

Design Manual for Roads and Bridges



General Principles & Scheme Governance
General Information

GG 104

Requirements for safety risk assessment

(formerly GD 04/12 and IAN 191/16)

Version 0.1.0

Summary

This document sets out the approach for safety risk assessment to be applied when undertaking any activity that does or can have an impact on safety on motorway and all-purpose trunk roads, either directly or indirectly. It provides a framework for identifying hazards, assessing, evaluating and managing safety risks and assuring safety risk governance.

National Variation

This document has associated National Application Annexes providing alternative or supplementary content to that given in the core document, which is relevant to specific Overseeing Organisations. National Application Annexes are adjoined at the end of 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 National Highways team. The online feedback form for all enquiries and feedback can be accessed at: www.standardsforhighways.co.uk/feedback.

This is a controlled document.

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Latest release notes

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
GG 104	0.1.0	January 2025	Core document, England NAA, Northern Ireland NAA, Scotland NAA, Wales NAA	Incremental change to requirements

Release notes: England National Application Annex created. Various other incremental changes. [Publication: January 2025] GG 104 replaces GD 04/12 and IAN 191/16.

Previous versions

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
GG 104	0	June 2018		

Foreword

Publishing information

This document is published by National Highways.

This document supersedes Revision 0.0.0.

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

This document sets out the approach for safety risk assessment. It provides a framework for identifying hazards, assessing, evaluating and managing safety risks and assuring safety risk governance.

Assumptions made in the preparation of the document

The assumptions made in GG 101 [Ref 1.N] apply to this document.

1. Scope

Aspects covered

- 1.1 The national requirements for safety risk assessment set out in the National Application Annexes shall be followed.

Implementation

- 1.2 This document shall be implemented forthwith on all activities that do or can have an impact on safety risk, either directly or indirectly, for all populations on or adjacent to the motorway and all-purpose trunk roads according to the implementation requirements of GG 101 [Ref 1.N].

Use of GG 101

- 1.3 The requirements contained in GG 101 [Ref 1.N]] shall be followed in respect of activities covered by this document.

2. 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.	Document
Ref 1.N	National Highways. GG 101, 'Introduction to the Design Manual for Roads and Bridges'

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General Principles & Scheme Governance
General Information

GG 104 - ENAA

England National Application Annex for Requirements for safety risk assessment

(formerly GD 04/12 and IAN 191/16)

Version 0.1.0

Summary

This National Application Annex contains the National Highways-specific requirements for the approach for safety risk assessment to be applied when undertaking any activity that does or can have an impact on safety on Highways England's motorway and all-purpose trunk roads, either directly or indirectly. It provides a framework for identifying hazards, assessing, evaluating and managing safety risks and assuring safety risk governance.

Feedback and Enquiries

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Latest release notes

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
GG 104 - ENAA	0.1.0	January 2025	England NAA	Incremental change to requirements
National Highways National Application Annex to GG 104.				

Previous versions

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
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Foreword

Publishing information

This document is published by National Highways.

This document supersedes GG 104 Revision 0, which is withdrawn.

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

National Highways has a Safety Management System (SMS) that reflects our commitment to safety. GG 104 fulfils the requirement for a framework that covers the identification of hazards and the associated safety risk assessment and mitigation process.

National Highways has a number of values and business imperatives to take into account when developing, maintaining and operating the network. Compliance with this document will provide the means to demonstrate that safety impacts have been assessed and included in transparent multi-criteria decision making, that will show rigour and withstand scrutiny if challenged to protect the business. Our aim is that no one should be harmed when travelling or working on the strategic road network.

The approach set out in this document promotes a safety focus, allowing decision makers to balance safety implications with other considerations.

Safety risk assessments support decision making. Safety risk decisions on the viability of activities to be undertaken, including decisions to 'do nothing', need to be supported by a safety risk assessment. The presumption that to do something is always necessary does not guarantee the optimal safety outcome for everyone.

By providing a framework safety risk assessment process rather than a rigid process, the requirements provide flexibility for safety risk assessments to be as simple or as complex as the activity being risk assessed requires and can be applied to the many and varied activities undertaken across the business or otherwise affecting it.

When an activity is initiated through problem identification, a safety risk assessment will help determine the nature and extent of any safety risk and the most effective way to proceed to reach the optimal safety outcome for everyone.

The requirements support safety risk assessments throughout the entire project life-cycle including:

- 1) Option selection.
- 2) The design and departure processes.
- 3) All aspects for which the application of the Construction (Design and Management) Regulations 2015 UKSI 2015/51 [Ref 5.I] is required.
- 4) The handover into operations, and maintenance.
- 5) For the continuing safe operation of completed schemes, as part of the strategic road network.

The requirements detail the need to document the scope of the safety risk assessment and any evidence used in it. This is to assure that a thorough audit trail is provided and there is no ambiguity around the decisions made.

The application of these requirements will assure that safety risk decisions are aligned with National Highways objectives, policies, duties and responsibilities, and are demonstrably evidence-led and transparent.

Assumptions made in the preparation of this document

The assumptions made in GG 101 [Ref 2.N] apply to this document.

The requirements and advice given in this document are provided on the basis that an appropriate governance process is in place and the outputs of the safety risk assessment process and decisions are used to assure it.

In this document the term so far as is reasonably practicable (SFAIRP) is used as in the Health and Safety at Work etc. Act (UKPGA 1974/37 [Ref 1.N]).

The Health and Safety Executive provides further advice on the evaluation and treatment of safety risks and this can be used to supplement the advice provided in section E/3 of this document to guide decision making in identifying and managing safety risks SFAIRP.

Safety-related systems are not fully responsible for controlling hazards. The breakdown of a safety-related system only has the potential to be hazardous when combined with the failure of other systems and/or human error. Such systems and their operation are required to be managed, and their performance assured.

Abbreviations

Abbreviation	Definition
BCR	Benefit-Cost Ratio
ERIC	Eliminate, Reduce, Isolate, Control
ETM	Emergency Traffic Management
FWI	Fatal and Weighted Injuries
HASAWA	Health and Safety at Work etc. Act 1974 (UKPGA 1974/37 [Ref 1.N])
HSE	Health and Safety Executive
NSCRG	National Safety Control Review Group
SCRG	Safety Control Review Group
SFAIRP	So Far As Is Reasonably Practicable
SMS	Safety Management System
SRO	Senior Responsible Owner

Terms and definitions

Term	Definition
Activity/activities	The function(s) carried out by individuals or groups in meeting National Highways obligations as a strategic highways company appointed by the Secretary of State under section 1 of the Infrastructure Act 2015 (UKPGA 2015/07 [Ref 1.1]), or third party functions.
Competence	The combination of training, skills, experience and knowledge that a person has and their ability to apply them to perform a task safely.
External party hazard	These are hazards to National Highways network users and workers that result from activities outside our network. [Note: Such activities may include cyber activities]
Governance	The processes for making, recording and implementing decisions.
Hazard	A source of potential harm, loss or failure.
Rigour	The quality of being extremely thorough and careful.
Safety baseline	Level of safety against which the safety objectives are set and measured.
Safety objective	A statement describing what, if any, contribution an activity will deliver from a safety perspective.
Safety risk	The expected consequence of a specified hazard being realised with the combination of the likelihood and expected severity of the outcome. NOTE: The safety risk consequence is usually a measure of harm or loss associated with an activity.
Safety-related systems	Safety-related systems are those that are required to perform a specific function or functions to manage safety. They are not fully responsible for controlling hazards. The breakdown of a safety-related system only has the potential to be hazardous when combined with the failure of other systems and/or human error. Such systems and their operation are required to be managed, and their performance assured.
Safety risk assessment	Identification, analysis and evaluation of safety risk.
Safety risk assessment process	Overarching process surrounding safety risk assessment that includes planning and preparation through to monitoring and review.
Senior Responsible Owner	The senior responsible owner is accountable for a programme or project meeting its objectives, delivering the projected outcomes and realising the required benefits.

(continued)

Term	Definition
Sub-population	A part, identifiable fraction or subdivision of a larger population. NOTE: see Table 1.4 Populations on the motorway and all-purpose trunk roads and clauses 2.15 and 3.17.
Motorway and all-purpose trunk roads	Collective term to indicate those parts of the highway and road network for which National Highways is the highway or road authority.

E/1. Application of this document

E/1.1 The approach set out in this document shall be applied to determine the level of complexity of any activity that does or can have an impact on safety risk, either directly or indirectly. This applies to both National Highways and any third party activity, including through the planning and development process.

E/1.1.1 Activities that do or can have an impact on safety risk for any of the populations or sub-populations as defined in table 1.4. include, but may not be limited to:

- 1) planning, preparing, designing, constructing, operating, maintaining and disposing of assets, and third party activities (examples of direct influences on safety risk, with nothing or no-one in between);
- 2) revising National Highways requirements and advice documents and all procedures, policies and strategies (examples of indirect influences on safety risk).

E/1.2 The approach set out in this document shall be applied to carry out safety risk assessments to support departure applications.

E/1.3 The approach set out in this document shall be applied to establish the relative rigour of the safety risk assessment.

NOTE The degree of rigour required for a safety risk assessment is proportionate to how simple or complex the activity being risk assessed is.

E/1.4 Populations shall be classified as shown in Table E/1.4.

Table E/1.4 Populations

Population	Classification
People directly employed by National Highways either permanently e.g. traffic officers, or periodically e.g. those undertaking site visits; and people in a contractual relationship with National Highways, including our national vehicle recovery contract operatives, all workers engaged in traffic management activities and incident support services, and any other activities such as persons carrying out survey and inspection work.	Workers
All road users, including but not limited to the emergency services, equestrians, cyclists and pedestrians, as well as those others who are at work but are not in a contractual relationship with National Highways such as privately contracted vehicle recovery and vehicle repair providers.	Users
'Other parties' includes any person or persons who could be affected by the National Highways motorway and all-purpose trunk roads, but who are neither using it, nor working on it e.g. living or working adjacent to the motorway and all-purpose trunk roads, or using other transport networks that intersect with the motorway and all-purpose trunk roads.	Other parties

E/1.5 This document shall be applicable throughout, and to all potential options for undertaking an activity.

Implementation

E/1.6 This document shall be implemented forthwith on all activities that do or may have an impact on safety risk, either directly or indirectly, for all populations as defined in Table 1.4 and according to the implementation requirements of GG 101 [Ref 2.N].

NOTE 1 Throughout this document the framework for the safety risk assessment process has been illustrated by a series of flowcharts which provide a visual representation of the requirements. The full flowchart can be found in Appendix E/A.

- NOTE 2 Explanation of the tasks required to undertake a safety risk assessment is provided in Appendix E/B.*
- NOTE 3 Explanation of safety risk assessment ownership, approval and acceptance arrangements is provided in the safety risk governance section.*

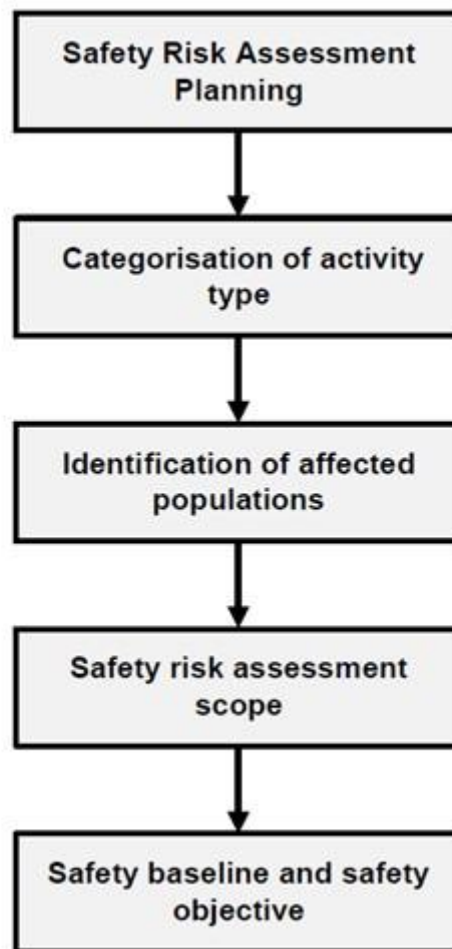
E/2. Safety risk assessment process

E/2.1 The framework safety risk assessment process presented in Appendix E/A of this document shall be followed throughout the safety risk assessment process.

NOTE 1 *If anything changes that affects the activity or component part(s) of it, a review to check that whatever has changed does not invalidate the safety risk assessment is necessary.*

NOTE 2 *The initial planning and preparation prior to undertaking the risk assessment is summarised in Figure E/2.1N2.*

Figure E/2.1N2 Safety risk assessment planning process



Safety risk assessment planning

E/2.2 The tasks required to carry out the safety risk assessment using the framework safety risk assessment process presented in Appendix E/A shall be defined before beginning a safety risk assessment.

E/2.2.1 The author(s) should include evidence of their competence to undertake the safety risk assessment.

E/2.3 The tasks required to carry out the safety risk assessment shall be documented in accordance with the governance arrangements for the business area in which the activity is undertaken.

E/2.4 A safety risk assessment shall start by clearly defining and recording the question(s) that it is seeking to address.

E/2.5 Where the safety risk of an activity has already been assessed, then a reasonable and proportionate effort to review previous, relevant decision making shall be completed and reflected in the safety risk assessment.

- E/2.6 Where there are a number of alternative approaches to undertaking an activity, each of these approaches, known as options, shall be the subject of a safety risk assessment.
- E/2.6.1 Safety impacts of options should be informed by the outputs of the safety risk assessments. Multi-criteria decision making shall take account of the safety impacts and shall be in accordance with the governance procedures for the business area in which the activity is undertaken.
- NOTE Option preferences formed ahead of the safety risk assessment process evaluation stage can lead to unconscious bias influencing the outcome of the safety risk assessment process.*

Categorisation of the activity type

- E/2.7 The safety governance of the activity shall be determined by categorisation of the activity type in category A, B or C in accordance with Table 2.7.

Table E/2.7 Categorisation of activity type

Feature	Selection criteria	
	Type	Indicator
<p>Extent of prior experience of activity.</p> <p>The degree of knowledge available from undertaking the activity previously or the degree to which knowledge is available from the activity being undertaken by other industries or organisations.</p>	A	Activities for which there is significant experience within National Highways. Previous safety studies and data are available, and some activity features are codified in a standard or formal procedure.
	B	<p>Activities for which there is limited experience within National Highways but there is transferable experience and previous safety studies and data are available elsewhere in the UK or internationally.</p> <p>Activities for which there is limited experience in National Highways but there is experience and previous safety studies and data are available elsewhere in the UK or internationally, including in different industries, which is deemed sufficiently similar to the activity in question to be deemed relevant.</p> <p>Activities for which there is experience within National Highways but that experience and previous safety studies and data that are available are in a different application of the activity and some adaptation will be required. There might also be local and site specific issues to take into account that can affect the relevance of the available experience.</p>
	C	Activities for which there is no previous applicable experience from either National Highways or other industries.

Table E/2.7 Categorisation of activity type (continued)

<p>Statutory and formal processes and procedures (including standards and legislation).</p> <p>Consideration of the applicability of current standards, formal processes or procedures, guidance and legislation.</p>	A	<p>The activity is substantially or entirely within the scope of existing standards, guidance, formal processes or procedures and applicable legislation.</p> <p>The activity requires minimal or no safety related departures from standard or safety related changes to formal processes or procedures (including any legislation).</p> <p>The nature and type of a departure is the most important element in determining the categorisation and so a single safety departure may change this.</p>
	B	<p>The activity is largely within the scope of existing standards, guidance, formal processes or procedures. There can be some safety related departures from standards needed and/or safety related changes to formal processes or procedures.</p> <p>The activity can need minor changes to existing legislation.</p> <p>Whilst the number of safety departures from standards, formal processes or procedures can affect the categorisation, the most important element in determining this is the nature and type of the departures.</p>
	C	<p>Activities that are not within the scope of existing standards, formal processes or procedures and require new ones to be developed.</p> <p>Activities for which significant departures from standards, formal processes or procedures are required.</p> <p>Activities which require significant changes to existing legislation or new legislation to be written.</p> <p>Whilst the number of safety departures from standards, formal processes or procedures can affect the categorisation, the most important element in determining this is the nature and type of the departures. For example, a large number of safety departures that can be addressed straightforwardly will have less impact on feature type than a single safety departure that cannot and requires a detailed risk assessment to support it.</p>

Table E/2.7 Categorisation of activity type (continued)

<p>Impact on the organisation.</p> <p>The effect that the activity will have on current National Highways processes, procedures, structure, roles and responsibilities, competencies, policies and strategy, in addition to contractual and workforce arrangements.</p>	A	<p>The activity has no impact on National Highways.</p> <p>The activity has a minor impact on any of these for a finite period of time.</p> <p>Length of time National Highways is affected by decision to undertake the activity is short term.</p>
	B	<p>The activity can lead to permanent minor changes to any of these. These minor changes can introduce new roles and responsibilities, policies, contractual and workforce arrangements.</p> <p>The activity can require a change to organisational arrangements.</p> <p>Length of time National Highways is affected by decision to undertake the activity is medium term.</p>
	C	<p>The activity has significant impact on any of these.</p> <p>The activity can change core safety roles and responsibilities.</p> <p>Length of time National Highways is affected by decision to undertake the activity is long term.</p>
<p>Activity scale.</p> <p>Consideration of the size and/or scale of the activity, including geographically and range of possible impacts.</p> <p>Does or can the activity have an impact on the motorway and all-purpose trunk roads, either directly or indirectly.</p>	A	The impact of the activity is limited in nature or scale.
	B	The impact of the activity is significant in nature or scale.
	C	The impact of the activity is wide ranging across the network, and/or significantly impacts infrastructure, interventions or workforce.
<p>Technical.</p> <p>Measure of technical and/or technological novelty and/or innovation the activity involves</p>	A	An activity where any processes, techniques, methodologies and/or technologies involved are currently in widespread use, available for reference, and re-examination is unlikely to be needed.
	B	<p>There can be some experience of the processes, techniques, methodologies and/or technologies, available for reference.</p> <p>The experience can be from use in either another application, or by another road authority, supplier, industry or perhaps from overseas in which case some additional work can be required to adapt them and/or to demonstrate that safety can be assured for the intended application.</p>
	C	Activities that use new processes, techniques, methodologies and/or technologies for which there is no previous experience in the UK or elsewhere.

Table E/2.7 Categorisation of activity type (continued)

<p>Stakeholder impact and interest.</p> <p>The quantity and/or impact of stakeholders, and their interest in terms of safety risk and resulting ability to influence or/impact on the activity.</p> <p>The degree to which the safety issues, as perceived, are capable of being understood and fully addressed.</p>	A	Activities for which the quantity and/or impact of stakeholders, and their interest in terms of safety risk and resulting ability to influence or impact the activity is low.
	B	Activities that have only a single or a few stakeholders but their impact, in terms of their attitude towards, or ability to influence, and/or interest in the successful achievement of the activities aim in terms of safety risk can be significant. Alternatively it will represent an activity that has several stakeholders but the amount, or type, of safety issues involved are limited.
	C	Activities for which there are a large number of stakeholders and their impact in terms of their attitude towards, or ability to influence safety can be significant. Stakeholders with a strong interest in the potential safety impact of the activity on themselves. Activities where there are conflicting needs arising from different stakeholders or stakeholder groups.

- E/2.8 The process for assigning a category to an activity shall follow the steps set out below:
- 1) review the features of the activity and assign each feature a category in line with Table E/2.7;
 - 2) once the activity features each have a category assigned to them, an overall category type for the activity is determined.

E/2.8.1 Table E/2.8N shows how the activity owner should determine which category type is assigned.

Table E/2.8.1 Determining the activity category

Feature classifications	Type	Comments
All type A	A	Where all activity features are categorised as type A then the entire activity is type A.
All type B	B	Where all activity features are categorised as type B then the entire activity is type B.
All type C	C	Where all activity features are categorised as type C then the entire activity is type C.
Three or more features categorised as Type A	A	Where three or more features are categorised as type A but the remaining features are categorised as a combination of type B and C, the activity is categorised as type A but the features categorised as B or C require a greater rigour of analysis, assessment and evaluation.
Three or more features categorised as Type B	B	Where three or more features are categorised as type B but the remaining features are categorised as a combination of type A and C, the activity is categorised as type B but the features categorised as C require a greater rigour of analysis, assessment and evaluation.
Three or more features categorised as Type C	C	Where three or more features are categorised as type C then the entire activity is of type C.
Equal distribution of categories across features (no majority)	A/B/- C	Where the categorisation of activity features results in an equal distribution between two or more category types the decision on the overall activity categorisation is governed by the importance of each feature relative to the activity. If this results in a decision to select the overall activity categorisation as the lower category type, the features that were identified with the higher category type require a greater rigour of analysis, assessment and evaluation, as well as governance.

- E/2.9 The results of the categorisation process, and the rationale for determining the individual activity features and overall category, shall be documented and supporting evidence recorded, in accordance with the governance procedures for the business area in which the activity is undertaken.
- E/2.10 The results of the categorisation process shall be used to determine if a safety control review group is to be established to approve the category type and accept the safety risk assessment process.
- E/2.11 Activities categorised as type B or C shall establish a safety control review group (SCRG).

NOTE *The section on safety risk governance provides guidance on establishing a safety control review group, the purpose of the group, roles, responsibilities and escalation routes to the National Safety Control Review Group (NSCRG).*

E/2.12 An activity shall be referred to the NSCRG where any individual feature other than stakeholder impact and interest is categorised as type C, and where the activity scale feature has the potential for an increase to a type C categorisation.

E/2.13 Any NSCRG attendance shall be preceded by the establishment of an SCRG.

E/2.14 For activities categorised as type A, the categorisation shall be approved by the person responsible for managing the activity.

Identification of affected populations

E/2.15 A safety risk assessment shall clearly identify all populations, prompted by the non-exhaustive list described in Table E/1.4, and record how each is or can be affected by the activity.

NOTE *Sub-populations identified within an overall population as described in Table E/1.4 can be affected in different ways because of their inherently different characteristics.*

E/2.15.1 Where sub-populations to the populations described in Table E/1.4 with differing characteristics exist, these should be assessed separately.

E/2.16 The identification of all affected populations shall be documented and supporting evidence recorded, in accordance with the governance procedures for the business area in which the activity is undertaken.

Safety risk assessment scope

E/2.17 The purpose of the activity and how this will be undertaken shall be clearly defined within the scope of the safety risk assessment.

E/2.18 What is included and what is excluded and all the populations affected by the activity and how it will be undertaken shall be defined and recorded.

NOTE 1 *The point of defining the scope of the safety risk assessment is to understand how the individual and composite features of the activity work together to achieve the overall activity outcome.*

NOTE 2 *Defining the scope of the safety risk assessment supports subsequent safety risk assessment actions by enabling those responsible for undertaking them to understand how individual features contribute to the achievement of the activity.*

E/2.19 The scope of the safety risk assessment shall be documented and supporting evidence recorded, in accordance with the governance procedures for the business area in which the activity is undertaken.

Safety baselines and safety objectives

E/2.20 A safety baseline and safety objective relevant to the activity shall be defined, documented and evidenced, in accordance with the governance procedures for the business area in which the activity is undertaken.

E/2.21 Safety baselines and safety objectives shall include all populations.

E/2.22 Safety objectives for all populations shall always be to manage risk SFAIRP.

E/2.23 The safety baseline shall be established from the current or recent historic safety performance of the activity.

E/2.23.1 The information sources or metrics used to establish the safety baseline and safety objective should be the best available.

NOTE 1 *There are a variety of information sources or metrics that can be used to establish the safety baseline and safety objective depending on what the activity is.*

- NOTE 2 It is important to use the best available information sources or metrics and to understand any limitations there are on what is chosen.*
- NOTE 3 If the activity is new, the information used to establish any safety baseline and safety objective can be sourced from expert opinion.*
- E/2.24** When a safety improvement is not the primary purpose of the activity a safety objective shall still be set for the populations affected.
- E/2.24.1** Safety objectives may be set using individual or collective risk metrics.
- E/2.25** Safety objectives shall be expressed in the same metric that is used to define the baseline.
- NOTE 1 The metrics used do not have to be the same for every population in the safety risk assessment.*
- NOTE 2 The metric used does have to be the same for a population when evaluating any change from the baseline as a result of the activity.*
- NOTE 3 Individual risk is calculated on the safety risk to a single person and is used to represent the statistical risk of any individuals exposed to the risk.*
- NOTE 4 In terms of individual risk the commonest metric is the probability of a typical worker being killed or injured during a year whilst undertaking their work.*
- NOTE 5 Collective risk is used to represent the statistical risk to a group of people, or a population, associated with a particular activity.*
- NOTE 6 In terms of collective risk the commonest metric is the average number of fatalities per year that would be expected to occur for a given activity.*

E/3. Safety risk assessment

E/3.1 The safety risk assessment process presented in Appendix E/A of this document and summarised in Figure E/3.1N shall be followed throughout the safety risk assessment process.

NOTE 1 *If anything changes that affects the activity or component part(s) of it, a review to check that whatever has changed does not invalidate the safety risk assessment is necessary.*

NOTE 2 *The safety risk assessment is summarised in Figure E/3.1N.*

Figure E/3.1N2 Safety risk assessment process



Hazard identification

E/3.2 All reasonably foreseeable hazards associated with an activity shall be identified.

NOTE *The identification of all reasonably foreseeable hazards includes understanding;*

- 1) *who – might be affected by the hazard, which population(s);*
- 2) *what – is the hazard;*
- 3) *where – does the hazard originate on the road network, or is it an external party hazard, and/or is it limited to specific surroundings or conditions;*
- 4) *when – is the hazard limited to specific times;*
- 5) *why – what is it about the population that means it is a hazard for them;*
- 6) *how – does the hazard have potential to cause harm, loss or failure.*

E/3.3 All steps of hazard identification shall be documented and supporting evidence recorded in accordance with the governance procedures for the business areas.

Hazard analysis

E/3.4 The identified hazards shall be analysed to understand the resulting safety risks and all reasonably foreseeable consequences if those risks are realised.

NOTE 1 A simple test of effective hazard, risk and consequence identification is if they can be described in this way: "because of <insert hazard here> <the risk> might occur which would lead to <insert possible events here>".

NOTE 2 Hazards do not only occur in isolation so it is important to assess the impact of both single and combined hazards.

Analysis of safety risk

E/3.5 The level of detail for any safety risk analyses shall be proportionate to the safety risks being assessed and the activity type categorisation.

E/3.5.1 The analysis of the safety risks for each population should include an assessment of the likelihood of the risk being realised and the most common potential severity of the consequences.

NOTE Risks do not only occur in isolation so it is important to assess the impact of both single and combined risks.

E/3.5.2 The analysis of the safety risks for each population may use a range of evidence sources, including:

- 1) quantitative data;
- 2) qualitative data including:
 - a) previous experience;
 - b) expert opinion;
 - c) stakeholder input;
 - d) research;
- 3) combination of quantitative and qualitative data.

E/3.6 A qualitative, well-reasoned argument shall be used to justify decisions, supported by the best available data.

E/3.6.1 Values for likelihood and severity of outcomes may be assigned to qualitative data for the purposes of assessment (see Appendix E/C).

NOTE Applying numbers to a largely qualitative assessment can create the impression that the assessment has a higher degree of accuracy than it does, which could encourage inappropriate calculations, such as percentage risk changes, to be made using numbers that are not supported by sufficient evidence.

Evaluation of safety risks

E/3.7 Outputs from safety risk analyses shall show the level of the safety risk associated with the activity.

E/3.8 Outputs from safety risk analyses shall be compared to the safety baseline and safety objectives set for the activity.

E/3.9 During the normal and outside of the normal operation of motorway and all-purpose trunk roads, in addition to evaluating the safety risk against the safety baseline and safety objective, safety risk must be evaluated against the SFAIRP criteria for each affected population [Ref 3.9N2].

NOTE 1 The term normal operation is used to describe when the use of the road is not constrained by National Highways implementing planned roadworks and includes instances when emergency traffic management is deployed.

NOTE 2 The term outside of normal operation is used to describe when the use of the road is constrained by National Highways implementing roadworks.

Table E/3.9N2 Safety risk decision criteria for normal and outside of normal operations

Population	Safety risk decision criteria for normal and outside of normal operation
Workers	SFAIRP
Users	SFAIRP
Other parties	SFAIRP

E/3.10 The evaluation of the safety risk analyses and any decisions on whether a measure meets the SFAIRP criteria shall be documented and supporting evidence recorded, in accordance with the governance procedures for the business area in which the activity is undertaken.

E/3.11 Escalation to and acceptance by the senior responsible owner for the activity shall be specifically required for an outcome of the safety risk assessment evaluation that identifies an increase in residual safety risk for a hazard, population, or sub-population, in accordance with the governance procedures for the business area in which the activity is undertaken.

Safety risk treatments

E/3.12 Where the outcome of the safety risk assessment evaluation for an option being safety risk assessed is within the list below, safety risk treatments shall be explored:

- 1) it shows a safety risk disbenefit from the safety baseline;
- 2) it does not meet the safety objective;
- 3) it does not accord with SFAIRP.

NOTE 1 *Safety risk treatments are implemented to reduce the likelihood of a risk being realised or lessen the severity of the potential outcome. Safety risk treatments are also known as mitigations or control measures.*

NOTE 2 *National Highways can, with suitable and sufficient justification, exercise discretion in deciding to provide or omit safety risk treatments.*

NOTE 3 *Safety risk treatments that rely solely on road user compliance require careful consideration and justification and are not advised; a combination of treatments are likely to be more successful in achieving the safety objective and compliance with SFAIRP.*

E/3.13 Safety risk treatments shall follow the ERIC hierarchy - Eliminate, Reduce, Isolate and Control for each safety risk.

NOTE 1 *The ideal option for a safety risk treatment is to eliminate the safety risk.*

NOTE 2 *Where the elimination of safety risks cannot be achieved or the costs to do so are grossly disproportionate, treatment measures for reducing risk through substitution, isolation, or engineering and administrative treatments, are assessed in turn.*

E/3.13.1 To identify appropriate treatments, a justification may be required that measures benefits versus costs, known as a benefit-cost ratio (BCR).

NOTE *A BCR for a safety risk treatment that is > 2 shows a good return on investment for what it costs and can be promoted on safety grounds.*

E/3.14 Gross disproportion cannot be defined by reference to a BCR alone. There is a sliding scale of likelihood, severity and exposure to affected populations that must also be taken into account, which is where professional judgement supported by appropriate risk analysis is key.

NOTE *For a low likelihood, high severity, high exposure scenario then a very low BCR could be assessed as appropriate. i.e.: a BCR that is < 1.*

E/3.14.1 Any safety risk treatment with a BCR between 1 and 2 may be considered alongside all other options.

- E/3.14.2 It should be taken into account where a greater benefit can reasonably be achieved by allocation of the cost of a safety treatment with a BCR between 1 and 2 elsewhere within the project or a wider programme of works.
- NOTE* *The benefits in a BCR will generally be measured against a monetised value for a risk of death i.e. value of preventing a fatality (VPF) (see TAG Unit 2.2.4 [Ref 7.1]); depending on the data available other metrics such as FWIs, KSIs, PICs TAG Unit 2.1.5 [Ref 6.1] or incidents can also be used.*
- E/3.14.3 A decision to do nothing may be a valid one if it is the proper conclusion of the assessment process outlined in this document.
- E/3.14.4 The residual safety risk should be assessed for comparison to the safety baseline and the safety objective for each safety risk treatment considered.
- E/3.15 Safety risks for the activity shall be managed to optimise the safety risk benefits and deliver that which is SFAIRP.
- E/3.15.1 In maximising the safety risk benefit of the activity, the HSE-approved concept of trade-off may be applied (in accordance with the HSE document 'R2P2 Reducing Risks and Protecting People' HSE Reducing Risks [Ref 3.N]).
- E/3.15.2 In applying a trade-off, any safety risk disbenefit to a single population should be outweighed by a safety risk benefit to one or all of the other populations, relevant to the hazard being managed.
- E/3.16 Where a safety risk disbenefit occurs to one population to enable a decrease in risk exposure for another population, the residual risk for the disbenefited population shall remain with that which is tolerable.
- NOTE 1* *Tolerability of risk is based on the understanding that it is not possible to fully eradicate all risk associated with every activity, and it acknowledges the relationship between the willingness to accept risks to secure benefits.*
- NOTE 2* *The concept of tolerability contains boundaries that describe risks as unacceptable, tolerable and broadly acceptable; 'unacceptable' because the benefits secured do not warrant the risk being taken and 'broadly acceptable' because the risk is so low that there is no discernible benefit from reducing it further.*
- E/3.16.1 Transfer of a safety risk disbenefit should only occur between populations affected by the same hazard, and where risks to all populations remain tolerable.
- E/3.17 Individual sub-populations shall be identified that may be affected differently by a hazard so that their safety risks are managed appropriately.
- E/3.18 All risk treatment options considered and discarded shall be recorded within the safety risk assessment.

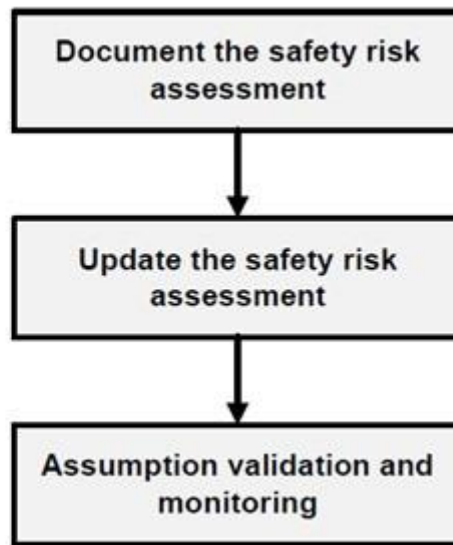
E/4. Document and maintain the safety risk assessment

E/4.1 The safety risk assessment process presented in Appendix E/A of this document shall be followed throughout the safety risk assessment process.

NOTE 1 *If anything changes that affects the activity or component part(s) of it, a review to check that whatever has changed does not invalidate the safety risk assessment is necessary.*

NOTE 2 *The process for documenting the safety risk assessment process and maintaining that documentation is summarised in Figure E/4.1N.*

Figure E/4.1N2 Document and maintain safety risk assessment process



E/4.2 All steps of the safety risk assessment shall be documented, and subsequently saved as National Highways records.

E/4.3 All steps of the safety risk assessment shall have the supporting evidence recorded to demonstrate that an appropriate level of rigour has been applied to assess the expected safety performance and to demonstrate how the design and implementation of the activity can satisfy the safety objective.

E/4.4 The format and extent of the safety risk assessment documentation shall be defined in accordance with the governance arrangements for the business area in which the activity is undertaken.

Update the safety risk assessment

E/4.5 Safety risk assessments shall be passed on through the various phases of activity development to the next competent person responsible for managing that phase of activity.

E/4.6 Safety risk assessments are live documents which shall be reviewed and updated throughout the life of the activity.

E/4.7 Where anything changes that affects the activity or component part(s) of it, a review to check that whatever has changed does not invalidate the safety risk assessment shall be completed and documented.

NOTE *The life of the activity includes all stages of delivery, for example when changing a process, and changes during guidance/standard drafting prompt a review of the safety risk assessment.*

E/4.8 Changes made during construction shall be checked against the safety risk assessment, updating as required.

Assumption validation and monitoring

- E/4.9 The monitoring and review arrangements, including scope of and timescales for, shall be defined, documented, and supporting justification recorded, in accordance with the governance procedures for the business area in which the activity is undertaken.
- NOTE The nature of the risk, assumptions and need for certainty of validation is reflected in the rigour and period of monitoring.*
- E/4.10 Where any assumptions were made in relation to the safety risk assessment, these shall be validated as part of the review.
- E/4.11 The detail of any residual risks that require active monitoring shall be recorded and an owner assigned.

E/5. Safety risk governance

Ownership, approval and acceptance arrangements

E/5.1 Throughout the life cycle of an activity, ownership and accountabilities in relation to the safety risk assessment process shall be clearly identified and documented, in accordance with the governance procedures for the business area in which the activity is undertaken.

NOTE Ownership can transfer during the whole life cycle of an activity. When this occurs, responsibility for continuing to apply the appropriate approach to the safety risk assessment process also transfers to the new owner.

E/5.2 Safety risk assessment process outputs and decisions for type B and C activities shall be consulted upon before acceptance and approval can take place. This is necessary to gain a whole life understanding of how the activity affects National Highways and to gain agreement from across National Highways that it can be implemented safely. This will be activity-specific assessment, so that:

- 1) all activities define the roles that are consulted to support the acceptance and approval process;
- 2) acceptance and approval is undertaken by competent persons;
- 3) acceptance and approval is recorded, in accordance with the governance procedures for the business area in which the activity is undertaken; and
- 4) the acceptance and approval process applies to any changes introduced to the activity and the safety documentation after implementation and is recorded, in accordance with the governance procedures for the business area in which the activity is undertaken.

Type A activities

E/5.3 The activity type categorisation and the safety risk assessment process shall be reviewed and agreed by the activity manager. The activity manager's agreement is documented in accordance with the governance procedures for the business area in which the activity is undertaken.

Type B activities

E/5.4 The activity type categorisation and the safety risk assessment process shall be referred to a safety control review group (SCRG).

Type C activities

E/5.5 The activity type categorisation and the safety risk assessment process shall be referred to a SCRG prior to the National Safety Control Review Group (NSCRG).

Safety Control Review Group (SCRG)

E/5.6 An SCRG shall be formed by the activity manager for any activity categorised as type B or C. The SCRG is formed of competent representatives of those business areas who are involved in undertaking, or affected by the activity at any stage in the development, implementation and adoption of the activity.

NOTE An SCRG is formed for the purpose of consultation on, reviewing, and accepting of the activity and its categorisation, as defined in the Management Arrangement of Safety Risk for National Highways Activities document NSCRG & SCRG [Ref 2.].

E/5.7 For activities with a categorisation accepted as type B, the SCRG shall consult on, review and accept the safety risk assessment process. The SCRG agrees the outputs of the safety risk assessment process and any decisions made within it.

E/5.8 For activities with a categorisation accepted as a type C, the SCRG shall review the categorisation and submit it to the NSCRG to accept. If the NSCRG agrees the type C categorisation, the SCRG will undertake the same role for consultation, review and agreement of safety risk assessment process outputs and decisions made within it but it will submit all of these to the NSCRG for their acceptance.

E/5.9 An activity shall be referred to the NSCRG where any individual feature other than stakeholder impact and interest is categorised as type C, and where the activity scale feature has the potential for an increase to a type C categorisation.

National Safety Control Review Group (NSCRG)

E/5.10 NSCRG shall be convened for any activity categorised as type C.

NOTE *NSCRG is a standing committee with membership as defined in the Management Arrangement of Safety Risk for National Highways Activities document NSCRG & SCRG [Ref 2.I]. The key objectives of the NSCRG are to:*

- 1) *provide direction on safety matters to activities, and provide assurance that statutory and regulatory duties have been discharged by National Highways, as well as any opportunities for continuous improvement.*
- 2) *assure alignment of safety objectives with National Highways objectives and targets, including those that are not safety related;*
- 3) *act as a specialist advisory group providing support to the Chief Highways Engineer;*
- 4) *review and advise on complex, unique or contentious safety issues arising on activities;*
- 5) *review and advise on safety issues that have a national impact or have not arisen before;*
- 6) *assure consistency of approach to managing safety across activities;*
- 7) *provide advice for corrective actions to senior responsible owners; and*
- 8) *inform the senior responsible owner where an activity is not working in accordance with National Highways stated requirements for safety governance, and require the activity manager to provide evidence of their assessment of safety risk.*

E/5.11 The NSCRG shall make a determination of the acceptability of any proposed solutions on type C referrals made by SCRGs and either:

- 1) accept the proposed activity;
- 2) refer back to the project team for further consideration; or
- 3) escalate the activity to the Chief Highways Engineer should the NSCRG feel that the issue has implications beyond its authority.

Approvals

E/5.12 Type A activities shall require no more than a 'business as usual' approach, and therefore will not require any additional approvals beyond those required by the governance process of the business area.

Type B activities

E/5.13 The SCRG shall decide whether or not to accept safety risk assessment outputs and decisions or will comment on the safety implications. This will be documented in the minutes of the SCRG.

E/5.14 The SCRG shall have the authority of the senior managers who ultimately sign off the safety risk assessment process outputs.

Type C activities

E/5.15 The NSCRG shall decide whether or not to accept safety risk assessment outputs and decisions or will comment on the safety implications. This will be documented in the minutes of the NSCRG.

E/6. 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.	Document
Ref 1.N	National Archives. UKPGA 1974/37, 'Health and Safety at Work etc. Act'
Ref 2.N	National Highways. GG 101, 'Introduction to the Design Manual for Roads and Bridges'
Ref 3.N	Health & Safety Executive. HSE Reducing Risks, 'Reducing Risks, Protecting People.'

E/7. Informative references

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

Ref.	Document
Ref 1.I	National Archives. UKPGA 2015/07, 'Infrastructure Act'
Ref 2.I	National Highways. Goulding, J. NSCRG & SCRG, 'Management arrangement for safety risk for National Highways activities'
Ref 3.I	BSI. BS EN IEC 31010, 'Risk management. Risk assessment techniques'
Ref 4.I	National Highways. NH SRA, 'Step by Step Guide to Safety Risk Assessment'
Ref 5.I	National Archives. UKSI 2015/51, 'The Construction (Design and Management) Regulations'
Ref 6.I	TAG Unit 2.1.5, 'Transport Appraisal Guidance Unit A4.1 Social Impact Appraisal, section 2.1.5'
Ref 7.I	TAG Unit 2.2.4, 'Transport Appraisal Guidance Unit A4.1 Social Impact Appraisal, section 2.2.4'

Appendix E/A. Safety risk assessment process

Figure E/A.1 Framework for safety risk assessment planning

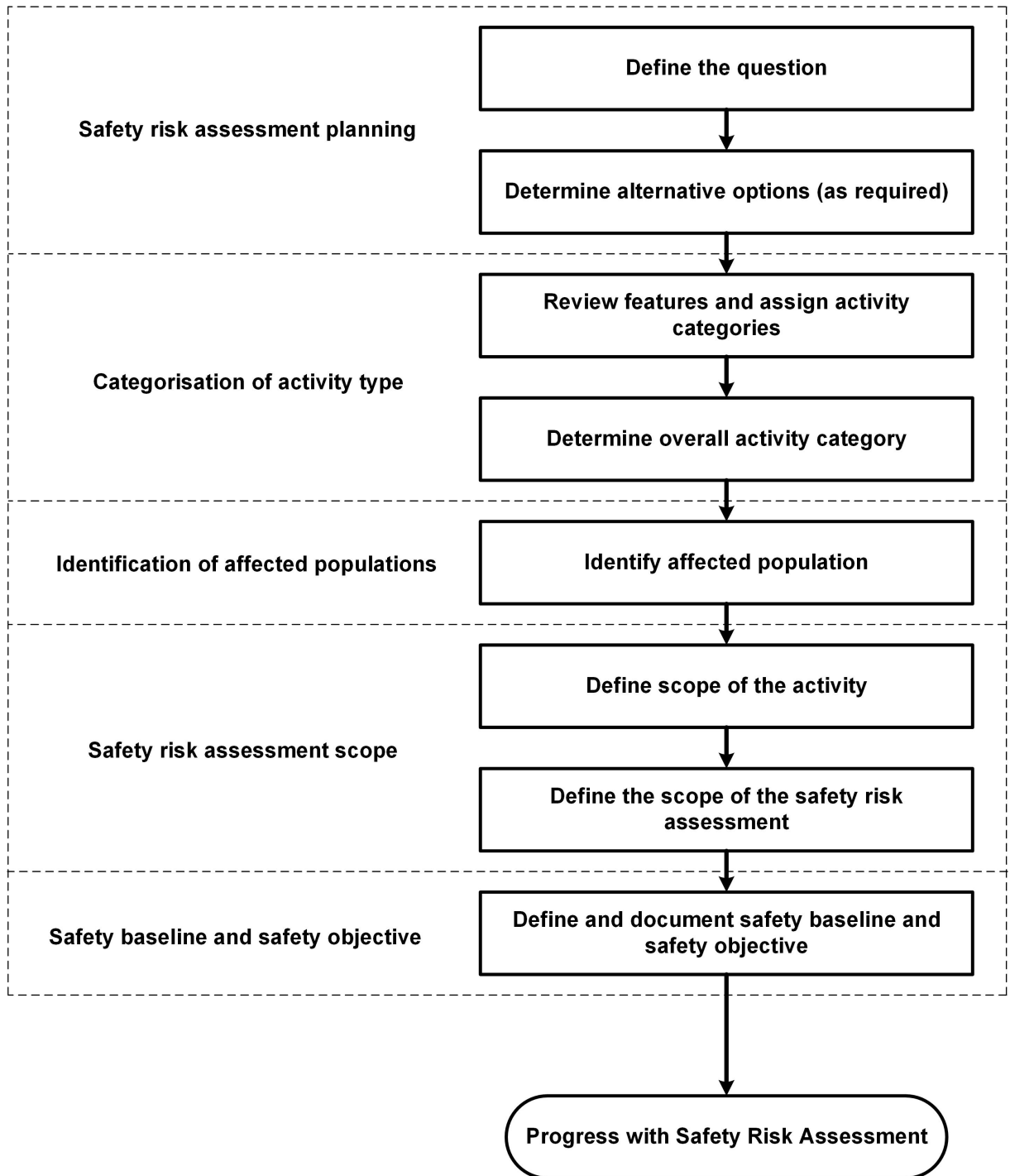


Figure E/A.2 Safety risk assessment process

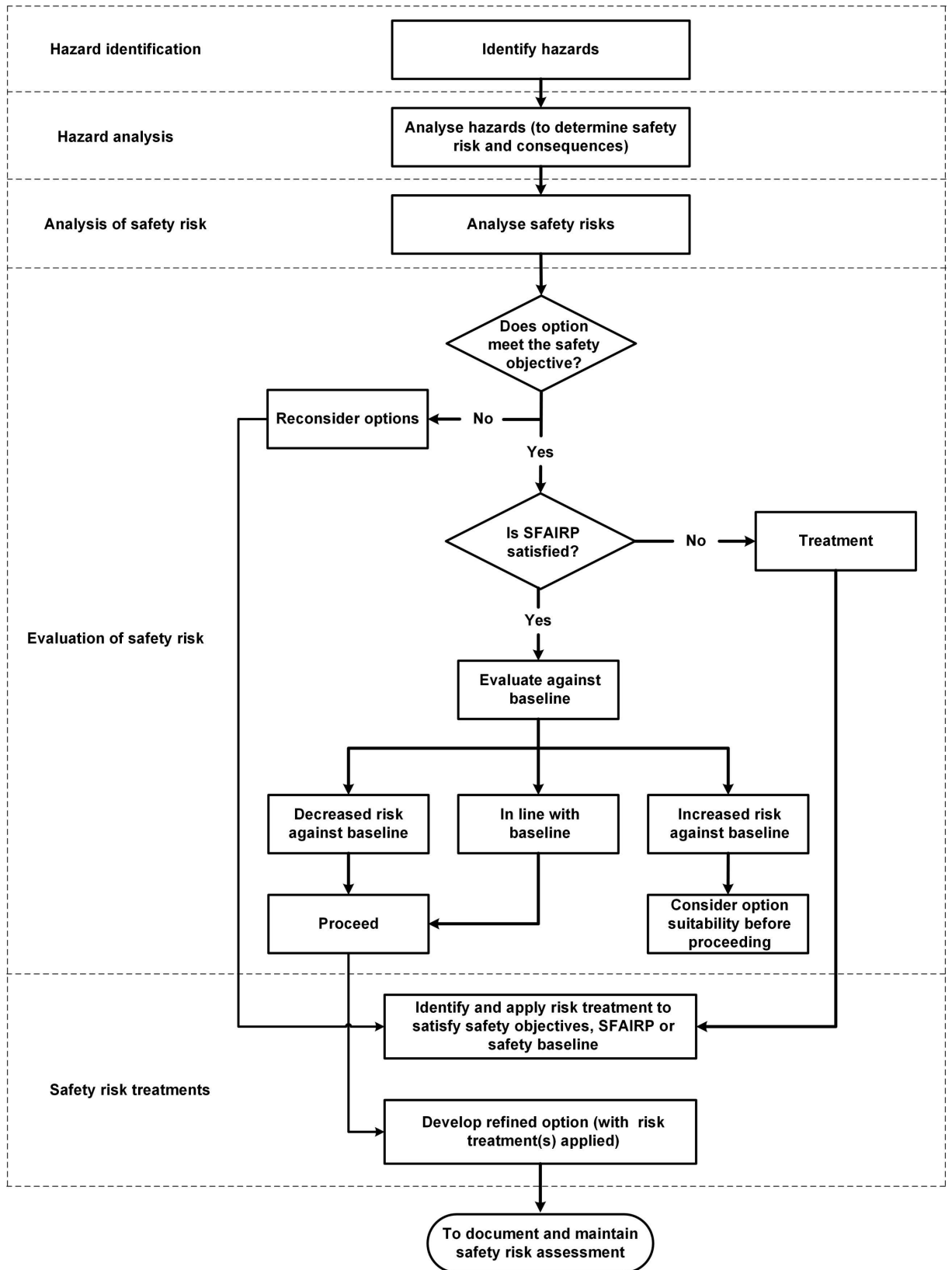
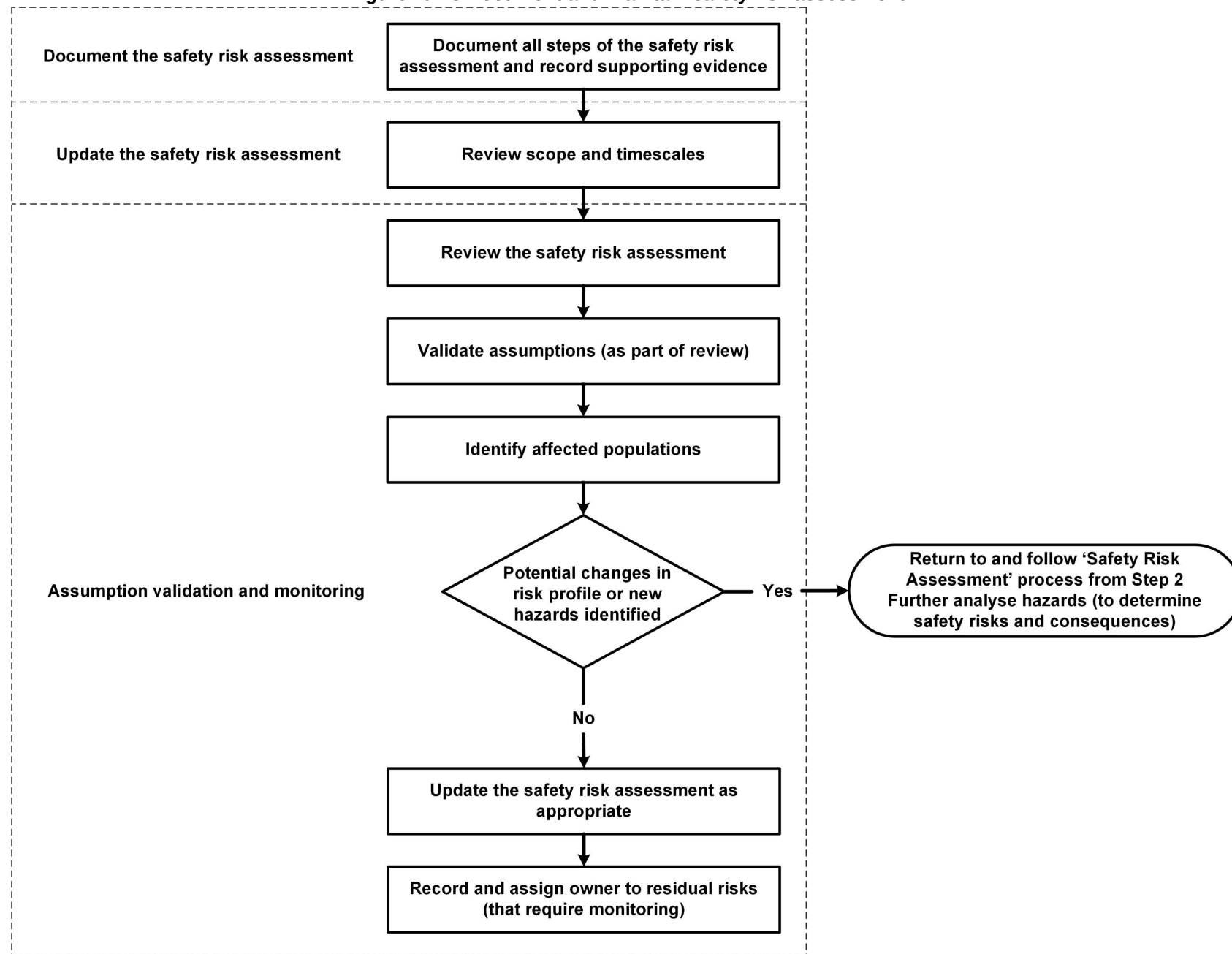


Figure E/A.3 Document and maintain safety risk assessment



Appendix E/B. Safety risk assessment tasks

Table E/B.1 (overleaf) lists the tasks for safety risk assessment

Table E/B.1 Safety risk assessment tasks

Framework safety risk assessment process steps	Task	Description of activity	Reason for carrying out the activity
<p>Safety risk assessment planning (Aspects covered:- Safety risk assessment process; Safety risk assessment planning; Categorisation of the activity; Identification of affected populations).</p>	<p>Develop a plan for safety.</p>	<p>Document a clear plan of how safety risk will be managed for all populations throughout the life cycle of the activity. Define the specific safety risk activities that will be undertaken for the activity. In activities categorised as Type B or C establish a safety control review group to accept the categorisation. An activity to be referred to the NSCRG where any individual feature other than stakeholder impact and interest is categorised as type C, and where the activity scale feature has the potential for an increase to a type C categorisation.</p>	<p>Supports the planning of safety activities and demonstrates that a defined safety risk management approach is being used. Establish roles and responsibilities. Provides a means of communicating to and educating stakeholders as to how the project will achieve its safety objectives.</p>
<p>Safety baseline and objectives.</p>	<p>Define and document the safety baseline and safety objective.</p>	<p>Document a suitable baseline for the activity. Document objectives to cover relevant populations and align with wider National Highways safety and risk objectives.</p>	<p>Allow the effect of the activity to be measured. A safety baseline is needed to measure the achievement of the safety objective. Have a clear understanding of the rationale to be pursued for managing safety for the different populations affected by the activity.</p>

Table E/B.1 Safety risk assessment tasks (continued)

Framework safety risk assessment process steps	Task	Description of activity	Reason for carrying out the activity
Hazard identification and analysis. Analysis and evaluation of safety risk. Safety risk treatment.	Type A project - Risk assessment.	Identify and document reasonably foreseeable hazards associated with the activity for all populations. Conduct safety risk assessment. Record details of any residual risks, and provide clear guidance on how these will be managed/monitored into the future.	Supports the identification and documentation of the hazards that will affect the activity; enabling them to be appropriately safety risk assessed and subsequently treated. To assure any residual risks are handed over to the appropriate owner within National Highways for ongoing management.
	Type B project - Risk assessment.	As above, and conduct additional, appropriate safety risk assessments. Consider use of sensitivity analysis to support safety risk assessments.	As above. Provides additional detail and rigour to the safety risk assessments and ensures that options are informed by risk assessment. Sensitivity analysis on risk scores will help focus resources on areas where significant safety improvements are necessary.
	Type C project - Risk assessment.	As above, and conduct additional hazard analysis and appropriate safety risk assessment for all populations which may include: Preliminary hazard analysis (PHA); System hazard analysis (SHA); Sub-system hazard analysis (SSHA); Interface hazard analysis (IHA); Operation and support hazard analysis (OSHA)	Supports the identification of hazards arising from various sources and interfaces, enabling the activity to be thoroughly risk assessed and subsequent treatments proposed. The management of these hazards will be consolidated in a log of hazards.
Document the safety risk assessment.		Document all safety risk assessment tasks undertaken. Include evidence showing that appropriate safety objectives have been developed and demonstrate how these objectives have been achieved.	To demonstrate that the appropriate level of safety management has been undertaken to assess the expected safety performance.

Table E/B.1 Safety risk assessment tasks (continued)

Framework safety risk assessment process steps	Task	Description of activity	Reason for carrying out the activity
Update the safety risk assessment.	Updating safety documentation.	Safety risk assessments are live documents which are to be reviewed and updated throughout the life of the activity. If anything changes that affects the activity or component part(s) of it, a review to check that whatever has changed does not invalidate the safety risk assessment will be necessary.	Maintain documentation as a record of status of the safety risk assessment and records ongoing achievement of safety objectives. This activity demonstrates that the activity still meets all of the necessary safety requirements and that appropriate safety risk management is continuing.
Assumption validation and monitoring.	Define and document review scope and timescales.	Verify that the activity has implemented any identified safety requirements and assure that all planned safety activities have been adequately undertaken. Validate assumptions and meeting safety objectives. This will require post operational monitoring. If any activities have not been completed, or have been completed but not in accordance with the safety plan, then this will be reported to the National Highways project manager. Safety risk treatments will be developed, implemented and recorded.	To demonstrate that the safety requirements have been actioned. Validate that the activity design satisfies its safety objectives. It is important to make it clear what has been done to treat issues where activities have not been completed as planned, or outcomes are not as expected.

Appendix E/C. Example risk matrix

Table E/C.1 gives values for likelihood and severity of outcomes that can be assigned to qualitative data for the purposes of assessment.

Table E/C.1 gives example values for likelihood and severity of outcomes, which should be adapted to reflect activity needs and scaled appropriately to enable distinction between the scoring of hazards with different values.

Table E/C.1 provides example values only; qualitative values may provide a preferable scoring methodology, as outlined in the 'Step by Step Guide to Safety Risk Assessment'. Ref.: NH SRA [Ref 4.]

Table E/C.2 provides an example method of recording hazard identification and analysis of safety risk, risk values and safety risk control measures. The values for L, S and R may be taken from Table E/C.1.

Table E/C.2 represents an example methodology of recording hazard identification and analysis of safety risk, risk values and safety risk control measures. An appropriate methodology should be used for the activity being assessed, where available. Ref.: BS EN IEC 31010 [Ref 3.]

Table E/C.2. Cumulative scoring should not be used across multiple populations.

Table E/C.2. The hazard list should be the same for multiple activity options.

Table E/C.1 Risk value, likelihood and severity of outcomes that may be assigned to qualitative data for the purposes of assessment

Likelihood (L) x Severity (S) = Risk value (R)		Severity (S)				
		Minor harm; Minor damage or loss no injury	Moderate harm; Slight injury or illness, Moderate damage or loss	Serious harm; Serious injury or illness, Substantial damage or loss	Major harm; Fatal injury, Major damage or loss	Extreme harm; Multiple fatalities, Extreme loss or damage
Likelihood (L)	Very unlikely; Highly improbable, not known to occur	1	2	3	4	5
	Unlikely; Less than 1 per 10 years	2	4	6	8	10
	May happen; Once every 5-10 years	3	6	9	12	15
	Likely; Once every 1-4 years	4	8	12	16	20
	Almost certain; Once a year or more	5	10	15	20	25
Risk value (R)		Required action				
Low (1-9)		Ensure assumed control measures are maintained and reviewed as necessary.				
Medium (10-19)		Additional control measures needed to reduce risk rating to a level which is equivalent to a test of SFAIRP for the population concerned.				
High (20-25)		Hazard to be avoided or risk to be reduced to tolerable.				

Table E/C.2 Example method of recording hazard identification and analysis of safety risk, risk values and safety risk control measures

Activity/ Decision				
Assessor		Assessment date		Version
Reviewer		Review date		Version date
Approver		Approval date		
Contact details				

Table E/C.2 Example method of recording hazard identification and analysis of safety risk, risk values and safety risk control measures (continued)

Hazard ref.	Hazard description	Risk description	Population(s) affected	Sub-population(s) affected	Before			Response measure (s)	After			Details and assumptions	Monitoring requirement(s)
					Likelihood of incident	Severity of incident	Risk		Likelihood of incident	Severity of incident	Risk		
	What is the hazard? Where - does the hazard originate on the road network, or is it an external party hazard, and/or is it limited to specific surroundings or conditions? When - is the hazard limited to specific times? i.e. If A happens...	What consequence(s) does the hazard present? How does this have the potential to cause harm, loss or failure? i.e. Then B occurs...	Who - Which population(s) may be affected by the hazard and why? i.e. To who...	Which sub-population(s) are affected?	Likelihood of incident	Severity of incident	Risk	A hierarchy of treatments to be used. ¹	Likelihood of incident	Severity of incident	Risk	Any subsequent, residual risk to be documented, including: - Any additional population(s) affected. - Any assumptions made.	The detail of any active monitoring to be recorded here, and owner assigned.

Table E/C.2 Example method of recording hazard identification and analysis of safety risk, risk values and safety risk control measures (continued)

1													
2													
3													
4													
5													
6													
7													
8													

Note 1. Where the elimination of safety risks cannot be achieved or the costs to do so are grossly disproportionate, treatment measures for reducing risk through substitution, isolation, or engineering and administrative controls, are assessed in turn.

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Design Manual for Roads and Bridges



General Principles & Scheme Governance
General Information

GG 104 - NINAA

Northern Ireland National Application Annex for Requirements for safety risk assessment

(formerly None)

Version 0.1.0

Summary

The requirements of GG 104 do not apply in Northern Ireland

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 team in the Department for Infrastructure, Northern Ireland. The email address for all enquiries and feedback is: dcu@infrastructure-ni.gov.uk

This is a controlled document.

Release notes	2
NI/1. Applicability	3

Latest release notes

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
GG 104 - NINAA	0.1.0	January 2025	Northern Ireland NAA	Incremental change to requirements
Department for Infrastructure, Northern Ireland National Application Annex to GG 104. [Publication January 2025.]				

Previous versions

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
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NI/1. Applicability

NI/1.1 The requirements of GG 104 shall not apply in Northern Ireland.

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General Principles & Scheme Governance
General Information

GG 104 - SNAA

Scotland National Application Annex for Requirements for safety risk assessment

(formerly None)

Version 0.1.0

Summary

The requirements of GG 104 do not apply in Scotland

Feedback and Enquiries

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Release notes	2
S/1. Applicability	3

Latest release notes

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
GG 104 - SNAA	0.1.0	January 2025	Scotland NAA	Incremental change to requirements
Transport Scotland National Application Annex to GG 104. [Publication January 2025.]				

Previous versions

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
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S/1. Applicability

S/1.1 The requirements of GG 104 shall not apply in Scotland.

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Llywodraeth Cymru
Welsh Government

General Principles & Scheme Governance
General Information

GG 104 - WNAA

Wales National Application Annex for Requirements for safety risk assessment

(formerly None)

Version 0.1.0

Summary

The requirements of GG 104 do not apply in Wales

Feedback and Enquiries

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Release notes	2
W/1. Applicability	3

Latest release notes

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
GG 104 - WNAA	0.1.0	January 2025	Wales NAA	Incremental change to requirements
Welsh Government National Application Annex to GG 104. [Publication January 2025.]				

Previous versions

Document code	Version number	Date of publication of relevant change	Changes made to	Type of change
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W/1. Applicability

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