A9 Dualling Programme: Tay Crossing to Ballinluig

DMRB Stage 3 Environmental Statement

Chapter 1: Introduction



1 Introduction

1.1 Overview

- 1.1.1 This Environmental Statement (ES) presents the findings of an Environmental Impact Assessment (EIA) of proposed upgrade of the existing A9 trunk road to the north of Perth, between Tay Crossing and Ballinluig. The proposed upgrade is part of a wider programme of A9 dualling projects proposed between Perth and Inverness, intended for completion by 2025.
- 1.1.2 The A9 trunk road forms a strategic link on Scotland's transport network, between central Scotland and the north of Scotland. The A9 trunk road commences at Keir Roundabout, near Dunblane and stretches 399km to the north coast of Scotland at Thurso.
- To the south of Perth, the existing A9 is currently dual carriageway to where it meets the M9 at Dunblane. To the north of Perth, the road changes to predominantly single carriageway, interspersed with sections of dual carriageway and wide single 2+1 carriageway (WS2+1), which comprises sections of two lanes of travel in one direction and a single lane of traffic in the opposite direction.
- 1.1.4 The existing A9 is used by a combination of different vehicle types, including coaches, Heavy Goods Vehicles (HGVs), and agricultural, tourist, local and long distance traffic. The mix of usage has led to an increase in driver stress, particularly during the summer months and holiday periods when traffic volumes tend to be higher. The nature of the non-dualled sections is such that there is a lack of safe overtaking opportunities, which has led to a number of serious accidents including some fatalities which are discussed in Chapter 2 (Need for the Scheme). There is also a lack of alternative diversion routes, which causes severe delays when accidents do occur.
- 1.1.5 The Cabinet Secretary for Infrastructure and Capital Investment launched the Scottish Government's Infrastructure Investment Plan (IIP) in December 2011, which sets the Scottish Government's plans for infrastructure investment up to 2030. Included in the IIP is the commitment to upgrade the A9 trunk road to dual carriageway between Perth and Inverness by 2025. This commitment follows earlier work undertaken as part of the Strategic Transport Projects Review (STPR) in 2008, which identified dualling of the A9 as a priority intervention.
- 1.1.6 STPR identified specific trunk road interventions, including upgrading the A9 between Dunblane and Inverness (Intervention 16) and in particular a requirement for dualling a total distance of 129km of the A9 between Perth and Inverness.

1.2 A9 Dualling Programme

- Two strategic studies, carried out from 2012 to 2014, examined the engineering and environmental aspects of the A9 Dualling Programme. These were the Preliminary Engineering Support Services (PES) (Transport Scotland, 2014) and Strategic Environmental Assessment (SEA) (Transport Scotland, 2013), and together provided an equivalent assessment to a Design Manual for Roads and Bridges (DMRB) Stage 1 level of consideration for the whole A9 Dualling Programme.
- The SEA aimed to incorporate effective protection for the environment into the earliest stages of the A9 Dualling Programme. It collated a vast range of information of environmental constraints relating to the A9 between Perth and Inverness, including data from the STPR, to assess the significance of these constraints and their effect on route options. The SEA found that dualling along the corridor of the existing A9 single carriageway was the most optimal solution, taking into consideration the topographical, environmental and physical constraints along the route, including designated sites. As well as considerations such as topographical constraints and opportunities to use existing infrastructure, initial development of mainline alignment route options was progressed based on the SEA findings.
- 1.2.3 A brief background to the higher-level considerations of the full A9 Dualling Programme is provided in Chapter 2 (Need for the Scheme).

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- 1.2.4 The A9 Dualling Programme comprises upgrade to 11 sections of the A9 between Perth and Inverness, as listed below (from south to north) and shown on Figure 1.1:
 - Project 01: Luncarty to Pass of Birnam;
 - Project 02: Pass of Birnam to Tay Crossing;
 - Project 03: Tay Crossing to Ballinluig;
 - Project 04: Pitlochry to Killiecrankie;
 - Project 05: (previously 05 and 06): Killiecrankie to Glen Garry;
 - Project 07: Glen Garry to Dalwhinnie;
 - Project 08: Dalwhinnie to Crubenmore;
 - Project 09: Crubenmore to Kincraig;
 - Project 10: Kincraig to Dalraddy;
 - Project 11: Dalraddy to Slochd; and
 - Project 12: Tomatin to Moy.
- Two of the above projects have already progressed through design and consenting stages; dualling between Luncarty and Pass of Birnam (Project 01) is scheduled to commence construction in 2018, and construction of the dualling between Kincraig and Dalraddy (Project 10) was recently completed.
- Jacobs UK Ltd has been commissioned to progress Projects 02 to 05, including design, environmental assessment, statutory procedures, procurement and construction supervision.
- Project 02 (Pass of Birnam to Tay Crossing) is currently subject to the review of route design options. The ESs for Project 04 (Pitlochry to Killiecrankie) and Project 05 (Killiecrankie to Glen Garry) were published in late 2017.
- This ES has been prepared in relation to the proposed dualling of the A9 between Tay Crossing and Ballinluig (Project 03), hereafter referred to as the 'proposed scheme'.

1.3 The Proposed Scheme

- 1.3.1 The proposed scheme as reported in this ES has been developed to a DMRB 'Stage 3' level of design, and is as shown on Figure 1.2 and described in full in Chapter 5 (The Proposed Scheme).
- 1.3.2 The Tay Crossing to Ballinluig section was subject to DMRB Stage 2 route options assessments (Jacobs 2016). Further detail on the DMRB Stage 2 process is provided in Chapter 3 (Alternatives Considered).
- 1.3.3 The proposed scheme comprises dualling of approximately 7.7km of the A9, and 0.6km of tie-in to the existing single carriageway section, to be achieved through a combination of widening and upgrades to the existing A9 carriageway. The proposed scheme also incorporates the following features which are described in Chapter 5 (The Proposed Scheme) and identified on Figure 5.1:
 - the A9 Southern Tie-in Interim Roundabout located to the north of the Tay Bridge to facilitate safe turning and access for southbound traffic on the proposed scheme accessing properties and facilities on the west side of the proposed scheme;
 - three left-in left-out junctions linking to local roads and including the Dunkeld Rotmell (C502)
 Road Junction and incorporating the Guay South Overbridge;
 - revisions to local access including provision of four at-grade left-in left-out accesses; and
 - upgrade to existing road drainage and treatment.

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1.4 Statutory Context for EIA

- The requirement for EIA stems from the European Commission Directive 85/337/EEC, as amended by Directive 97/11/EC, regarding the assessment of the environmental effects of certain public and private projects and Directive 2003/35/EC regarding public participation. The EIA Directive has recently been updated and a new EU Directive (2014/52/EU) was adopted on 15 May 2014, which was transposed into UK legislation on 16 May 2017. In Scotland there are a number of EIA regulations, those relevant in relation to the construction of trunk roads are The Roads (Scotland) Act 1984 (Environmental Impact Assessment) Regulations 2017. However, as explained in Chapter 7 (Scoping and Consultation), road projects subject to a scoping procedure prior to 16 May 2017 are to be assessed in accordance with the Roads (Scotland) Act 1984 as amended by the Environmental Impact Assessment (Scotland) Regulations 1999, hereafter referred to as the EIA Regulations¹. This is in line with the transitional arrangements described in the 2014/52/EU Directive.
- 1.4.2 The EIA Regulations categorise developments according to their requirement for an EIA. Schedule 1 lists large-scale developments with the potential for significant environmental effects where an EIA is mandatory. Schedule 2 lists developments that may or may not require an EIA depending on the characteristics and location of the development, and the significance of potential effects.
- 1.4.3 The works are considered to constitute a relevant project falling within Schedule II as defined by the EIA Regulations. Screening using the Annex III criteria of the EIA Directive has identified a need for an EIA on the basis that the proposed scheme is likely to have a significant effect on the environment by virtue of factors such as its nature, size or location, for this project specifically:
 - · the works exceed the screening threshold of 1ha in area; and
 - there is potential for impacts to the River Tay Special Area of Conservation (SAC).
- 1.4.4 This screening process was recorded to support a Record of Determination (RoD), submitted to Transport Scotland in April 2017 (refer to Appendix A7.3).
- 1.4.5 The EIA of the proposed scheme has formed an integral part of the engineering design and appraisal process. The purpose of EIA is to investigate the likely significant impacts of the proposed scheme on the biological, physical and historical environment, as well as on members of the public and on current or planned future use of the environment.
- The EIA process also provides a valuable opportunity to avoid or reduce potential environmental effects through design refinement. The EIA has informed decision-making throughout the design process to address potentially significant effects where practicable, such as by refinement of route alignment or by the incorporation of measures to avoid or prevent, reduce, remedy or offset any potential adverse environmental effects.

1.5 Environmental Statement (ES)

- 1.5.1 As noted in Section 1.4 (Statutory Context for EIA), the proposed scheme has been subject to an EIA that establishes detailed information about the potential significant environmental effects. This ES reports the findings of the EIA process undertaken for the proposed scheme.
- The assessments reported in the ES have followed the guidelines set out in DMRB, Volume 11 (Highways Agency et al, 2009a; as amended), including relevant DMRB Interim Advice Notes (IAN), such as IAN 125/15: Supplementary Guidance for Users (Highways England, 2015). In addition to DMRB, other applicable guidance has also been considered, where relevant, such as the Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2016). Further details on the guidance applicable to the individual assessment chapters are referenced in the relevant ES chapters.

¹Although the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 consolidated, updated and replaced Part II of the Environmental Impact Assessment (Scotland) Regulations 1999, Parts III and IV of the 1999 Regulations concerning Roads, Bridges and Land Drainage, remained extant.



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- 1.5.3 Schedule 4 of the EIA Regulations outlines the information to be included in an ES. Accordingly, this ES provides the following:
 - a description of the proposed scheme, including details of the site and the road design, land use requirements, and an estimate by type and quantity of any emissions arising;
 - an outline of the main alternatives and the main reasons for the choice of the proposed scheme, taking into account the environmental effects;
 - a description of the aspects of the environment likely to be significantly impacted by the proposed scheme;
 - a description of the likely significant impacts of the proposed scheme on the environment, including direct and indirect, secondary, cumulative, short, medium and long term, permanent and temporary, beneficial and adverse effects, and a description of the forecasting methods used to assess the effects on the environment;
 - a description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment;
 - an indication of any difficulties encountered in compiling the required information; and
 - a non-technical summary of the above information.
- 1.5.4 The structure of the ES is presented as shown in Table 1.1.

Table 1.1: Structure of the Environmental Statement

ES Component	Description
Non-Technical Summary (NTS)	
At front of the ES	Summary of the ES in non-technical language. Also available as a separate document.
Volume 1: Main Report	
Chapters 1 - 5	These provide project background and proposed scheme information. Chapter 1 - Introduction Chapter 2 - Need for the Scheme Chapter 3 - Alternatives Considered Chapter 4 - Iterative Design Development Chapter 5 - The Proposed Scheme
Chapter 6	This provides an overview of the assessment process, setting out the environmental parameters considered, and explaining how the assessment of environmental effects was undertaken.
Chapter 7	This summarises the EIA consultation and scoping process, and provides a summary of the key issues raised and how these have been taken into account.
Chapters 8 - 19	Reporting of EIA for each specialist environmental parameter, including an introduction to the subject area, approach and methods, baseline (i.e. existing) conditions, assessment of effects, mitigation and residual impacts.
Chapter 20	This considers the overall (cumulative) impact of the proposed scheme and potential cumulative effect with other developments in the area, where not covered within the preceding chapters.
Chapters 21-22	These provide tabulated summaries of the mitigation proposed and the key residual effects remaining after implementation of mitigation.
Volume 2: Appendices – Specialist Technical Reports	
Appendices A2.1 - A19.2	Technical reference information supporting the ES chapters, such as calculations and detailed background data. Appendix number corresponds to the relevant ES chapter (e.g. Appendix A7.1 relates to Chapter 7; Appendix A11.1 relates to Chapter 11).
Volume 3: Figures	
Figures 1.1 -18.1	Graphics supporting the ES chapters, illustrating the proposed scheme and environmental information. Figure reference corresponds to the relevant ES chapter (e.g. Chapter 7 refers to Figure 7.1 et seq.).

1.5.5 A glossary of terms and a list of abbreviations are also provided at the front of Volume 1.

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- 1.5.6 This ES presents the assessment of the proposed scheme as described in Chapter 5 (The Proposed Scheme). The design of the proposed scheme may be refined, but will still be deemed to comply with this ES, provided that such refinements to this design are subject to environmental review to ensure that there are no additional significant effects or worsening of significant residual effects than those reported in this ES, and subject to Transport Scotland's acceptance of the findings of any such review.
- 1.5.7 Some detailed aspects of the proposed scheme design, such as construction methods and traffic management, will depend on the approved construction proposals of the appointed contractor(s), details of which will not be available until the detailed design and build stage. Assumptions have been made where necessary to inform the assessment, as described in Chapter 5 (The Proposed Scheme) and in individual chapters of the ES where relevant.

1.6 The Assessment Team

- 1.6.1 The EIA was undertaken, managed and compiled by Jacobs UK Ltd. Jacobs UK Ltd is an Institute of Environmental Management and Assessment (IEMA) Registered EIA Quality Mark Company.
- 1.6.2 Independent reviews and audits of assessments have been undertaken at key stages to produce a robust ES that complies with the requirements of the EIA Regulations. Furthermore, consultees have been consulted with regard to the scope, approach and results of the assessments, as described in further detail in Chapter 7 (Consultation and Scoping).

1.7 Review and Comments

1.7.1 Copies of this ES are available for inspection at:

Transport Scotland

Major Transport Infrastructure Projects (MTRIPS) Buchanan House 58 Port Dundas Street Glasgow G4 0HF

Telephone: 0141 272 7100

08.30 to 17.00 Monday to Thursday 08.30 to 16.30 Friday

Birnam Arts and Conference Centre

Station Road Birnam Dunkeld PH8 0DS

Telephone: 01350 727674

09:00 to 17:00 Monday to Sunday

Pitlochry Library

26 Atholl Road Pitlochry PH16 5BX

Telephone: 01796 474635

14:00 to 16:00 and 17:00 to 19:00 Wednesday 10:00 to 12:00 and 14:00 to 19:00 Thursday 14:00 to 16:00 Friday

09:00 to 12:00 Saturday

1.7.2 This ES can be viewed on the Transport Scotland website.

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- 1.7.3 A bound paper copy of the ES may be purchased at a cost of £150, and the ES is also available in DVD format at a cost of £10 by writing to Transport Scotland at the address shown above, or by email to: info@transport.gov.scot
- 1.7.4 Any person wishing to make representations on the ES should write to Transport Scotland at the above address. Representations must be received within six weeks of the advertised date of publication of the ES.

1.8 References

CIEEM (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

Highways Agency, Scottish Government, Welsh Assembly Government and The Department for Regional Development in Northern Ireland (2008). The Design Manual for Roads and Bridges Volume 11, Section 2, Part 3 (HD47/08) Screening for Projects for Environmental Impact Assessment.

Highways Agency, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland (2009a). Interim Advice Note (IAN) 125/09: Supplementary Guidance for Users of DMRB Volume 11 Environmental Assessment.

Highways England, Transport Scotland, Welsh Assembly Government and The Department for Regional Development Northern Ireland (2009b). Design Manual for Roads and Bridges: Volume 11 Environmental Assessment as amended.

Highways England (2015). Interim Advice Note 125/15. Supplementary Guidance for Users of DMRB Volume 11 'Environmental Assessment'.

Jacobs (2016) *(on behalf of Transport Scotland)*. A9 Dualling Programme: Tay Crossing to Ballinluig – DMRB Stage 2 Scheme Assessment Report.

Scottish Government (1984). Roads (Scotland) Act 1984.

Scottish Government (1999). Environmental Impact Assessment (Scotland) Regulations 1999.

Scottish Government (2008). Strategic Transport Project Review (STPR), December 2008.

Scottish Government (2011). Environmental Impact Assessment (Scotland) Regulations 2011.

Scottish Government (2011). The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011.

Scottish Government (2011). Infrastructure Investment Plan, December 2011.

Scottish Government (2017). The Roads (Scotland) Act 1984 (Environmental Impact Assessment) Regulations 2017.

Transport Scotland (2013). A9 Dualling Programme: Strategic Environmental Assessment – Environmental Report.

Transport Scotland (2014). DMRB Stage 1 Assessment. A9 Dualling: Preliminary Engineering Support Services

UK Government (1991). New Roads and Street Works Act 1991.