

1 Introduction

This document relates to the Forth Crossing Bill introduced in the Scottish Parliament on 16 November 2009. It has been prepared by the Scottish Executive to satisfy Rule 9C.3.2(g)(iii) of the Parliament's Standing Orders. The contents are entirely the responsibility of the Scottish Executive and have not been endorsed by the Parliament.

1.1 Background

1.1.1 The Forth Replacement Crossing (FRC) is a major infrastructure project proposed by Transport Scotland, an agency of the Scottish Government. The FRC comprises a new cable-stayed bridge across the Firth of Forth and associated new and improved roads infrastructure to both the north and south of the bridge.

1.1.2 Despite significant investment and maintenance over its lifetime, the existing Forth Road Bridge is showing signs of deterioration and is not suitable as the long-term main crossing of the Firth of Forth. In December 2007, following the completion of the Forth Replacement Crossing Study (Jacobs et al., 2007) as part of the Strategic Transport Project Review (STPR), the Scottish Government confirmed the intention to provide a new cable-stayed bridge to the west of the existing Forth Road Bridge.

1.1.3 Jacobs Arup (as a joint venture) was commissioned in January 2008 to assist Transport Scotland to develop the FRC proposals. Following considerable environmental, engineering and economic assessment of different route corridors and options (as described in detail in Chapter 3: Alternatives Considered), key decisions were announced by the Scottish Government in December 2008 including:

- the preferred route corridor to the north and south of the Firth of Forth;
- the intended design of the new bridge; and
- a managed crossing scheme, retaining the Forth Road Bridge as a public transport corridor and continuing its use by pedestrians and cyclists, and designing the new bridge to accommodate all other traffic (private cars, heavy goods vehicles etc).

1.1.4 The FRC proposals have been progressed within the preferred route corridor since the December 2008 announcement. This Environmental Statement (ES) presents the results of the Environmental Impact Assessment (EIA) of the Design Manual for Roads and Bridges (DMRB) Stage 3 engineering design as described in Chapter 4 (The Proposed Scheme).

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1.1.5 The FRC Stage 3 engineering design assessed in the EIA and reported in this ES (hereafter referred to as 'the proposed scheme') is shown on Figure 1.1. The proposed scheme comprises a new bridge approximately 2.7km in length, approximately 3.6km of new mainline carriageway and 1.8km of upgrades to existing mainline carriageway. The key elements are summarised below:

- mainly online upgrade of the A90 south of Admiralty Junction to Ferrytoll Junction;
- reconfigured Ferrytoll Junction and associated side road realignments/improvements;
- a new bridge (hereafter referred to as 'the Main Crossing') to the west of the existing Forth Road Bridge;
- new mainline carriageway from the southern abutment of the Main Crossing, running west of South Queensferry to a new junction with the A904 ('Queensferry Junction');
- new mainline carriageway from Queensferry Junction running to the south of South Queensferry before rejoining the existing A90 west of Scotstoun; and

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- improvements to M9 Junction 1A to provide improved functionality facilitating all movements (east and west to/from the M9). The works also include carriageway upgrades to the M9, south of Junction 1A.

1.1.6 Further detail regarding the proposed scheme including associated improvements such as new bus links to the Forth Road Bridge and the intended traffic management strategy (Intelligent Transport System; ITS) is provided in Chapter 4 (The Proposed Scheme).

1.2 Statutory Context

The Hybrid Bill Process

1.2.1 It is intended to apply for development authorisation for the proposed scheme through a Parliamentary Bill introduced in November 2009 and processed by the Scottish Parliament.

1.2.2 The Parliamentary Bill will be in the form of a Hybrid Bill (public bill which affects private interests).

1.2.3 The Standing Orders of the Scottish Parliament (Scottish Parliament, 2008) confirm that the Bill should be accompanied by an Environmental Statement containing the information set out in Schedule 4 of the Environmental Impact Assessment (Scotland) Regulations 1999¹ (hereafter referred to as the EIA Regulations).

Bill Objectives

1.2.4 The primary purpose of the Bill is to seek and obtain authority for a scheme which includes the construction and operation of a new crossing over the Firth of Forth to the west of the Forth Road Bridge which will carry all general permitted road traffic thus enabling a restricted use of the Forth Road Bridge to public transport, pedestrians, cyclists and other specified users. The Bill allows works in relation to:

- construction of a new crossing;
- construction of new roads (including connections with existing roads);
- improvement of existing roads; and
- implementation and maintenance of Intelligent Transport Systems.

1.2.5 To facilitate the implementation of works, the Bill also allows for the stopping up of some roads and other rights of way where these cross or are on the route. In particular, the Bill grants compulsory purchase powers thus ensuring that Scottish Ministers will be able to acquire the land or rights in land that are required for the works to be constructed and operated.

Environmental Impact Assessment (EIA)

1.2.6 EIA of the proposed scheme has been undertaken and formed an integral part of scheme design and appraisal. The purpose of the EIA is to investigate the likely impact 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.

1.2.7 EIA has informed decision making throughout the design process to address potentially significant impacts where practicable such as by refinement of route alignment, or by the incorporation of measures to prevent, reduce, remedy or offset any predicted adverse environmental impacts.

¹ as amended by the Environmental Impact Assessment (Scotland) Amendment Regulations 2002 and the Environmental Impact Assessment (Scotland) Amendment Regulations 2006

1.2.8 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 determines the requirement for an EIA of the proposed scheme. Annex I of the EIA Directive lists large-scale or potentially high impact developments for which an EIA is always required. As a motorway in parts, the proposed scheme falls into this category. The Standing Orders of the Scottish Parliament accord with the terms of the EU Directive with respect to production of an Environmental Statement. The Standing Orders require the project to supply information as per Schedule 4 of the EIA Regulations. The proposed scheme also complies with Directive 2003/35/EC regarding public participation.

1.3 Environmental Statement (ES)

1.3.1 As noted in Section 1.2, the proposed scheme was subject to EIA, which has established detailed information about the likely main environmental effects. This ES reports on the findings of the EIA process.

1.3.2 Schedule 4 of the EIA Regulations confirms 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 during construction and operation, and an estimate by type and quantity of any emissions arising from the development;
- an outline of the main alternatives and the main reasons for the choice of the preferred scheme, taking into account environmental effects;
- a description of the aspects of the environment likely to be significantly affected by the proposed scheme;
- a description of the likely significant effects of the proposed scheme on the environment, including direct and any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative 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.

1.3.3 This ES is presented as shown in Table 1.1 below:

Table 1.1: Structure of the Environmental Statement

ES Component	Description
Non Technical Summary	
Provided at the front of the ES	Summary of the ES in non-technical language. Also available as a separate document.
Volume 1: Main Report	
Chapters 1-4	These provide project background and proposed scheme information. Following Chapter 1 (this chapter), Chapter 2 sets out the need for the scheme, Chapter 3 explains the alternatives considered and Chapter 4 provides a description of the Stage 3 design.
Chapter 5	This provides an overview of the assessment process, setting out the environmental parameters considered, and explaining how impact assessment was undertaken.
Chapter 6	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 7-20	Reporting of EIA for each specialist environmental parameter, including an introduction to the subject area, approach and methods, baseline (i.e. existing) conditions, impact assessment and mitigation.

ES Component	Description
Chapter 21	This provides the assessment made of the overall (cumulative) impact of the proposed scheme. Consideration is also given to the cumulative impact of other developments in the area.
Chapters 22-24	These provide tabulated summaries of the main potential impacts identified, the mitigation proposed, and the key residual impacts remaining after implementation of mitigation.
Volume 2: Appendices – Specialist Technical Reports	
Appendices A1.1- A9.5 and A11.1- A20.1	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: Appendices – Specialist Ecological Reports	
Appendices A10.1- A11.4	Technical reference information supporting Chapter 10 (Terrestrial and Freshwater Ecology) and Chapter 11 (Estuarine Ecology). Appendix number corresponds to the relevant ES chapter (e.g. Appendix A10.1 and A11.1 relate to Chapter 10 and 11 respectively).
Volume 4: Figures	
Figures 1.1-21.2	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 <i>et seq.</i>).

- 1.3.4 A glossary of terms and a list of abbreviations are also provided at the front of the main report.
- 1.3.5 This ES presents the assessment of the proposed scheme as described in Chapter 4 (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 will be subject to environmental review to ensure that the residual impacts will be no worse than those reported in this ES.
- 1.3.6 Some aspects of the proposed scheme design and details of aspects such as construction methods and traffic management will depend on the Contractor’s construction proposals which are not yet available. Assumptions have therefore been made, and are stated in the ES, to allow predictions of likely impacts. Construction activity will be constrained by the terms of the Code of Construction Practice as referred to in this ES and included as Appendix A19.1 (refer to Chapter 19: Disruption Due to Construction).

1.4 The Assessment Team

- 1.4.1 The EIA was undertaken, managed and compiled by Jacobs Arup as part of a joint venture commission. Additional specialist environmental input was also provided to some technical components where appropriate, as identified within the relevant ES chapters.
- 1.4.2 Independent reviews and audits of assessments have been undertaken at key stages to ensure robust EIA that complies with requirements of the EIA Regulations. Furthermore, consultees have been consulted with regard to the scope, approach and results of assessment, as described in further detail in Chapter 6 (Consultation and Scoping).
- 1.4.3 A list of key staff and qualifications is provided in Appendix A1.1.

1.5 Review and Comments

1.5.1 Copies of this ES are made available for inspection during normal office hours at:

Forth Replacement Crossing Team
Transport Scotland
7th Floor, Buchanan House
58 Port Dundas Road
Glasgow
G4 0HF
Telephone: 0141 272 7578

and by appointment (telephone 0131 244 4556) at:

Scottish Government
IMU Library Services
F Spur, Saughton House
Broomhouse Drive
Edinburgh
EH11 3XD

1.5.2 The Environmental Statement can be viewed on the FRC website: www.forthreplacementcrossing.info. A bound paper copy of the Environmental Statement may be purchased at a cost of £500, and is also available in DVD format at a cost of £10 by writing to Transport Scotland.

1.5.3 Copies of the Bill and the accompanying documents published by the Parliament will be available on the Parliament's website (www.scottish.parliament.uk/bills) and also to purchase from any Blackwells bookshop. Further information about the Hybrid Bill process, in particular the objection process, is provided in the Scottish Parliament leaflet Guidance on Hybrid Bills, which is available from the Non Executive Bills Unit (address as below), and online at www.scottish.parliament.uk/business/so/sto-c.htm.

1.5.4 If you consider you may suffer an adverse effect as a result of the proposals described in this Environmental Statement, you are entitled to object. Objections should be lodged with the clerks of the Scottish Parliament no later than 60 days after the introduction of the Bill, which is expected to be introduced late 2009. Objections should be sent in writing to:

The Non Executive Bills Unit
Room T2 60
The Scottish Parliament
Edinburgh EH99 1SP

1.5.5 The fee for lodging of objections is £20 and is payable to the Scottish Parliament.

1.6 References

Environmental Impact Assessment (Scotland) Regulations 1999.

Jacobs/Faber Maunsell/AECOM (2007). Forth Replacement Crossing Study: Reports 1-5. Prepared on behalf of Transport Scotland.

Scottish Parliament (2008). Standing Orders of the Scottish Parliament 3rd Edition (2nd Revision, December 2008).