 (Local Context for Dualling) respectively provide an overview of the work underway at an A9 Dualling Programme level and local context for the proposed scheme.

2.2 The A9 Trunk Road

2.2.1 The A9 is a strategic route linking central Scotland to the north of Scotland. Currently, the A9 from Perth to Inverness comprises sections of both single carriageway and dual carriageway. In addition, there are a few short sections of Wide Single 2+1 (WS2+1) where the road consists of two lanes of travel in one direction and a single lane in the opposite direction, therefore providing overtaking opportunities in the two lane direction, however overtaking in the single lane direction is prohibited.

2.2.2 The A9 is a vital link used by both local and long distance traffic. It is a major bus route and is used by freight traffic supporting key industries, such as food and drink, oil, waste and construction. The route is used by tourists as a means of reaching locations in Perthshire and the Highlands. It is considered that the upgrade of the A9 to dual carriageway would help assist economic growth in the north of Scotland. Dualling of the A9 would improve journey times, potentially saving costs for businesses, reducing driver stress and increasing safety, potentially making the surrounding areas more attractive as a short-term tourism destination, in line with the proposed scheme objectives provided in Section 2.4 (A9 Dualling Programme Review).

2.2.3 The investment case for A9 Dualling Programme (Transport Scotland, 2016) outlines strong road user, community, business and planning authority support for the A9 Dualling Programme. In particular, the commercial businesses along the A9 corridor are strongly in favour of the A9 Dualling Programme and the economic benefits it will bring. The report identifies there are five key sectors most likely to benefit from the proposed scheme; food and drink, tourism, energy, life sciences and forestry.

2.2.4 Driver stress and frustration were reviewed as part of the A9 Dualling: Case for Investment (Transport Scotland, 2016) which indicated that high levels of driver frustration were linked to slow moving vehicles, the build-up of platoons and the restriction of travel speed to well below desired levels. The report outlines the benefits of relieving driver frustration by implementing the A9 Dualling Programme.

2.3 National Context for Dualling

A9 Route Action Plan and Route Strategy (1995-97, 1996)

2.3.1 Studies into the potential for improving the A9 Trunk Road date back to 1995-97, with a Route Action Plan (RAP) and a Route Strategy (Scott Wilson Kirkpatrick, 1997) which considered the opportunities to improve safety and relieve driver stress. The upgrade for the section from Tay Crossing to Ballinluig formed part of the preferred route strategy at that time.

A9 Route Improvement Strategy Study (2004)

2.3.2 The RAP was followed by a Route Improvement Strategy Study (RISS) (Scott Wilson, 2004) (Scotland), which aimed to identify a route improvement scheme for a section of the A9 from Perth to Blair Atholl; of which a part of the proposed scheme is located. The study concluded that Pitlochry

¹ The Infrastructure Investment Plan sets out why the Scottish Government need to invest, how it will invest and what strategic large scale investments will be taken forward within each sector (including transport) in the next 20-30 years.

provided a definite split in the character of the overall A9 route, primarily due to the reduction in traffic volumes to the north of the town.

- 2.3.3 This study developed a medium to long term strategy for introducing both dual carriageway and wide single carriageway improvements on the A9 between Perth and Blair Atholl, and exclusively wide single carriageway from Pitlochry to Bruar.
- 2.3.4 The findings of the RISS (Scott Wilson, 2005) were subject to appraisal as part of the Strategic Transport Review (STPR), which was first reported by the Scottish Government in 2008 and updated in 2009.

Strategic Transport Review (2008)

- 2.3.5 The STPR was undertaken by Transport Scotland to define the most appropriate strategic investments in Scotland's national transport network at the time. The review set out 29 investment priorities for Scotland, including the A9 Dualling Programme between Perth and Inverness (Intervention 16).
- 2.3.6 Within the context of the Scottish Government's commitment to planning for dualling of the A9, the STPR identified a number of targeted improvements as initial priorities. These improvements include full dualling of the A9 between Dunblane and Inverness and new grade separated junctions between Dunblane and Perth to reduce accidents and improve journey time reliability.
- 2.3.7 The 29 investment priorities, published by the STPR, were chosen as they are most effective in contributing towards sustainable economic growth and the Scottish Government's National Planning Framework 2 (NPF) (2009). NPF2 was superseded in June 2014 by Scotland's third NPF which sets out a long term vision for the development of Scotland.

Infrastructure Investment Plan (2011)

- 2.3.8 The Cabinet Secretary for Infrastructure and Capital Investment launched the IIP (Scottish Government) on 06 December 2011. The IIP provides an overview of the Scottish Government's plans for infrastructure investment for the future including the upgrading of the A9 to dual carriageway. The commitment made to complete the dualling of the A9 between Perth and Inverness by 2025 was classed as a 'particularly significant' project. This commitment was reaffirmed in the IIP 2015.

National Planning Framework 3 (2014)

- 2.3.9 The Scottish Government's NPF3 (2014) is a long term strategy for Scotland and identifies national developments and other strategically important development opportunities to support and help deliver sustainable economic growth. In relation to trunk roads and specifically the A9, NPF3 states:

'We will complete dualling of the trunk roads between cities, with dualling of the A9 from Perth to Inverness complete by 2025....'

'The dualling of the A9 between Perth and Inverness and improvements to the Highland Mainline will provide a step change in accessibility across the rural north, increase business confidence and support investment throughout the region.'

- 2.3.10 NPF3 makes reference to the STPR in providing the evidence base for much of the transport investment outlined in the IIP 2011. In relation to IIP, NPF3 states:

'Our strategy complements the Infrastructure Investment Plan – in turn future reviews of infrastructure investment will take into account the longer term development strategy provided by NPF3.'

- 2.3.11 Further information relating to the national planning framework is provided in Chapter 19 (Policies and Plans).

A9 Dualling: Case for Investment (2016)

- 2.3.12 The 'A9 Dualling: Case for Investment' was undertaken by Transport Scotland (2016) to build upon the business case in the STPR for dualling the A9. The report provides a summary of the Scottish Government's strategic and socio-economic case for investment for the A9 Dualling Programme.
- 2.3.13 The Case for Investment demonstrates the main benefits of the A9 Dualling Programme which include:
- *'step-change in connectivity to and between the cities of Inverness and Perth;*
 - *journey times between Inverness and Perth will reduce by approximately twenty minutes;*
 - *improved access to markets, reduced need for stockpiling and better productivity;*
 - *less disruptive future maintenance;*
 - *safe, consistent and reliable driving conditions which will lead to improved route resilience and reduced delays during incidents and adverse weather;*
 - *fewer road accidents related deaths and few serious injuries; and*
 - *drivers will be able to travel at their optimum speed.'*

2.4 A9 Dualling Programme Review

- 2.4.1 Following the IIP announcement in December 2011, two corridor-wide commissions were implemented to help develop a consistent approach to dualling design and assessment. These have informed progression of the proposed scheme from Tay Crossing to Ballinluig, and are explained further below. As noted in Chapter 1 (Introduction), these commissions were the Preliminary Engineering Services (PES) and Strategic Environmental Assessment (SEA) which are closely linked strategic studies that together identify the engineering and environmental constraints, issues, risks and opportunities to provide an equivalent assessment to the level of DMRB Stage 1 for the A9 Dualling Programme.

Preliminary Engineering Services

- 2.4.2 The PES commission was awarded to Jacobs UK Ltd in September 2012 and involved engineering constraints mapping, corridor options work equivalent to a DMRB Stage 1 level of assessment, and other design strategies such as junction and access strategy, layby/rest area strategy, and non-motorised user (NMU) strategies.
- 2.4.3 The PES commission also includes a number of early assessments to provide the basis for later progression of individual projects forming part of the overall A9 Dualling Programme. These include geotechnical and topographical studies, business case development and implementation of a stakeholder engagement strategy.

Strategic Environmental Assessment

- 2.4.4 The SEA commission was awarded to Halcrow in September 2012, to be undertaken in parallel with the PES commission. The Environmental Assessment (Scotland) Act 2005 requires SEA for all public sector plans, programmes and strategies with the potential for significant impacts on the environment. Whilst an SEA was carried out as part of the STPR, the A9 Dualling Programme provides the overall direction of the route alignment selection process, design, project-level EIA and later construction activities, it was determined that SEA was required. SEA screening and scoping stages were completed by February 2013, with the Environmental Report reviewed in public consultation in June 2013 (Transport Scotland 2013), allowing the environmental assessment stage to proceed. An SEA Addendum Report was published in March 2014 (Transport Scotland, 2014a) which collated and reviewed feedback from the consultation process. Consultation feedback following the publication of the SEA Addendum Report was then issued to complete supplementary strategic studies as discussed in paragraph 2.4.11.

2.4.5 In addition, an A9 SEA Post Adoption Statement was published in September 2014 (Transport Scotland, 2014b). The purpose of this report was to outline how the SEA findings and how the comments received on the SEA Environmental Report (Transport Scotland, 2013) and SEA Addendum (Transport Scotland, 2014a) have been taken into account, including those from Scottish Natural Heritage (SNH), Historic Environment Scotland (HES) and Scottish Environmental Protection Agency (SEPA). It also provides a Monitoring Framework to ensure the strategic constraints identified during SEA are appropriately cascaded to DMRB Stage 2 and DMRB Stage 3.

2.4.6 The findings of the SEA, including the supporting strategic reviews, below, have informed the EIA process for the proposed scheme, and the SEA is therefore referred to where relevant in this ES.

Strategic Environmental Design Principles

2.4.7 One of the key outputs of the SEA process was the development of a range of Strategic Environmental Design Principles (listed in full in Appendix A2.1) which are included in the SEA Post Adoption Statement (Transport Scotland, 2014b). These Principles were developed through collaboration and review with Transport Scotland and the Environmental Steering Group (ESG) members as set out in Chapter 7 (Scoping and Consultation). The Principles are intended to represent the aims of the A9 Dualling Programme, with respect to the commitment to the delivery of an environmentally led design process, and to highlight the issues that are of particular relevance to A9 Dualling Programme.

2.4.8 The Strategic Environmental Design Principles are being considered on all A9 dualling projects and through all stages of the design process and are referenced in the ES chapters where appropriate. It is accepted that not all Principles will be applicable or achievable in all situations and that the aims may conflict with each other and/or with road safety considerations. They are not intended as a replacement for existing requirements or standards; instead, they are intended to be considered as a set of aims that all A9 dualling projects will seek to meet.

SEA Monitoring Framework

2.4.9 Another key output from the SEA process was the SEA Monitoring Framework. This sets a structure for each project team to clearly record how the key environmental constraints, identified by the SEA have been considered and addressed through each later stage of the DMRB assessment process.

2.4.10 Appendix A2.2 presents the SEA Monitoring Framework for this project and identifies how the recommendations made in the SEA for each of the key environmental constraints have been considered in the DMRB Stage 2 and DMRB Stage 3 assessments.

Other Strategic Reviews

2.4.11 In parallel with the PES and SEA work, a number of other strategic studies have been undertaken to consider potential effects of the wider programme of work, and/or to promote consistency between individual projects forming part of the overall A9 Dualling Programme. These are listed below and are referred to in this ES where they have been taken into account:

- Habitat Regulations Appraisal – Screening Report (Halcrow 2013a);
- Habitat Regulations Appraisal - Appropriate Assessment (Halcrow, 2013b);
- Strategic Landscape Review Report (Transport Scotland, 2013b); and
- Strategic Flood Risk Assessment (Transport Scotland, 2013c).

A9 Dualling Programme Objectives

2.4.12 Since publication of STPR, further assessment of problems and opportunities along the existing A9 has led to the development of A9 Dualling Programme objectives set by Transport Scotland, as follows:

1. To improve the operational performance of the A9 by:
 - reducing journey times; and
 - improving journey time reliability.
2. To improve safety for motorised and non-motorised users by:
 - reducing accident severity; and
 - reducing driver stress.
3. To facilitate active travel within the corridor.
4. To improve integration with Public Transport Facilities.

2.5 Local Context for Dualling

- 2.5.1 In addition to the national context explained above, the following local context considerations contribute to the need for the proposed scheme.

Safety

- 2.5.2 The current single carriageway section of the A9 between Tay Crossing to Ballinluig often results in vehicles being held up by Heavy Goods Vehicles (HGVs) and other slower moving traffic. This journey time increase can lead to driver frustration potentially resulting in dangerous overtaking manoeuvres, where occurring accidents are often severe. To reduce driver frustration and road accidents, operational performance will be improved in line with Objective 1. Upgrading the road from single carriageway to dual carriageway would reduce the occurrence of driver frustration and would provide opportunity for safer overtaking, as outlined in Objective 2.
- 2.5.3 In addition, a new overbridge is included as part of the proposed scheme between Dowally and Guay. This structure, provides improved connection for the settlements of Dowally, Guay and Kindallachan (east of the proposed scheme) to the northbound carriageway for journeys to the north and connection for Dowally Farm (west of the proposed scheme) to the southbound carriageway for journeys to the south. This connectivity mitigates the need for potentially dangerous right turns across the path of traffic travelling in the opposite direction which will improve safety for motorised and non-motorised users as stated in Objective 2.
- 2.5.4 Within the study area, the existing A9 is single carriageway in each direction and NMUs are currently able to informally cross the road at any point they deem appropriate. Three separate locations have been identified in Chapter 9 (Effects on All Travellers) as informal crossing points of the existing A9. The inclusion of an overbridge in the proposed scheme will provide a safe crossing of the A9 between Dowally and Guay for NMUs in line with Objectives 2 and 3.

Existing Traffic Conditions

- 2.5.5 The current A9 carriageway from Tay Crossing to Ballinluig has an Annual Average Daily Traffic (AADT) flow of approximately 15,300 (based on 2015 figures). Approximately 14% of the traffic is HGVs.

Local and National Accident Statistics

- 2.5.6 The majority of accidents on the A9 occur along sections of single carriageway, and generally near to junctions. Along the extents of the existing A9 from Tay Crossing to Ballinluig, there were 22 accidents between 2008 and 2015. Two of these accidents resulted in fatal injuries, where the level of injuries sustained cause death within 30 days of the accident. Five were serious where a casualty was detained in hospital or sustained fractures, concussions, severe cuts or where death occurred 30 or more days after the accident. Fifteen were light in severity when a casualty sustained a sprain, bruise or slight cut. Average speed cameras were installed and became operational in October 2014.
- 2.5.7 Although the accident rate for the sections of the A9 between Perth and Inverness is below the national average, the severity of the accidents when they do occur is significantly higher. Table 2.1

presents data which compare the national accident rates, severity splits and casualty rate (before average speed cameras were installed) against the statistics for the A9 between Perth and Inverness. The table demonstrates that although the accident rate for the A9 is significantly lower than the national average, an accident is three times more likely to result in fatality. Objective 2, stated in paragraph 2.4.12, aims to improve the safety of the A9 which will reduce accident rates and severity and reduce driver stress.

Table 2.1: Comparison of Accident Rates and Ratios (before average speed cameras)

Accident Rate	National Average			A9 Perth to Inverness		
	0.174 PIA/MVKm*			0.086 PIA/MVKm*		
	Fatal	Serious	Slight	Fatal	Serious	Slight
Severity Split	2%	12%	86%	6%	14%	80%
Casualty Rate	0.03	0.19	1.31	0.09	0.22	1.22

Source: A9 Dualling: Case for Investment (Transport Scotland, 2016)

*PIA/MVKm = Personal injury accidents per million vehicle kilometres

Tourism and Recreation

- 2.5.8 The A9 provides access between Perth and Inverness, and is a conduit for travellers looking to visit various regions of Scotland. The area surrounding the proposed scheme offers a wide range of tourist attractions and recreational activities, which are supported by the A9.
- 2.5.9 Tourist attractions have been identified through site visits and review of the Visit Scotland website. There are some tourist attractions along the proposed scheme although the main tourist attractions are located in or around Pitlochry and Dunkeld, situated to the north and south of the proposed scheme respectively. These include: Pitlochry Festival Theatre; Loch Faskally; the Enchanted Forest; the Edradour and Blair Atholl distilleries; Dowally Craft Centre; Loch of the Lowes Visitor Centre; Birnam Arts and the Beatrix Potter Exhibition; and The Hermitage. Additional information on tourism and recreation are provided in Chapter 8 (People and Communities: Community and Private Assets) and Chapter 9 (People and Communities: All Travellers).
- 2.5.10 The Perth & Kinross Council Local Development Plan (PKCLDP), states that 13% of all employment within LDP area is accounted for by tourism. The LDP also seeks to enhance tourism facilities and provision, partly achieved by upgrading the A9 to dual carriageway.
- 2.5.11 To support this, the proposed scheme includes provision for active travel and improved integration with Public Transport Facilities in (Objectives 3 and 4) by incorporating replacement mainline bus stops, new local bus service provision on the Dowally to Kindallachan Side Road and incorporation of the Rotmell to Dowally footway and Kindallachan to Ballinluig footpath. Additional information on community facilities and public access are provided in Chapter 8 (People and Communities: Community and Private Assets) and Chapter 9 (People and Communities: All Travellers).

2.6 References

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