### FORTH CROSSING ACT 2011

#### **EXPLANATORY NOTES**

#### **COMMENTARY ON SECTIONS**

#### Part 1 - Works

17. This Part provides specific powers for the Scottish Ministers to construct the works (section 1), it also describes the works (schedules 1 and 2 and sections 2 and 3), the location of the works (section 4) and how the works are to be carried out (sections 5 to 10).

#### Section 1 – Power to construct Forth Crossing etc.

- 18. **Section 1** gives the specific statutory authority which is required for the works. It gives Ministers powers to carry out the works. In the absence of this section the activities permitted by the Act would potentially be liable to challenge in the courts e.g. on the grounds that the bridge and roads constituted a legal nuisance. Such an action could potentially result in an order preventing the nuisance by stopping the works (called an interdict). The protection of statutory authority is therefore important to the viability of the scheme.
- 19. Subsection (1)(a) makes clear that the Scottish Ministers can construct the bridge and construct new roads and structures or improve existing roads and structures associated with the bridge. These works are known collectively as the principal works and a full description of the principal works is set out in **schedule 1**. The subsection also introduces the term the Forth Crossing. That should not, however, be misconstrued as meaning that the bridge must be called the Forth Crossing.
- 20. Subsection (1)(b) gives effect to **schedule 2**, which describes the types of works which may be required in connection with the principal works. Ancillary works will only be authorised if they are necessary or expedient in connection with the construction of the principal works or as a consequence of the maintenance of those works. **Schedule 2** provides a description of the types of works and operations that are normally necessary for the construction and operation of bridges and also mitigation works and works for the protection of neighbouring land interests. It is possible that other types of ancillary works, not listed in **schedule 2**, may be necessary to give effect to the works and therefore subsection (1)(b)(ii) provides authority to the Scottish Ministers to undertake other ancillary works not listed within **schedule 2**.
- 21. Subsection (1)(b) recognises that once the bridge and associated roads are operational any maintenance will be authorised under the Roads (Scotland) Act 1984 (c.54) (as a result of their designation as trunk roads under Part 2) and ties the ancillary power to the Act's authorisation for construction and its recognition that maintenance will be under the 1984 Act. The term Forth Crossing works, which is applied throughout the Act, is defined in subsection (2).

#### Section 2 – Bridge proportions

- 22. This section sets out limitations on the construction of the proposed bridge to ensure its safe operation and the safe operation of shipping and aviation interests that will pass respectively below and above the bridge.
- 23. The Firth of Forth is a navigational water. To provide certainty to vessels passing under the new bridge, **section 2(a)** sets out the headroom for the bridge. The headroom is the minimum height between the water level and the lowest point of the underside of the bridge or any attachments to the bridge. In the United Kingdom, heights above sea level are defined in terms of Ordnance Datum Newlyn, which is the mean sea level at Newlyn in Cornwall.
- 24. There are two navigational channels which pass under the area where the new bridge is proposed to be located. The three towers to support the bridge are not to be located in the navigational channels of the Forth. The navigation channel which passes between the proposed Central Tower of the bridge and the proposed North Tower is known as the Rosyth Navigational channel and the channel between the proposed Central Tower and the proposed South Tower is known as the Forth Deep Water Channel. The minimum distance between the towers as referenced in paragraphs (c) and (d) includes the whole of the relevant channel under that part of the bridge. The location of the proposed Central Tower will be, as stipulated within paragraph (b), on an islet known as Beamer Rock.
- 25. Paragraphs (e) and (f) provide a limit as to maximum height of the towers once constructed to ensure there is no interference with air traffic in the area.

#### Section 3 – Maximum construction height

26. **Section 3** requires the Scottish Ministers to obtain the consent of the operator of Edinburgh Airport when carrying out or maintaining the works on the bridge above a prescribed height. That prescribed height is known as the maximum construction height and is defined for each of the towers within paragraphs (a) and (b). No consent is required when undertaking operations below the maximum construction height.

#### Section 4 – Limits of deviation etc.

- 27. **Section 4** allows for a degree of flexibility within defined limits. The Parliamentary plans show the centre line of the principal works (see **schedule 1**) and the limits of deviation around those centre lines. Subsection (1)(a) allows lateral deviation of the works from the centre line provided that the principal works remain within the limits of deviation as shown on the plans. The Act does not permit the construction of the principal works outwith the limits of deviation.
- 28. The Parliamentary sections show the vertical dimensions and situations of the proposed principal works. Subsection (1)(b) allows the Scottish Ministers to vary the vertical location of the principal works. The ability to deviate upwards is constrained by the provisions within **sections 2 and 3**. The ability to deviate to any extent downwards enables the Scottish Ministers to construct the principal works at whatever depth is required to achieve stability.
- 29. Subsection (2) enables the Scottish Ministers to carry out and maintain ancillary works (see section 1(1)(b)) only within Act limits which are defined at section 78.

#### Section 5 – Bridge marking and lighting

30. This section places an obligation on the Scottish Ministers to ensure that the bridge is adequately marked and lit during, and at all times after, construction, to consult with the operator of Edinburgh Airport on the placing of markings and obstacle lighting on the bridge prior to construction, following construction, prior to any renewal or replacement of any marking or lighting and at any other time as the Scottish Ministers think fit,

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which may include periods of maintenance activity and to comply with any reasonable request by the operator of Edinburgh Airport in meeting specific obligations in respect of marking and lighting. Subsection (1) sets out the obligation to ensure the bridge is adequately marked and lit, subsection (2) sets out the obligation on consultation with the operator of Edinburgh Airport and subsection (3) describes what the Scottish Ministers must do after having consulted with the operator .

#### Section 6 – Interference with navigation

- 31. **Section 6** provides a power to allow interference with navigation within the Firth of Forth during the construction and maintenance of the works. That power is limited by subsection (1) so it can only be exercised within the Act limits shown on the Parliamentary plans. Therefore, the power to interfere with navigation cannot be exercised in relation to any part of the Firth of Forth which is outwith the Act limits. Subsections (1)(a) and (b) provide the specific circumstances in which the Scottish Ministers are permitted to interfere with navigation. The application of such a power is usual in works of this kind.<sup>1</sup>
- 32. Subsection (2) provides an illustrative list of things that the Scottish Ministers may do that will interfere with navigation. Before interfering with any navigational rights the Scottish Ministers must under subsection (3) consult with the navigation authority<sup>2</sup> and ensure that any interference or obstruction or delay caused as a consequence of that interference is kept to a minimum. Subsection (4) advises that the Scottish Ministers are not liable for any loss arising as a consequence of their interference with navigation.

#### Section 7 – Dredging etc.

- 33. Dredging in the Firth of Forth may be required to be carried out as part of the Forth Crossing works to enable the pillars and towers of the bridge to be located. Blasting of Beamer Rock may also be required to provide a platform for the Central Tower.
- 34. **Section 7** provides the Scottish Ministers with the power to undertake activities such as dredging and blasting which affect the bed of the Firth of Forth. Subsection (1) provides that the Scottish Ministers may carry out such activities within the limits of deviation. Similar powers have been applied in previous Acts authorising such works.<sup>3</sup>
- 35. Subsection (2) permits the Scottish Ministers to use or otherwise dispose of anything removed as a result of dredging or blasting. Activities such as dredging, blasting or other activities associated with the carrying out of the works in the Firth of Forth are likely to result in an obstruction or danger to navigation.

#### Section 8 – Marine (Scotland) Act 2010

36. The Marine (Scotland) Act 2010 establishes a consent regime for such works as described in **section 7**. It is not appropriate for the Forth Crossing works once authorised by the Parliament under the Act to be subject to a further consent regime. Accordingly, **section 8** enables the Scottish Ministers to undertake the Forth Crossing works without having to obtain a license for any activity that may be required under the Marine (Scotland) Act 2010.

### Section 9 – Interference with railways

37. This section places the Scottish Ministers under a duty to consult with relevant railway undertakers and consider any representations that they might have. The purpose of the section is to ensure that the relevant railway undertaker is fully aware of the nature of the ancillary works, which unlike principal works (which are set out in **schedule 1** and

<sup>1</sup> See, for example, section 29 (works affecting river Severn) of the Severn Bridges Act 1992 (c.3).

<sup>2</sup> Currently Forth Ports plc.

<sup>3</sup> See, for example, section 30 (dredging etc.) of the Severn Bridges Act 1992 (c.3).

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illustrated on the Parliamentary plans) are only defined in general terms (see **section 1** and **schedule 2**).

#### Section 10 – Trees and shrubs

- 38. The powers under section 1 of the Act include the power to clear ground in respect of vegetation and that power also applies under section 41. Section 10 further enables the Scottish Ministers to cut down, lop or cut back the roots of any tree or shrub on land that is not within the Act limits or subject to the power in section 41. The power being taken in this section can only be exercised if the Scottish Ministers reasonably believe it to be necessary to prevent the tree or shrub from obstructing or interfering with the works or apparatus used in connection with the works or from constituting a danger to persons carrying out or using the works.
- 39. Subsection (2) requires that the Scottish Ministers make reasonable efforts to avoid unnecessary damage to the tree or shrub.
- 40. Subsection (3) disapplies any tree preservation order made under section 160(1) of the Town and Country Planning (Scotland) Act 1997 (c.8) or any prohibition on interfering with trees in conservation areas made under section 172 of the same Act which might otherwise apply.
- 41. The approach taken is to ensure that as far as possible consents are authorised or disapplied under the Act in order that the Forth Crossing works are not compromised in their delivery. Compensation for cutting down, lopping or cutting back roots of trees and shrubs is covered in section 52. Any dispute over compensation is to be determined by the Lands Tribunal of Scotland.