

## Design Manual for Roads and Bridges



Sustainability & Environment  
Appraisal

# LA 101

## Introduction to environmental assessment

(formerly HA 200/08, HA 201/08, IAN 125/15, IAN 126/15, IAN 133/10)

Revision 0

### Summary

This document sets out the over-arching requirements and principles that form an introduction to the environmental assessment of motorway and all-purpose trunk roads.

### Application by Overseeing Organisations

Any specific requirements for Overseeing Organisations alternative or supplementary to those given in this document are given in National Application Annexes to this document.

### Feedback and Enquiries

Users of this document are encouraged to raise any enquiries and/or provide feedback on the content and usage of this document to the dedicated Highways England team. The email address for all enquiries and feedback is: [Standards\\_Enquiries@highwaysengland.co.uk](mailto:Standards_Enquiries@highwaysengland.co.uk)

**This is a controlled document.**

Contents

**Release notes** 2

**Foreword** 3

    Publishing information . . . . . 3

    Contractual and legal considerations . . . . . 3

**Introduction** 4

    Background . . . . . 4

    Assumptions made in the preparation of this document . . . . . 4

**Abbreviations** 5

**Terms and definitions** 6

**1. Scope** 9

    Aspects covered . . . . . 9

    Implementation . . . . . 9

    Use of GG 101 . . . . . 9

**2. Overarching principles of environmental assessment** 10

    Environmental Impact Assessment . . . . . 10

    Non-statutory environmental assessment . . . . . 11

    Expertise . . . . . 11

    Environmental objectives . . . . . 11

**3. Levels of environmental assessment** 12

    Scoping . . . . . 12

    Screening . . . . . 12

    Simple assessment . . . . . 12

    Monitoring . . . . . 13

**4. Normative References** 14

**5. Informative References** 15

## Release notes

Version	Date	Details of amendments
0	Jul 2019	LA 101 replaces HA 200/08, HA 201/08, IAN 125/15, IAN 126/15 and IAN 133/10. The full document has been re-written to make it compliant with the new Highways England drafting rules.

## Foreword

### Publishing information

This document is published by Highways England.

This document supersedes previous advice contained in Volume 11 Section 1 (HA 200/08) and Section 2 (HA 201/08) of the DMRB, IAN 125/15, IAN 126/15 and IAN 133/10, and makes provision for requirements outlined within EU Directive 2011/92/EU as amended by 2014/52/EU, hereafter referred to as the EIA Directive [Ref 4.N].

This document contains clear reference to other volumes, sections and parts.

### Contractual and legal considerations

This document forms part of the works specification. It does not purport to include all the necessary provisions of a contract. Users are responsible for applying all appropriate documents applicable to their contract.

## **Introduction**

### **Background**

Environmental assessment is the process by which information about environmental effects is collected, assessed, reported and used to inform decision-making. Environmental assessment includes screening, scoping, Environmental Impact Assessment (EIA), non-statutory environmental assessment and monitoring.

This document sets out the over-arching principles and approach to the levels of environmental assessment under the EIA Directive [Ref 4.N].

### **Assumptions made in the preparation of this document**

The assumptions made in GG 101 [Ref 5.N] apply to this document.

# Abbreviations

Abbreviations

Abbreviation	Definition
EIA	Environmental Impact Assessment
ES	Environmental Statement

## Terms and definitions

### Terms and definitions

Term	Definition
Annex I project	Projects listed within Annex I of the EIA Directive [Ref 4.N].
Annex II project	Projects listed within Annex II of the EIA Directive [Ref 4.N].
Competent authority	An authority that is legally responsible for discharging the requirements of the EIA Directive [Ref 4.N] via the development consenting process.
Competent expert	Individuals who can demonstrate that they have relevant: <ol style="list-style-type: none"> <li>1) qualifications; and</li> <li>2) expertise in the environmental assessment of infrastructure projects or related environmental factor(s).</li> </ol>
Detailed assessment	Detailed field surveys and/or quantified modelling techniques to understand complex environmental effects.
Effect	Term used to express the consequence of an impact (expressed as the 'significance of effect').
Elements	Parts of environmental factors.  NOTE: For example, listed buildings are part of cultural heritage.
Enhancement	A beneficial measure that is over and above what is required to mitigate the adverse effects of a project.
Environmental assessment	A process by which information about environmental effects is collected, assessed and used to inform decision-making.  NOTE: This includes Environmental Impact Assessment and non-statutory environmental assessment.
Environmental factors	<ol style="list-style-type: none"> <li>1) Population and human health;</li> <li>2) Biodiversity;</li> <li>3) Land, soil, water, air and climate;</li> <li>4) Material assets, cultural heritage, and landscape;</li> <li>5) The interaction between the factors listed above.</li> </ol>

**Terms and definitions (continued)**

<b>Term</b>	<b>Definition</b>
Environmental Impact Assessment	<p>Statutory process consisting of:</p> <ol style="list-style-type: none"> <li>1) preparation of an Environmental Statement;</li> <li>2) consultation;</li> <li>3) examination by the competent authority of the information contained within the Environmental Statement;</li> <li>4) the reasoned (justified or evidenced) conclusion by the competent authority on the significant effects of the project on the environment; and</li> <li>5) the reasoned (justified or evidenced) decision by the competent authority to grant or refuse development consent.</li> </ol>
Environmental Statement	<p>A statutory report produced by the developer including:</p> <ol style="list-style-type: none"> <li>1) a description of the project;</li> <li>2) a description of the likely significant effects of the project on the environment;</li> <li>3) a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;</li> <li>4) a description of the reasonable alternatives;</li> <li>5) a non-technical summary; and</li> <li>6) any additional information relevant to the characteristics of a project.</li> </ol>
Monitoring	<p>Assessment of the performance of the project, including mitigation measures.</p> <p>NOTE This determines if effects occur as predicted or if operations remain within acceptable limits, and if mitigation measures are as effective as predicted.</p>
Non-statutory environmental assessment	<p>Process consisting of:</p> <ol style="list-style-type: none"> <li>1) preparation of an environmental assessment report;</li> <li>2) examination by the Overseeing Organisation of the information contained within that report; and</li> <li>3) the reasoned (justified or evidenced) decision by the Overseeing Organisation to proceed (or not) with the project.</li> </ol>



**Terms and definitions (continued)**

<b>Term</b>	<b>Definition</b>
Plans and programmes	Documents which are:  1) subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government; and  2) required by legislative, regulatory or administrative provisions.
Preferred option	The chosen design option that most successfully achieves the project objectives and becomes subject to further design and assessment.
Project	Construction works, installations, schemes, or interventions (in the natural surroundings and landscape) including those involving the extraction of mineral resources.
Scoping	The process of considering the information required for reaching a (reasoned) conclusion on the likely significant effects of a project on the environment.
Screening	The identification of likely significant effects on the environment and consequential need for an Environmental Impact Assessment.
Screening request	Application by the developer for a screening opinion from the competent authority (or Overseeing Organisation).
Screening opinion	A written statement by the competent authority as to whether a project requires EIA.
Simple assessment	The collection and assessment of data and information that is readily available to reach an understanding of the likely environmental effects of a project.  NOTE: This informs the final design or need for further 'detailed assessment'.

**1. Scope**

**Aspects covered**

- 1.1 The requirements and procedures set out in this document shall be followed when screening, scoping, assessing, reporting and monitoring the environmental effects of projects in line with the requirements of the EIA Directive [Ref 4.N].

*NOTE This document does not cover the development of wider legislative, regulatory or administrative provisions under the Environmental Assessment of Plans and Programmes Directive [Ref 2.N] (also referred to as the SEA Directive) or the Habitats Directive [Ref 1.N].*

**Implementation**

- 1.2 This document shall be implemented forthwith on all projects on motorways and all-purpose trunk roads according to the implementation requirements of GG 101 [Ref 5.N].

**Use of GG 101**

- 1.3 The requirements contained in GG 101 [Ref 5.N] shall be followed in respect of activities covered by this document.

## 2. Overarching principles of environmental assessment

- 2.1 Environmental assessment shall provide clear, concise information to support the competent authority in reaching a reasoned conclusion on the likely effects of a project on the environment.
- 2.2 Environmental Impact Assessments (EIAs) must be based on current knowledge and established methods of assessment, in accordance with the EIA Directive [Ref 4.N].
- 2.3 Non-statutory environmental assessment information shall be based on current knowledge and established methods of assessment.
- 2.3.1 Environmental assessment should be proportionate to the scale and stage of a project.
- NOTE** *The prediction of likely significant effects does not require absolute certainty (further information is provided within LA 104 [Ref 1.I] Environmental assessment and monitoring.*
- 2.4 EIAs must ensure effective participation of the public concerned in the decision making procedures, in accordance with the EIA Directive [Ref 4.N].
- 2.5 Non-statutory environmental assessments shall ensure effective participation of the public concerned in the decision-making procedures.
- 2.6 EIAs must be based on a description of the project proposed to be constructed, in accordance with the EIA Directive [Ref 4.N].
- 2.6.1 Prior to the submission of project documentation to the competent authority for consent, the following items should be reviewed for consistency across all reports:
- 1) project objectives (including any environmental objectives);
  - 2) environmental assessment assumptions;
  - 3) project design parameters (including any specific environmental design measures); and
  - 4) environmental assessment conclusions.
- 2.7 Non-statutory environmental assessments shall be based on a description of the physical characteristics of the project proposed to be constructed.
- 2.7.1 Environmental assessment should be an iterative process that informs options, design / mitigation decisions, transport appraisal and procedures associated with environmental legislation separate from the EIA Directive [Ref 4.N].
- 2.8 Environmental assessment conclusions shall provide the evidence for the development and implementation of proportionate environmental management, mitigation and monitoring measures.
- 2.8.1 Before commencement of construction activities, the conclusions of the project environmental assessment should be reviewed to ensure that they still reflect the scheme being constructed.
- NOTE** *Material changes to the project after the consent has been obtained can influence the reported conclusions in the environmental assessment.*
- 2.9 Where additional assessments are required beyond those under the EIA Directive [Ref 4.N], e.g. the Habitats Directive 92/43/EEC [Ref 1.N] or the Birds Directive 2009/147/EC [Ref 3.N], project teams must include information within scoping reports on coordinated or joint:
- 1) survey proposals; and
  - 2) reporting.
- 2.10 The specific requirements of the Overseeing Organisation covering the relevant national regulations shall apply.

### Environmental Impact Assessment

- 2.11 Where a project is listed in Annex I of the EIA Directive [Ref 4.N], Environmental Impact Assessment (EIA) must be undertaken.

- 2.12 Where a project falls under Annex II of the EIA Directive [Ref 4.N] and is likely to have significant environmental effects (having regard to the selection criteria in Annex III of the EIA Directive), EIA must be undertaken.
- 2.12.1 The specific screening procedures of the Overseeing Organisation should apply when undertaking EIA.
- NOTE** *Further guidance on EIA screening and assessment is provided in LA 102 [Ref 2.I] Screening projects for Environmental Impact Assessment; and LA 104 [Ref 1.I] Environmental assessment and monitoring.*

### **Non-statutory environmental assessment**

- 2.13 Where screening concludes that EIA is not required, a proportionate level of environmental assessment shall be undertaken to inform non-statutory reporting in accordance with LA 104 [Ref 1.I] Environmental assessment and Monitoring.
- 2.14 The specific reporting requirements of the Overseeing Organisation shall apply when undertaking non-statutory environmental assessment.

### **Expertise**

- 2.15 Environmental Statements (ES), produced under the EIA Directive [Ref 4.N], must be prepared by a competent expert(s).
- 2.16 ES technical chapters shall be prepared by lead individuals who are competent experts.
- 2.17 Screening requests, scoping reports and non-statutory environmental assessment reports shall be prepared by competent experts.
- 2.18 Statements providing evidence of how individuals meet the definition of competent expert shall be provided within ES's, screening requests, scoping reports and non-statutory environmental assessment reports.

### **Environmental objectives**

- 2.19 Environmental objectives provide a mechanism for supporting improved environmental performance and shall be reported within ES's, screening requests, scoping reports and non-statutory environmental assessment reports.
- 2.19.1 Opportunities to deliver improved environmental performance (including enhancements) should be captured within environmental objectives.
- NOTE** *Early identification of environmental objectives increases the likelihood of achieving improved environmental performance by informing options / design choice and decision-making.*
- 2.19.2 Project objectives and environmental objectives should deliver improved environmental performance by being linked and informed by wider legislative, regulatory or strategic requirements.
- 2.20 The specific environmental objective reporting requirements of the Overseeing Organisation shall apply.

### 3. Levels of environmental assessment

3.1 Projects shall employ, where relevant, the following non-sequential assessment levels on projects;

- 1) scoping;
- 2) screening;
- 3) simple assessment;
- 4) detailed assessment; and
- 5) monitoring.

**NOTE 1** *Environmental assessment levels are not always sequential, e.g. scoping of the project options takes place prior to screening the preferred option. Scoping of the preferred option is refined to focus the environmental assessment on those factors which need to be reported in further detail.*

**NOTE 2** *Not all levels of environmental assessment are required for a project e.g. detailed assessment can be undertaken without having undertaken simple assessment, where likely significant effects have been identified during scoping.*

#### Scoping

3.2 Scoping shall be undertaken in accordance with LA 103 [Ref 6.N] Scoping projects for Environmental Assessment.

**NOTE** *Scoping provides justification and evidence for:*

- 1) further assessment (or not) of environmental factors;
- 2) the level of assessment to be undertaken;
- 3) the approach to consultation; and
- 4) the environmental assessment methodologies / study areas.

#### Screening

3.3 Screening must be undertaken in accordance with the EIA Directive [Ref 4.N].

#### Simple assessment

3.4 Simple assessment shall be undertaken where:

- 1) there remains a sufficient level of uncertainty over likely significant environmental effects; and
- 2) further evidence is required to support environmental assessment following scoping.

**NOTE 1** *The objective of simple assessment is to apply a proportionate approach in supporting assessment conclusions, demonstrating legal compliance and informing design, mitigation and monitoring (where relevant).*

**NOTE 2** *Simple assessment is typically based on readily available information, walkover surveys and targeted consultation with environmental bodies.*

3.5 Simple assessment shall be undertaken in accordance with the methodology and reporting requirements set out in LA 104 [Ref 1.I] Environmental assessment and monitoring.

3.6 Detailed assessment shall be undertaken where:

- 1) scoping, screening and / or simple assessment identify likely significant environmental effects; and
- 2) further assessment is required to sufficiently inform and support the decision-making process.

**NOTE** *Detailed assessment typically comprises quantified modelling, assessment monitoring, detailed field surveys and consultation with environmental bodies and other interested / affected stakeholders.*

3.7 Detailed assessment shall be undertaken in accordance with the methodology and reporting requirements set out in LA 104 [Ref 1.I] Environmental assessment and monitoring.

**NOTE 1** *ES's and non-statutory environmental assessment reports can contain simple assessment for some factors and detailed assessments for other factors, depending on the complexity of issues requiring assessment.*

**NOTE 2** *Within ES's and non-statutory environmental assessment reports not all elements (parts of factors) are scoped in e.g. visual impacts can be assessed without assessing landscape impacts.*

### **Monitoring**

**3.8** Where significant adverse environmental effects are reported in ES's, monitoring of these effects shall be undertaken in accordance with LA 104 [Ref 1.1] Environmental assessment and monitoring.

**NOTE** *The purpose of monitoring is to:*

- 1) ensure measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment are delivered;*
- 2) build data on the effectiveness of design and mitigation measures thereby driving improvement in environmental performance for future projects;*
- 3) satisfy licence / permit requirements (where applicable); and*
- 4) identify remedial action as a consequence of under-performance or failure of mitigation.*

## 4. Normative References

The following documents, in whole or in part, are normative references for this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Ref 1.N	'Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora'
Ref 2.N	'Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment, Official Journal L 197, 21/07/2001.'
Ref 3.N	'Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds'
Ref 4.N	'Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment Text with EEA relevance, Official Journal L 124, 25/04/2014.'
Ref 5.N	Highways England. GG 101, 'Introduction to the Design Manual for Roads and Bridges'
Ref 6.N	Highways England. LA 103, 'Scoping projects for environmental assessment'

**5. Informative References**

The following documents are informative references for this document and provide supporting information.

Ref 1.I	Highways England. LA 104, 'Environmental assessment and monitoring'
Ref 2.I	Highways England. LA 102, 'Screening projects for Environmental Impact Assessment'



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