



# Guidelines on the information to be contained in Environmental Impact Assessment Reports

# ENVIRONMENTAL PROTECTION AGENCY

The EPA is responsible for protecting and improving the environment as a valuable asset for the people of Ireland. We are committed to protecting people and the environment from the harmful effects of radiation and pollution.

## The work of the EPA can be divided into three main areas:

**Regulation:** *Implementing regulation and environmental compliance systems to deliver good environmental outcomes and target those who don't comply.*

**Knowledge:** *Providing high quality, targeted and timely environmental data, information and assessment to inform decision making.*

**Advocacy:** *Working with others to advocate for a clean, productive and well protected environment and for sustainable environmental practices.*

## Our responsibilities include:

### Licensing

- Large-scale industrial, waste and petrol storage activities;
- Urban waste water discharges;
- The contained use and controlled release of Genetically Modified Organisms;
- Sources of ionising radiation;
- Greenhouse gas emissions from industry and aviation through the EU Emissions Trading Scheme.

### National Environmental Enforcement

- Audit and inspection of EPA licensed facilities;
- Drive the implementation of best practice in regulated activities and facilities;
- Oversee local authority responsibilities for environmental protection;
- Regulate the quality of public drinking water and enforce urban waste water discharge authorisations;
- Assess and report on public and private drinking water quality;
- Co-ordinate a network of public service organisations to support action against environmental crime;
- Prosecute those who flout environmental law and damage the environment.

### Waste Management and Chemicals in the Environment

- Implement and enforce waste regulations including national enforcement issues;
- Prepare and publish national waste statistics and the National Hazardous Waste Management Plan;
- Develop and implement the National Waste Prevention Programme;
- Implement and report on legislation on the control of chemicals in the environment.

### Water Management

- Engage with national and regional governance and operational structures to implement the Water Framework Directive;
- Monitor, assess and report on the quality of rivers, lakes, transitional and coastal waters, bathing waters and groundwaters, and measurement of water levels and river flows.

### Climate Science & Climate Change

- Publish Ireland's greenhouse gas emission inventories and projections;
- Provide the Secretariat to the Climate Change Advisory Council and support to the National Dialogue on Climate Action;
- Support National, EU and UN Climate Science and Policy development activities.

### Environmental Monitoring & Assessment

- Design and implement national environmental monitoring systems: technology, data management, analysis and forecasting;
- Produce the State of Ireland's Environment and Indicator Reports;
- Monitor air quality and implement the EU Clean Air for Europe Directive, the Convention on Long Range Transboundary Air Pollution, and the National Emissions Ceiling Directive;
- Oversee the implementation of the Environmental Noise Directive;
- Assess the impact of proposed plans and programmes on the Irish environment.
- Environmental Research and Development
- Coordinate and fund national environmental research activity to identify pressures, inform policy and provide solutions;
- Collaborate with national and EU environmental research activity.

### Radiological Protection

- Monitoring radiation levels and assess public exposure to ionising radiation and electromagnetic fields;
- Assist in developing national plans for emergencies arising from nuclear accidents;
- Monitor developments abroad relating to nuclear installations and radiological safety;
- Provide, or oversee the provision of, specialist radiation protection services.

### Guidance, Awareness Raising, and Accessible Information

- Provide independent evidence-based reporting, advice and guidance to Government, industry and the public on environmental and radiological protection topics;
- Promote the link between health and wellbeing, the economy and a clean environment;
- Promote environmental awareness including supporting behaviours for resource efficiency and climate transition;
- Promote radon testing in homes and workplaces and encourage remediation where necessary.

### Partnership and networking

- Work with international and national agencies, regional and local authorities, non-governmental organisations, representative bodies and government departments to deliver environmental and radiological protection, research coordination and science-based decision making.

### Management and structure of the EPA

The EPA is managed by a full time Board, consisting of a Director General and five Directors. The work is carried out across five Offices:

- Office of Environmental Sustainability
- Office of Environmental Enforcement
- Office of Evidence and Assessment
- Office of Radiation Protection and Environmental Monitoring
- Office of Communications and Corporate Services

The EPA is assisted by advisory committees who meet regularly to discuss issues of concern and provide advice to the Board.



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Published May 2022

## ACKNOWLEDGEMENTS

The revision of the Guidelines was carried out by CAAS Ltd in close collaboration with a Working Group convened by the Environmental Protection Agency (EPA). This group was chaired by the Agency and comprised members of the following government departments, institutes and agencies: Department of Housing, Local Government and Heritage, Department of the Environment, Climate and Communications, An Bord Pleanála, Office of the Planning Regulator, Office of Public Works, National Parks & Wildlife Service, Northern and Western Regional Assembly, Irish Planning Institute and Local Authorities Planning/County and City Managers Association. This group met at key stages to discuss emerging issues, to offer comments and to give direction on revision of the Guidelines. The EPA wishes to express its appreciation to the members of the Working Group, and their contribution in the preparation of the Guidelines is gratefully acknowledged.

This report was prepared following a public consultation process. The EPA also acknowledges those who made submissions during the public consultation phase.

EPA personnel who provided photographs were: Ruth Little, Sorcha Ní Longphuirt and Marian Doyle. Other photographs were provided by: Brian Burke, Birdwatch Ireland.

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# 1. INTRODUCTION

## 1.1 INTRODUCTION

The Environmental Protection Agency is required by the EPA Act 1992, as amended<sup>1</sup>, under which it was established, to:

‘prepare guidelines on information to be contained in environmental impact assessment reports.’

The Act goes on to state that:

‘Regard shall be had, in the preparation of an environmental impact assessment report in respect of development to which this section applies’ to these Guidelines and

‘A competent authority to which an environmental impact assessment report is submitted in respect of development to which this section applies shall, in considering the said statement, have regard’ to these Guidelines.

For clarity, these Guidelines apply to the preparation of all Environmental Impact Assessment Reports undertaken in the State, not just the regimes for which the EPA is a competent authority. Since the first *Draft Guidelines on the information to be contained in Environmental Impact Statements* were produced in 1995<sup>2</sup>, Environmental Impact Assessment (EIA) has come to play a central role in decision-making. It features heavily at oral hearings before An Bord Pleanála and has had a high rate of appearance in European Court of Justice proceedings, while an increasing number of judicial reviews<sup>3</sup> seek to contest the adequacy of the EIA process for projects. EIA has become more prominent in relation to other consent processes such as Forestry, Agriculture and EPA related regimes (Waste, Integrated Pollution Control, Industrial Emissions and Waste Water Licensing). This background points to the importance of having authoritative and agreed guidelines for the information that should be available to those involved in EIA across all the various consent systems.

Furthermore, there are increased social and legal<sup>4</sup> emphases on the need for meaningful public participation in decisions relating to environmental issues. In this context, it is more important than ever to ensure that information is available in a format that is clear, concise and accessible to the greatest number of people – and certainly to a wider audience than the professional experts and officials who are involved in EIA.

The Guidelines were made available in draft format following the transposition deadline of 16 May 2017 set down in *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 (EIA Directive)*. The Guidelines have been updated following the introduction of transposing legislation and are now formally adopted and published by the Environmental Protection Agency.

1 Section 72 of Environmental Protection Agency Act, 1992 (as amended).

2 The first Guidelines were produced (as draft) in 1995. They were updated and published in 2002.

3 Public decisions made by administrative bodies and the lower courts may be judicially reviewed by the High Court. In a judicial review the court is not concerned with the merits of the decision but rather with the lawfulness of the decision-making process, that is, how the decision was made and the fairness of it. (See [www.citizensinformation.ie](http://www.citizensinformation.ie) for more information.)

4 ref. Aarhus Convention (The United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters), made at Aarhus, Denmark, 25 June 1998.

Comprehensive lists of all relevant legislation, case law, etc., are avoided as they may become quickly outdated. Instead key examples are referred to, where particularly significant. Knowledge, understanding and application of all aspects of EIA are subject to emerging case law in the national and European courts. The case law reflected in these Guidelines is not exhaustive, and any subsequent case law or legislation should be considered.

The preparation of these updated Guidelines<sup>5</sup> has involved extensive consultation. Participants in this consultation included government departments, national agencies, regional and local government, independent statutory bodies, non-governmental organisations, members of the public, developers and bodies representing various professional, industrial and sectoral groups.

**Where these Guidelines refer to the 'amended Directive' this means the codified Directive 2011/92/EU as amended by Directive 2014/52/EU (EIA Directive). An *informal consolidated version of 2011/92/EU as amended by 2014/52/EU* is provided by the Commission. This is a useful reference document; however, it does not have legal standing.**

## 1.2 THE AMENDED DIRECTIVE

The amended Directive uses the term Environmental Impact Assessment Report for what was formerly referred to in Irish legislation as an Environmental Impact Statement. These Guidelines use the new term and its initialism, EIAR.

The changes introduced by Directive 2014/52/EU are fully described in the Directive. Compliance with the amended Directive requires nothing less than was previously required.

## 1.3 LEGISLATION

The amended Directive has been transposed into the relevant domestic statutory provisions.

All domestic legislation is available at [irishstatutebook.ie](http://irishstatutebook.ie).

These Guidelines generally refer to the amended Directive rather than the domestic legislation, as this sets the fundamental framework which must be complied with by each Member State.

## 1.4 THE PURPOSE OF THE GUIDELINES

The Guidelines have been drafted with the primary objective of improving the quality of EIARs with a view to facilitating compliance (with the Directive). By doing so they contribute to a high level of protection for the environment through better informed decision-making processes. They are written with a focus on the obligations of developers<sup>6</sup> who are preparing EIARs.

<sup>5</sup> For the remainder of this document, the term 'the Guidelines' is used as an abbreviation of the full title of the '*Guidelines on the information to be contained in Environmental Impact Assessment Reports*'.

<sup>6</sup> "Developer" means the applicant for authorisation for a private project or the public authority which initiates a project (Article 1 of amended Directive).

This includes EIARs for all types of projects<sup>7</sup> covered by the Directive. The Guidelines are also intended to provide all parties in the EIA process, including competent authorities (CAs), with an authoritative reference to be regarded when considering an EIAR.

The CA is the authority charged with examining an EIAR with a view to issuing a consent and includes the Minister, public or statutory body or public authority to which the EIAR is required to be submitted.

The Guidelines emphasise the importance of the methods used in the preparation of an EIAR to ensure that the information presented is adequate and relevant.



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7 ref. [section 2.1](#) Introduction.

'Data and information included by the developer in the environmental impact assessment report, in accordance with Annex IV to Directive 2011/92/EU, should be complete and of sufficiently high quality'.

**Recital (32) of  
Directive  
2014/52/EU**

The Guidelines will assist all parties who contribute to deciding what the focus of the EIAR should be. This should improve clarity on the adequacy of concise EIARs that concentrate on the likely significant effects. In turn, this should also help to reduce the time, effort and expense required to prepare and evaluate EIARs. More importantly it should make the overall process clearer and easier to understand and should make it easier for the public to participate.

Having regard to the Guidelines will result in better environmental protection by ensuring that the EIA process identifies effects early and accurately. This will better inform the decision-making processes. It will also help to ensure that projects fit better with their physical, biological and human surroundings. This, in turn, contributes to improved protection of the environment, which is the objective of the EIA Directive.

These Guidelines are separate to the *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*<sup>8</sup> which relate to the responsibilities of planning authorities and An Bord Pleanála as Competent Authorities in carrying out their environmental impact assessments.

European Commission guidance documents on the Environmental Impact Assessment of Projects (Guidance on Screening, Scoping, and the preparation of the EIAR) are available on the Commission website<sup>9</sup>.

It should be noted that it is the responsibility of the developer or their agent(s) to have up-to-date knowledge of the case law and legislation that is applicable to their proposal.

## 1.5 STRUCTURE OF THE GUIDELINES

This document – the *Guidelines on the information to be contained in Environmental Impact Assessment Reports* - concentrates on the principles and associated practice of preparing EIARs. It is a statutory document that should be regarded by developers, practitioners and CAs – as set out in section 1.1 above.

Following this Introduction, the document is organised into three parts to provide guidance on:

1. The role of EIARs in the EIA process and fundamental considerations in the preparation of an EIAR, including consideration of alternatives, avoidance of significant adverse effects, mitigation and monitoring, provision of relevant information, public participation and objectivity.
2. The key activities involved in the preparation of an EIAR, namely screening, scoping, consultation, consideration of alternatives, establishing the baseline, assessment of effects, mitigation of significant adverse effects and assessing residual effects.
3. Guidance on the presentation of information.

This document contains links to specific legal and other relevant information that is available elsewhere.

<sup>8</sup> Department of Housing, Planning and Local Government, 2018.

<sup>9</sup> <https://op.europa.eu/en/publication-detail/-/publication/2b399830-cb4b-11e7-a5d5-01aa75ed71a1>

The information provided in the *Advice Notes for preparing Environmental Impact Assessment Reports*<sup>10</sup> provides greater detail by way of practical guidance on individual environmental factors and on the likely ranges of effects caused by different project types. The Advice Notes is a non-statutory document which goes beyond the requirements of the EPA Act. The provision of Section 72(3)(b) of the EPA Act does not apply to the Advice Notes.

## 2. CONTEXT AND GENERAL APPROACH

### 2.1 INTRODUCTION

Before commencing it is important to clarify two terms. EIA stands for the *process* of Environmental Impact Assessment. The Environmental Impact Assessment Report (EIAR) is the principal *document* that the EIA process is based on. These two terms are described below, separately and in detail.

While these Guidelines follow the amended Directive by using the term Environmental Impact Assessment Report (EIAR), the term Environmental Impact Statement (EIS) may continue to appear in other guidelines and related documents until such time as those documents are updated.

As stated in section 1, the primary purpose of the Guidelines is to set out what information needs to be contained in an EIAR as well as the methods used in preparing it. However, as EIARs are integral to the EIA process, it is important for those preparing these reports to be familiar with the process. This helps all involved to understand where the information presented in an EIAR comes from, why it is included and what the purpose of the EIAR is.

It is important to note that details of processes, roles, titles and terminology vary under different pieces of legislation. For the purposes of the Guidelines, the term 'project' is used to encompass all of the various forms of development, works and activity<sup>11</sup> which are subject to EIA requirements, as set out in the relevant legislation and as understood by the Directive.

The Guidelines advise on general principles and methods only. All parties to the EIA need to take responsibility for being aware of requirements of the legislation pursuant to which the EIAR is being prepared.

This section gives an overview of the EIA process and explains the role that an EIAR plays in it.

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10 Available on the EPA website [www.epa.ie](http://www.epa.ie)

11 'Activity' means any process, development or operation specified in the First Schedule and carried out in an installation, Environmental Protection Agency Act 1992, as amended.

## 2.2 WHAT IS AN ENVIRONMENTAL IMPACT ASSESSMENT REPORT?

An EIAR is defined in the Planning and Development Act<sup>12</sup> as:

‘a report of the effects, if any, which proposed development, if carried out, would have on the environment and shall include the information specified in Annex IV of the Environmental Impact Assessment Directive’

The EIAR is prepared by the developer<sup>13</sup> and is submitted to a CA as part of a consent process. The CA uses the information provided to assess the environmental effects of the project and, in the context of other considerations, to help determine if consent should be granted. The information in the EIAR is also used by other parties to understand the significant effects of the project and its effects and to inform their submissions to the CA.

The EIAR presents the results of a systematic analysis and assessment of the significant effects of a proposed project on the receiving environment. The amended EIA Directive prescribes a range of environmental factors which are used to organise descriptions of the environment and these factors must be addressed in the EIAR. These are listed below. The EIAR should be prepared at a stage in the design process when changes can still be made to avoid significant adverse effects. This often results in the modification of the project to avoid or reduce effects through redesign.

### Article 3(1) of amended Directive

‘The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the following factors:

- a) population and human health;
- b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;
- c) land, soil, water, air and climate;
- d) material assets, cultural heritage and the landscape;
- e) the interaction between the factors referred to in points (a) to (d).’

<sup>12</sup> Planning and Development Act 2000, (as amended).

<sup>13</sup> In these Guidelines, the person or organisation proposing to carry out a project is generally referred to as the ‘developer’. This is consistent with the terminology of the Directive. In the Planning Act the equivalent term is the ‘applicant’.

The Directive describes what an EIAR is to contain, as follows:

'The information to be provided by the developer shall include at least:

- a) a description of the project comprising information on the site, design, size and other relevant features of the project;
- b) a description of the likely significant effects of the project on the environment;
- c) 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;
- d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;
- e) a non-technical summary of the information referred to in points (a) to (d); and
- f) any additional information specified in Annex IV relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected.

Where an opinion is issued pursuant to paragraph 2, the environmental impact assessment report shall be based on that opinion, and include the information that may reasonably be required for reaching a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. The developer shall, with a view to avoiding duplication of assessments, take into account the available results of other relevant assessments under Union or national legislation, in preparing the environmental impact assessment report.'

**Article 5(1) of  
amended Directive**

Clear, concise, unambiguous information is essential throughout an EIAR. A systematic approach, standard descriptive methods and the use of replicable assessment techniques and standardised effect descriptions contribute to ensuring that all likely significant effects are adequately considered and clearly communicated.

## 2.3 OVERVIEW OF THE EIA PROCESS

EIA is a process for anticipating and predicting the effects on the environment caused by a project. It is defined in the amended Directive as follows:

### Article 1(2)(g) of amended Directive

‘Environmental impact assessment means a process consisting of:

- i) the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2);
- ii) the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7;
- iii) the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7;
- iv) the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination; and
- v) the integration of the competent authority’s reasoned conclusion into any of the decisions referred to in Article 8a.’

EIA contributes to the environmental basis for the decision-making process. It is integrated into consent processes. This helps to ensure that the environmental consequences of the project are understood before a consent decision is reached.

Figures [2.1](#) and [2.2](#) illustrate how EIA is a systematic analysis of the proposed project in relation to the existing environment during a consent process.

EIA screening is usually carried out at the project design stage where it is decided whether EIA is required or not. If EIA is required, then the scope of the EIAR is established (scoping), after which the EIAR is prepared as part of the consent application.

Where significant effects are identified during the preparation of the EIAR, it may be possible for these to be avoided or reduced during consideration of alternatives and the design process. The analysis of effects can also contribute to environmental protection by identifying mitigation measures such as process improvements, for example.

After the developer applies for consent, the CA examines the EIAR, circulating it to statutory consultees<sup>14</sup> while also making it available to the public. In addition to its own consideration of the information presented in the EIAR, the CA takes account of other environmental information submitted by the developer, certain authorities and the public during the formal consent process<sup>15</sup>.

The CA then makes its decision to refuse or grant permission or to seek additional information, having regard to the information contained in the EIAR, among other considerations. The consent includes:

'any environmental conditions attached to the decision, a description of any features of the project and/or measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment as well as, where appropriate, monitoring measures.'

**Article 8a(1)(b) of amended Directive**

Significant adverse effects identified in the EIAR can also be used as reasons for a decision to refuse consent.

The consent decision is a key milestone which generally marks the end of the formal EIA process. The implementation of mitigation measures and any monitoring measures contained in the EIAR and consent decision continues after the formal EIA process is complete. This can happen during the construction, operation and, where relevant, the decommissioning stages of a project.

'Member States should ensure that mitigation and compensation measures are implemented, and that appropriate procedures are determined regarding the monitoring of significant adverse effects on the environment resulting from the construction and operation of a project, inter alia, to identify unforeseen significant adverse effects, in order to be able to undertake appropriate remedial action. Such monitoring should not duplicate or add to monitoring required pursuant to Union legislation other than this Directive and to national legislation.'

**Recital (35) of Directive 2014/52/ EU**

14 Bodies specified in the applicable legislation, e.g. Article 28 of the Planning and Development Regulations, 2001 (as amended).

15 ref section 5 of *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*, Department of Housing, Planning and Local Government, 2018.

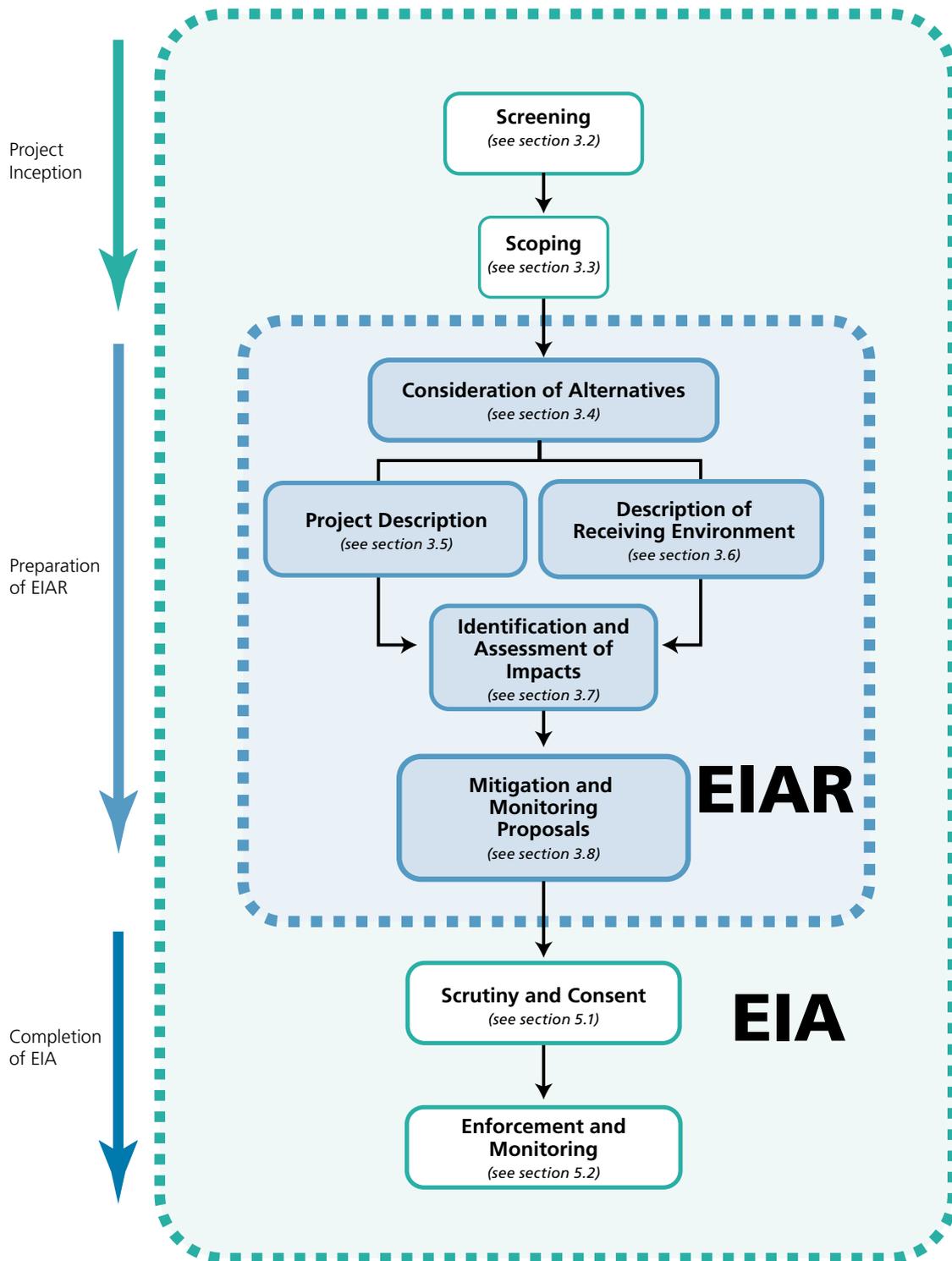
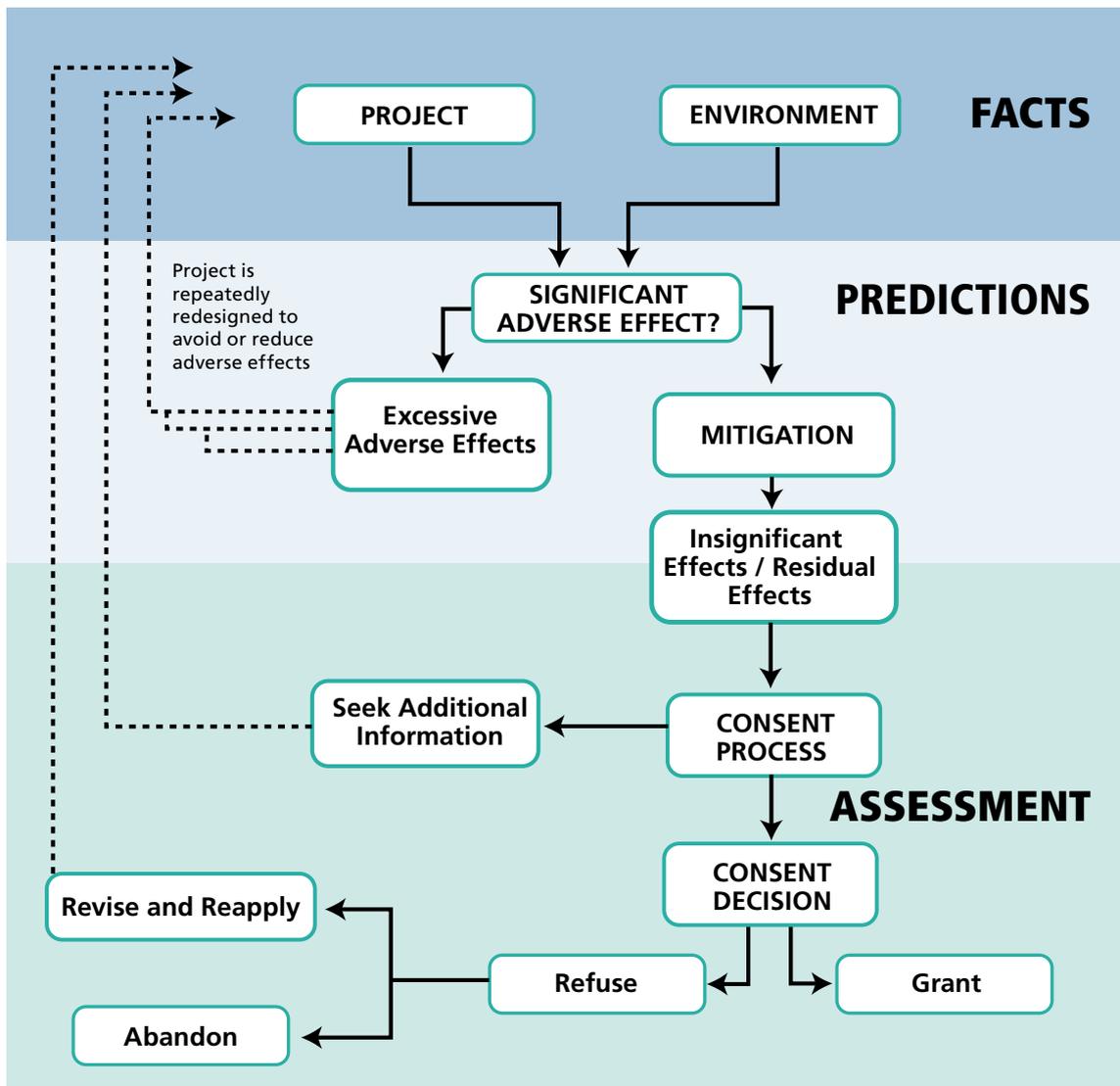


Figure 2.1 The Position of an EIAR within the EIA Process



This diagram illustrates that the EIA process can be considered as involving three main parts. The first consists of a compilation of facts – i.e. the description of the existing environment and the description of the proposed project. The second consists of predictions of likely effects – this may be carried out on an iterative basis as the design is improved to eliminate excessive adverse effects. The final part consists of the assessment of the environmental effects as part of a consent process which may decide to grant, condition, refuse or seek additional information.

Figure 2.2 EIA Process Flow Chart

## 2.4 FUNDAMENTAL PRINCIPLES

EIA provides a system of sharing information about the environment which enables effects to be foreseen and prevented during the design and consent stages. This provides the basis for protecting the environment and informs decision-making.

The fundamental principles to be followed when preparing an EIAR are:

- ▲ Anticipating, predicting, avoiding and reducing significant effects
- ▲ Assessing and mitigating effects
- ▲ Maintaining objectivity
- ▲ Ensuring clarity and quality
- ▲ Providing relevant information to decision makers
- ▲ Facilitating better consultation.

### 2.4.1 ANTICIPATING, AVOIDING AND MITIGATING SIGNIFICANT EFFECTS

Throughout the EIA process, anticipation of effects is the most effective means of avoiding significant adverse effects. Anticipation works best when applied in the earliest stages of a project. This involves forming preliminary opinions, usually in the absence of complete data on the approximate magnitude, character, duration and significance of the likely effects.

Relevant experience and expertise are particularly helpful for early anticipation of effects. The use of relevant guidance material, such as the material provided in these Guidelines and in the accompanying Advice Notes, can also be helpful for this early anticipation of effects.

Then, once effects are anticipated, potential ways to avoid them are explored. Preliminary opinions are shared as early as possible with the developer and the design team to help them to modify proposals so that significant adverse effects are avoided or minimised.

Effect avoidance is principally achieved by consideration of alternatives<sup>16</sup>. Where significant adverse effects are identified then alternative options are identified and evaluated. The objective is to adopt the combination of options that presents the best balance between avoidance of significant adverse environmental effects and achievement of the objectives that drive the project.

Alternatives may be identified at many levels and stages during the evolution of a project, from project concepts and site locations, through site layouts, technologies or operational plans and on to mitigation and any monitoring measures. Alternatives that are available for consideration at the earlier stages in the evolution of a project often represent the greatest potential for avoidance of significant adverse effects.

At its most effective, avoidance of effects can lead to an EIAR which predicts 'no significant adverse effects'. To avoid misinterpretation of this statement it is very important for the EIAR to provide transparent and objective evidence of the evaluation and iterative decision-making processes which led to the adoption or selection of the chosen option.

Assessment during the project design<sup>17</sup> typically involves a process of repeated steps, each involving design and re-design to try to get the best fit with a wide range of environmental factors. Each stage of the conception of the project is assessed, with questions such as 'is this the best site/route?', 'is this the best way to build this?' or 'is this the appropriate technology?' asked from the beginning until the design is completed. These stages will usually need to take account of a range of environmental issues, asking questions such as 'is this effect on this receptor significant or not?'

<sup>16</sup> ref. *section 3.4* Consideration of Alternatives.

<sup>17</sup> In this context, design refers to assessment by the developer rather than by the CA.

An effective way of achieving this is to maintain a dialogue between designers and competent experts throughout the design process with the designers adjusting the design in response to assessment by the specialists. The EIAR, particularly in the section describing the consideration of alternatives, records the key outcomes of these explorations.

#### **2.4.2 MAINTAINING OBJECTIVITY**

Objectivity has two key components. The first is derived from the rigour of the assessment and analysis. This ensures that replicable work based on high-quality scientific information is carried out using recognised methods that are presented in a fully transparent manner. The second is to ensure that credibility of the EIAR is not undermined by any perception of bias or subjectivity in assessments by experts lacking appropriate competency, objectivity or independence.

#### **2.4.3 ENSURING CLARITY AND QUALITY**

Clear, concise, unambiguous communication is essential throughout an EIAR. A systematic approach, standard descriptive methods and the use of replicable assessment techniques and standardised effect descriptions must be adopted to ensure that all likely significant effects are adequately considered and clearly communicated.

Adherence to the process, structure and content set out in the Directive ensures a systematic approach that is transparently supported by evidence supplied by competent experts throughout. The structure of clearly separating data (descriptions of the receiving environment and of the project) from predictions (effects) and mitigation measures facilitates the CA in their assessment of the likely conformity of effects with accepted standards and objectives.

#### **2.4.4 PROVIDING RELEVANT INFORMATION TO DECISION MAKERS**

An EIAR is prepared before a consent decision is made. This enables the CA to reach a decision in the full knowledge of the project's likely significant effects on the environment, if any. Information should be relevant, complete and legally compliant. It should also be appropriate to the requirements of the consent procedure and the scale of the project. The information should be systematically presented and assessed.

#### **2.4.5 FACILITATING BETTER CONSULTATION**

Good practice in preparing EIARs involves clear and focused consultation with various parties at key stages in the assessment process.

Compliance with the Aarhus Convention requires that the structure, presentation and the non-technical summary of the EIAR, as well as the arrangements for public access, all facilitate the dissemination of the information contained in the EIAR. The core objective of public consultation is to ensure that the public is made as fully aware as possible of the likely environmental impacts of projects prior to a decision being made by the CA.

Consultation is discussed in more detail in [section 2.6](#).

## 2.5 COMPETENCY OF EXPERTS

The Directive requires that:

**Article 5(3)(a) of amended Directive**

‘the developer shall ensure that the environmental impact assessment report is prepared by competent experts;’

It does not offer a definition of what would be considered competent expertise. The requirement for expertise on behalf of the developer and the CA is related to the significance, complexity and range of effects that an EIAR needs to assess. This will be reflected by an appropriate combination of experience, expertise and knowledge. It should be characterised by an appropriate knowledge of the latest and most appropriate scientific methodology and assessment procedures and by correct interpretation of data.

Competence includes an understanding of the legal context of the decision-making process and may often require a range of experts to cover the full range of the complexity of an environmental factor such as biodiversity, where the expertise of many disciplines may intersect.

**Recital (33) of Directive 2014/52/EU**

‘Experts involved in the preparation of environmental impact assessment reports should be qualified and competent. Sufficient expertise, in the relevant field of the project concerned, is required for the purpose of its examination by the competent authorities in order to ensure that the information provided by the developer is complete and of a high level of quality.’

In relation to planning, further guidance on competency is provided in the *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*<sup>18</sup>.

The introduction to the EIAR should include a list of the experts who have contributed to an EIAR, showing which parts of the EIAR they have worked on, their qualifications, experience and any other relevant credentials<sup>19</sup>. This facilitates an assessment of the competency in the team that prepared the EIAR.

## 2.6 CONSULTATION

Consultation is a key element of each stage of the EIA process. The requirement for consultation is included in the definition of EIA in the Directive<sup>20</sup> and there are procedures for statutory consultation at various stages in the EIA process. These are detailed in the relevant transposing legislation.

While it is generally best to commence pre-application consultation as early as possible, it is not obligatory during the preparation of an EIAR. The extent to which it is carried out is decided by the developer and their team on a case by case basis.

<sup>18</sup> Section 4.8 to 4.11, Department of Housing, Planning and Local Government, 2018.

<sup>19</sup> In relation to planning, this information is prescribed in Article 94 of the Planning and Development Regulations, 2001 (as amended).

<sup>20</sup> Article 1(2)(g)(ii) of amended Directive ([section 2.3](#) Overview of the EIA Process, above, refers).

The benefits of early consultation<sup>21</sup> include:

- ▲ Early identification and therefore more focused consideration of significant effects, a more focused EIAR, and a more focused scoping process.
- ▲ Reduction in consultees' time and/or input required later in the process.
- ▲ Early indication of the need for detailed survey work, especially relating to data that is required over several seasons.
- ▲ Early indication of the information required to assess the application in a manner that is proportionate and appropriate in defining the likely significant effects on the environment.
- ▲ It allows for early understanding of the potential concerns of the consultees, and encourages greater understanding of the project and the preparation of the EIAR by the consultees and decision maker
- ▲ It allows for the identification of opportunities to incorporate mitigation measures into the design of the proposal.

Most consultation carried out for the preparation of the EIAR takes place with the CA, other authorities<sup>22</sup>, specialist agencies and those parties that are most likely to be directly affected. Consultation by a developer with the local population can be helpful in identifying potentially significant concerns and issues. Consultation by a developer with the wider public during preparation of an EIAR tends to be used where the affected population may be very large, and/or difficult to identify. To be of value, such consultation needs to be allocated sufficient time and be expertly structured and managed to ensure clarity and consistency. The non-technical summary of an EIAR can be an effective tool in explaining the content of the EIAR to the wider public and facilitating their involvement in the statutory consultation during the consent determination stage.

It is important to distinguish between EIA related consultation – which gathers information – and the exercise of canvassing for project support, which often precedes or accompanies applications for permission. Where a proposer carries out the latter type, they should keep it clearly separate from consultation for the EIAR, which should maintain an objective and factual approach.

During the statutory consent determination process, the CA is obliged to consult with certain authorities. Consultation by a developer with these authorities (if they offer such a service) before formal submission for consent helps the developer to pre-empt issues which may be raised at this stage and to address them beforehand<sup>23</sup>.

The key stages at which consultation regarding the information to be contained in an EIAR may be carried out are detailed in section 3.

21 Adapted from *A handbook on environmental impact assessment Guidance for Competent Authorities, Consultees and others involved in the Environmental Impact Assessment Process in Scotland*, Scottish Natural Heritage, 5<sup>th</sup> Edition, 2018.

22 Bodies specified in the applicable legislation, e.g. Article 28 of the Planning and Development Regulations, 2001 (as amended).

23 See section 3.3.3 Consultation by Developer about Scoping.

## 2.6.1 TRANSBOUNDARY CONSULTATION

### Article 7(4) of amended Directive

'The Member States concerned shall enter into consultations regarding, inter alia, the potential transboundary effects of the project and the measures envisaged to reduce or eliminate such effects and shall agree on a reasonable time- frame for the duration of the consultation period. Such consultations may be conducted through an appropriate joint body.'

The Espoo (EIA) Convention<sup>24</sup> lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries. This convention is not limited to EU Member States and includes Great Britain and Northern Ireland.

In the case of an EIAR for any project that is likely to cause significant transboundary effects, contact with the relevant authorities in the UK (including Northern Ireland) or other States should be made. This may be discussed between the developer and the CA during pre-application consultation. Contact between the authorities will establish a consultation framework to consider and address these effects.



<sup>24</sup> *Convention on Environmental Impact Assessment in a Transboundary Context*, United Nations Economic Commission for Europe, 1991 (as amended), 2017.

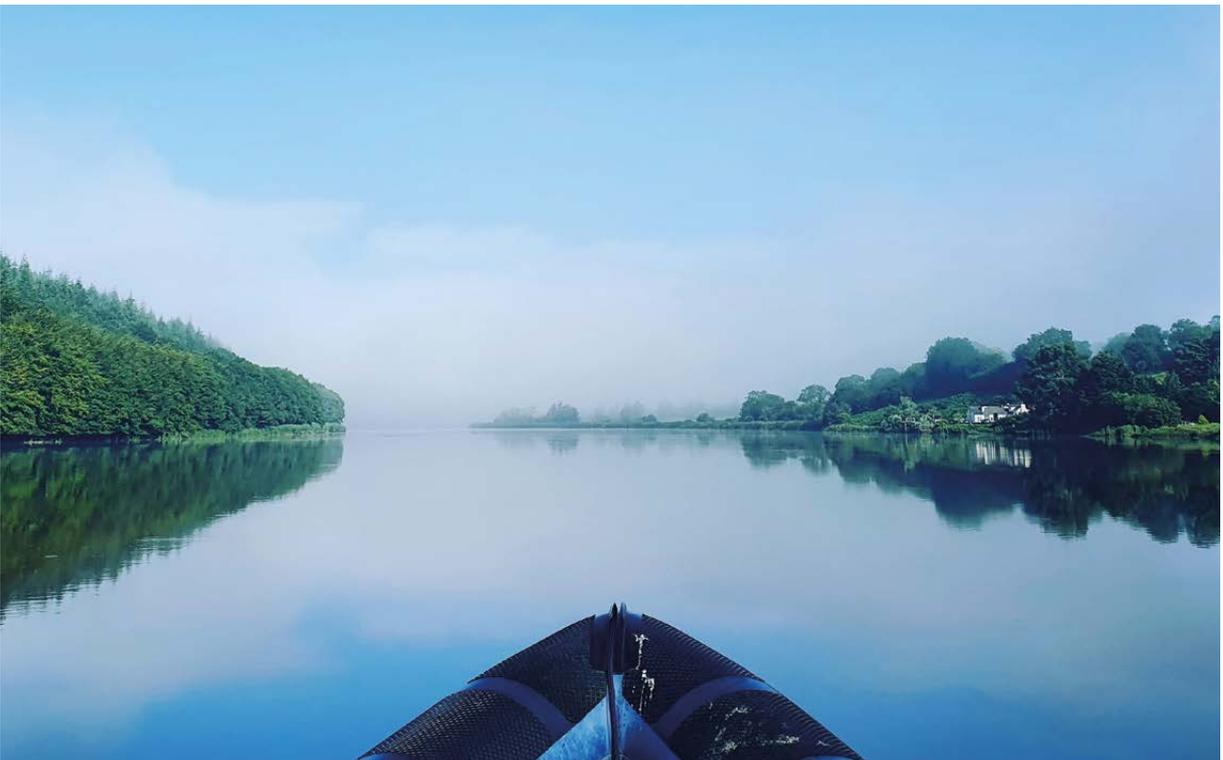
## 3. PREPARING AN EIAR

### 3.1 INTRODUCTION

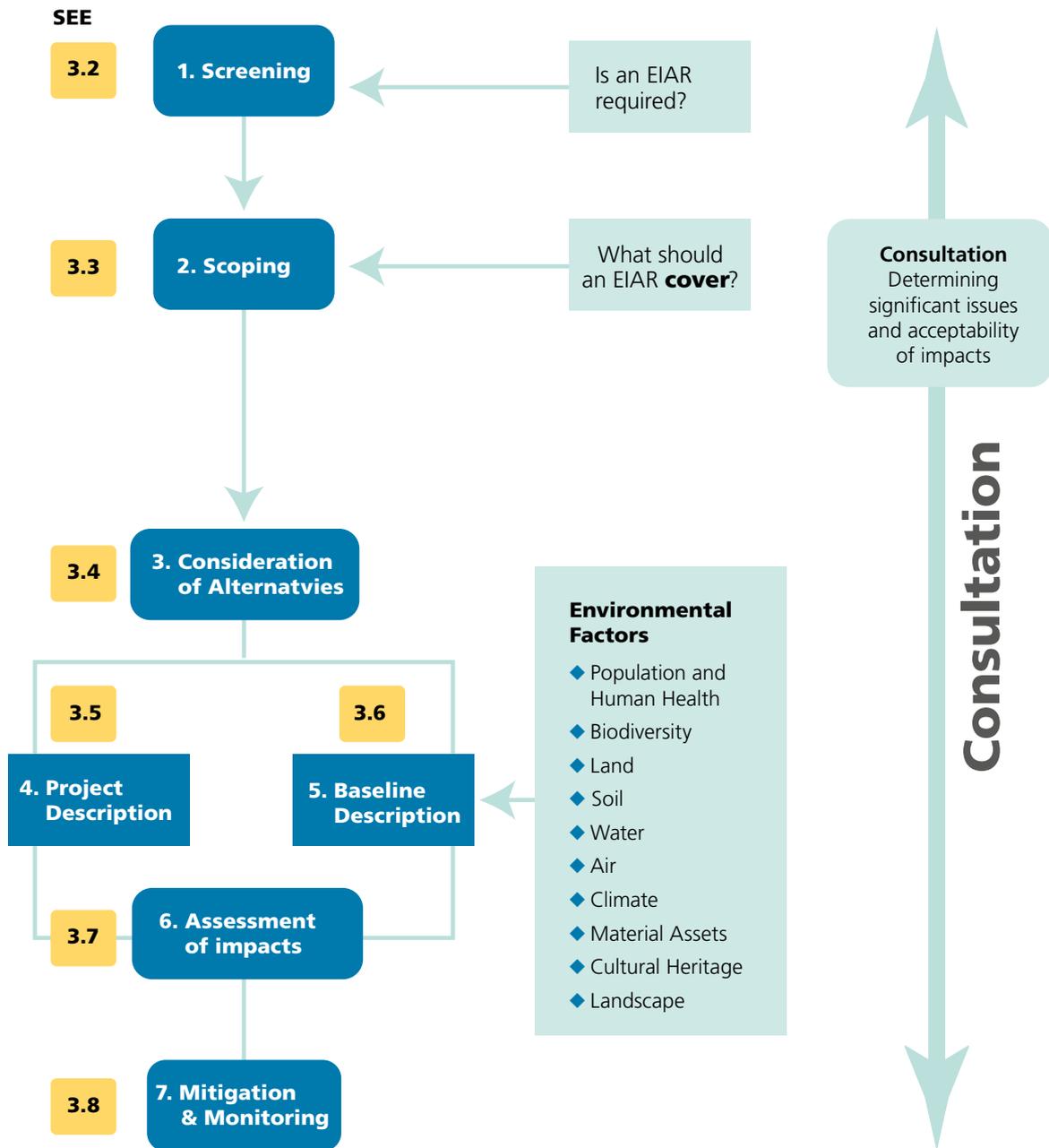
This section provides guidance on how to carry out each of the stages of work that are required to prepare an EIAR that complies with the relevant legislation<sup>25</sup>.

The schematic (Figure 3.1) details the steps involved in the preparation of an EIAR. The steps are largely sequential, but not necessarily consecutive and some elements may be carried out throughout.

The first step, *screening*, is to establish if an EIA is required or not. Screening is discussed in the next section.



25 [Section 1.3](#) Legislation.



The information that must be included in an EIAR is shown as seven steps in sequence in the diagram above. The environment is described under a number of specific headings that are shown on the right. Adherence to this general sequence and structure helps ensure an objective and systematic approach.

Figure 3.1 EIAR Contents in Sequence

## 3.2 SCREENING (STAGE 1 OF 7)

### 3.2.1 INTRODUCTION

Screening involves deciding whether an EIA needs to be undertaken or not. At the outset, it needs to be determined whether the proposal is a *project* as understood by these Guidelines. For the purposes of the Guidelines, the term project is used to encompass all of the various forms of development, works and activity which are subject to EIA requirements, as set out in the relevant legislation and as understood by the Directive<sup>26</sup>.

The decision-making process then proceeds by examining the relevant legislation which transposes Annexes I and II of the Directive. If this does not provide a clear screening outcome then the nature and extent of the project, site and the types of potential effects are examined. The totality of the project is considered<sup>27</sup>, including off-site and secondary projects as well as indirect, secondary and cumulative impacts<sup>28</sup>.

Figure 3.2 provides a step-by-step guide to the main steps involved in screening.

European Commission guidance on EIA screening is available on the Commission website<sup>29</sup>.

### 3.2.2 PROJECT TYPE

The first step is to examine whether the proposal is a *project* as understood by the Directive. Projects requiring environmental impact assessment are defined in Article 4, and set out in Annexes I and II, of the Directive<sup>30</sup>. If a proposed project is not of a type covered by the Directive, there is no statutory requirement for it to be subject to environmental impact assessment. However, this is a complex issue and regard should be had to the Directive's 'wide scope and broad purpose'<sup>31</sup>. In determining if the proposed project is of a type covered by the Directive it may be necessary to go beyond the general description of the project and to consider the component parts of the project and/or any processes arising from it. If any such parts or processes are significant and, in their own right, fall within a project type covered by the Directive, the proposed project as a whole may fall within the requirements of the Directive. The Commission document *Interpretation of definitions of project categories of annex I and II of the EIA Directive* provides useful guidance on project interpretation. Where doubt remains, consultation with the CA may be useful<sup>32</sup>.

### 3.2.3 THRESHOLDS

The next screening step is to determine whether the project exceeds a specific threshold. Thresholds are set out in the relevant legislation<sup>30</sup>. The only types of projects to which thresholds do not apply are those that are considered to always be likely to have significant effects; Integrated works for the initial smelting of cast iron and steel, for example.

Where a project is of a specified type but does not meet, or exceed the applicable threshold then the likelihood of the project having significant effects on the environment needs to be considered. Both the adverse and beneficial effects are considered<sup>33</sup>. This is done by reference to the criteria specified in Annex III of the amended Directive.

26 ref. Article 1(2)(a) of Amended Directive.

27 ref. [section 3.5](#) Describing the Proposed Project (Stage 4 of 7.)

28 ref. [Indirect, Secondary and/or Cumulative Impacts](#)

29 [Guidance on EIA Screening](#), European Commission, 2017.

30 Including but not limited to those projects specified in [Schedule 5 of the Planning and Development Regulations, 2001](#) as amended.

31 [Interpretations of definitions of project categories of annex I and II of the EIA Directive](#), EC, 2015.

32 ref. [section 3.2.4](#) Consultation on Screening.

33 Except in the case of project type 13(a) as listed in Annex II of the amended Directive. This covers project changes and extensions and requires EIA only where adverse effects are predicted.

**Recital (27) of  
Directive  
2014/52/EU**

The CA is also obliged to screen applications for consent for sub-threshold projects by reference to these criteria. Detailed guidance on this is given in the guidance for CAs regarding sub-threshold development<sup>34</sup>. While that guidance is intended for consent authorities<sup>35</sup>, the same considerations are relevant to developers or any parties involved in the EIA process.

'The screening procedure should ensure that an environmental impact assessment is only required for projects likely to have significant effects on the environment.'

The project needs to be considered in its entirety for screening purposes. This means that other related projects need to be identified and assessed at an appropriate level of detail. This will identify the likely significance of cumulative and indirect impacts, thus providing the CA with a context for their determination.

Dividing the project into separate parts so that each part is below an applicable threshold needs to be avoided. This is project-splitting and is not compliant with the Directive. (Ref. summary of C-142/07 below.)

Off-site or secondary projects also need to be considered at the screening stage. These are discussed in section 3.5.7, including reference to case law.

Applications for changes to or extensions of relevant projects should also be screened with regard to specified thresholds<sup>36</sup>.

**CASE LAW**

In Case C-142/07 *Ecologistas en Acción-CODA v Ayuntamiento de Madrid* (2008), the Court of Justice of the European Union (CJEU) held that by splitting most of the the project into sections that were less than 5 km (the threshold above which national legislation required EIA), there was a failure to consider cumulative and indirect impacts of the project.

The judgment in this case stated 'The objective of the EIA Directive cannot be circumvented by the splitting of projects. Where several projects, taken together, may have significant effects on the environment within the meaning of Article 2(1), their environmental impact should be assessed as a whole. It is necessary to consider projects jointly in particular where they are connected, follow on from one another, or their environmental effects overlap.'

The whole project needs to be described.

(Case law summaries in [section 3.5.6](#) and [section 3.5.7](#) also refer to project splitting.)

34 [Environmental Impact Assessment \(EIA\) Guidance for Consent Authorities regarding Sub-Threshold Development](#), Department of the Environment, Heritage and Local Government, 2003.

35 Including *competent* authorities.

36 ref Annex I(24) & Annex II(13) of amended Directive and transposing legislation.

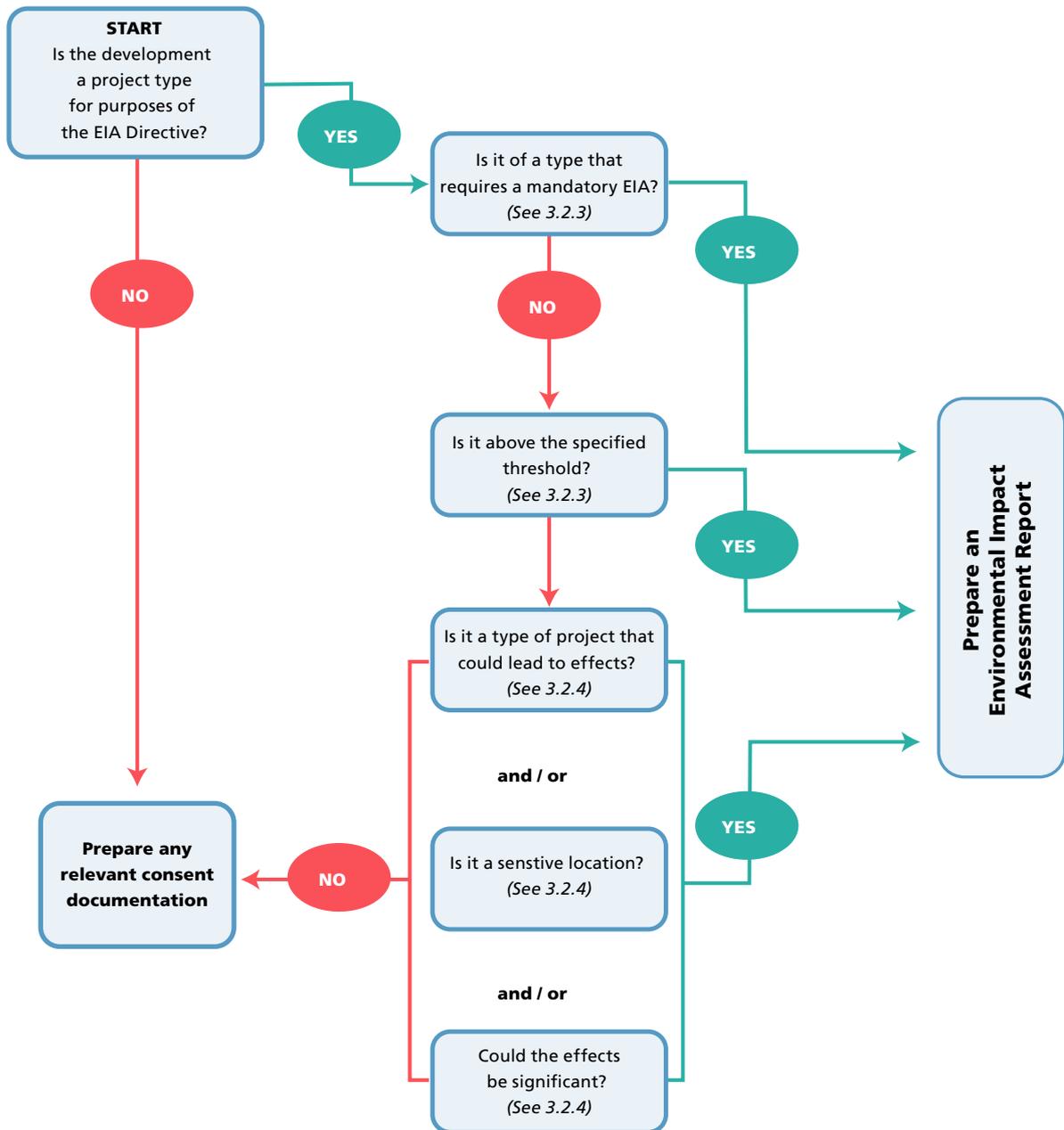


Figure 3.2 Screening

### 3.2.4 CONSULTATION ON SCREENING

During the screening stage, the applicant may seek to informally consult with the CA and other relevant authorities on EIA Screening. The applicant may prepare a report or written statement from a competent expert containing their view as to why an EIA is or is not required. This is usually presented as an EIA screening report. Authorities are not obliged to engage in informal consultation.

Where a developer wishes to engage in formal pre-application screening consultation with the CA, and subject to provisions of the legislation<sup>37</sup>, then the Directive specifies the following as information to be provided by the developer:

#### Annex II A of amended Directive

1. 'A description of the project, including in particular:
  - a) a description of the physical characteristics of the whole project and, where relevant, of demolition works;
  - b) a description of the location of the project, with particular regard to the environmental sensitivity of geographical areas likely to be affected.
2. A description of the aspects of the environment likely to be significantly affected by the project.
3. A description of any likely significant effects, to the extent of the information available on such effects, of the project on the environment resulting from:
  - a) the expected residues and emissions and the production of waste, where relevant;
  - b) the use of natural resources, in particular soil, land, water and biodiversity.

The criteria of Annex III shall be taken into account, where relevant, when compiling the information in accordance with points 1 to 3.'

On receipt of a formal screening determination request, the authority may consult with certain other authorities<sup>38</sup> with responsibility for environmental matters such as pollution control, nature protection, cultural heritage, water, waste or air. If the authority identifies that effects are likely under some factors but that, having regard to the prescribed screening criteria, these effects are insufficient to require an EIA, then they may suggest providing a separate report (or reports) on the affected factors.

Whether consultation is carried out on screening before the consent application is made or not, the CA screens a project for EIA as part of its consent determination process.

<sup>37</sup> Formal consultation on screening has not been provided for in all of the transposing legislation.

<sup>38</sup> Bodies specified in the applicable legislation, e.g. Article 28 of the Planning and Development Regulations, 2001 (as amended).

## 3.3 SCOPING (STAGE 2 OF 7)

### 3.3.1 OVERVIEW

'Scoping' is a process of deciding what information should be contained in an EIAR and what methods should be used to gather and assess that information. It is defined in the European Commission guidance<sup>39</sup> as:

'The process of identifying the content and extent of the information to be submitted to the Competent Authority under the EIA process'

Scoping is best carried out by personnel having appropriate expertise and relevant prior experience. Knowledge of the characteristics of the project type and of the sensitivities likely to be present in the receiving environment are particularly useful for scoping.

The legislation provides for developers to formally request the opinion of the CA on the scope of an EIAR<sup>40</sup>. This can be availed of for any project requiring an EIAR (ref section 3.3.3 below).

The provision of sufficient detail at the scoping stage is the best way to facilitate useful and specific responses from consultees.

Scoping is carried out on a case-by-case basis because the significant issues for different projects are unlikely to ever be identical. However, there are standard issues that a developer should consider for each project to establish whether they apply in specific cases. The Advice Notes contain guidance on relevant environmental factors for principal project types.

The potential for likely significant effects throughout different phases of the proposed project are considered as far as possible at scoping stage – whether they would individually require consent or not. These include, as relevant, site investigations, construction, commissioning and operation to eventual decommissioning. Scoping also considers the range of alternatives to be considered in an EIAR.

Detailed guidance on scoping can be found in many publications including the Advice Notes and the European Commission Guidance referred to above. Published guidance is typically focused on individual sectors (e.g. infrastructural projects) or on specialist topics (e.g. geology) and reference to both types is generally beneficial.

39 [Guidance on EIA Scoping](#), European Commission, 2017.

40 ref. Article 5(2) of [amended Directive](#) and transposing legislation ([Section 1.3](#) Legislation).

### 3.3.2 PARTICIPANTS IN SCOPING

The scope of the EIAR commonly emerges from a dialogue between some or all of the following:

- ▲ *The developer* and their team, including competent experts, *who* may propose an initial draft of the scope on the basis of their knowledge of the project, the site and the likely relevant issues
- ▲ *The Competent Authority (CA)* who will have extensive knowledge of the context and local issues and concerns, as well as detailed knowledge of statutory requirements
- ▲ *Other Authorities*<sup>41</sup>, *Agencies and NGOs* who typically have a detailed understanding of aspects of the environment that may be affected
- ▲ *The Public*, either individually or in groups, who are likely to have either thematically specific or area-specific concerns. Local residents are likely to be key participants for most projects.

More information on the roles of all participants is given in the Advice Notes.

### 3.3.3 CONSULTATION BY DEVELOPER ABOUT SCOPING

There can be considerable benefits in the developer engaging in early consultation about the scope of an EIAR to help to identify the relevant issues. This can be done formally (under the legislation) or informally.

'2. Where requested by the developer, the competent authority, taking into account the information provided by the developer in particular on the specific characteristics of the project, including its location and technical capacity, and its likely impact on the environment, shall issue an opinion on the scope and level of detail of the information to be included by the developer in the environmental impact assessment report in accordance with paragraph 1 of this Article. The competent authority shall consult the authorities referred to in Article 6(1) before it gives its opinion.'

and

'Where an opinion is issued pursuant to paragraph 2, the environmental impact assessment report shall be based on that opinion, and include the information that may reasonably be required for reaching a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment.'

**Article 5(2) and  
extract from  
Article 5(3) of  
amended Directive**

When making the scoping request it should be stated whether this is being done formally, with reference to the relevant legislative provision, or informally. A similar level of detail should be provided to the CA (and any other consultees) on the proposed project and the proposed scope of the EIAR, regardless of whether scoping is being done informally or formally. It should be noted that there is no obligation on the CA or other parties to respond to informal scoping requests.

<sup>41</sup> Bodies specified in the applicable legislation, e.g. Article 28 of the Planning and Development Regulations, 2001 (as amended).

### 3.3.4 KEY SCOPING CRITERIA

All parties should be aware of the need to keep the EIAR as tightly focused as possible. This focuses the effort and resources of all parties on the key significant issues. Scoping is usually guided by the following criteria:-

- ▲ Use 'Likely' and 'Significant' as the principal criteria for determining what should be addressed. Any issues that do not pass this test should be omitted (scoped out) from further assessment. A section of the EIAR should describe the scoping process explaining why such issues have been scoped out and they are not being considered further. All the prescribed environmental factors<sup>42</sup> need to be listed in the scoping section of the EIAR. It is important to note that the environmental factors themselves cannot be scoped out and must feature in the EIAR. Only subtopics and headings related to each factor can be scoped in or out. Each environmental factor should be clearly covered by one or more specific section headings in the EIAR<sup>43</sup>. If scoping determines that no likely significant issues arise under any heading, then an explanatory text should be included.
- ▲ Precedence - where EIARs for similar projects on similar sites or for other project proposals for the same site are available, these can be useful references.
- ▲ Interactions – careful consideration of pathways – direct and indirect – that can magnify effects through the interaction or accumulation of effects – for instance the potential for cumulative significant effects to arise from multiple non-significant effects. (See also Indirect, Secondary and/or Cumulative Impacts in [section 3.7.3](#)).

### 3.3.5 CONSIDERATION OF OTHER ASSESSMENTS

Scoping considers the extent to which other assessments may address some types of effects adequately and appropriately.

Strategic Environmental Assessment (SEA) is a higher tier form of environmental assessment that examines plans and programmes. It examines the same factors as EIA but at a higher decision-making level. These include higher level alternatives and effects of the plan or programme on environmental factors, including for example, water, biodiversity, climatic factors and the landscape. SEA also considers strategic measures to avoid, reduce or mitigate likely effects, which may also be relevant during EIA scoping. The extent to which higher level considerations have already been assessed- and so do not need to be assessed again - should inform and be referred to in the EIA scoping process. This can reduce the amount of cumulative effects that need to be considered in an EIAR<sup>44</sup>.

Scoping considers other projects or activities that are not included in the same consent application. These may be closely related to the subject consent application and may even be a direct result of it. These could include secondary projects, such as a power line or a road junction upgrade, which may result in significant effects. (See Case Law summary in [section 3.5.7](#)).

Such considerations should allow the CA and the public to form an overall understanding of the likely effects – direct, indirect and cumulative - that will arise because of a decision to permit a project. Where uncertainty arises then an EIAR needs to describe the 'worst case' scenario of the accumulation of effects that could arise from these other projects. It is prudent to identify the full range of these other likely sources of potential effects at the initial scoping stage. This will ensure that major and reasonably foreseeable issues that could result in significant adverse effects can be identified and considered.

Assessments carried out to support separate consent requirements may include assessments for compliance under other EU Directives including the Industrial Emissions, Habitats, Seveso, Waste Framework, Water Framework and Floods Directives. Some of these may be carried

42 Population and Human Health, Biodiversity, Land, Soil, Water, Air, Climate, Material Assets, Cultural Heritage, Landscape and Interactions between these factors, (See Article 3(1) of Directive 2014/52).

43 See sections 4.1 and 4.2 for more on content and structure of the EIAR.

44 See EPA Research Report 392: [Guidance on Strategic Environmental Assessment–Environmental Impact Assessment Tiering](#)

out at different stages in the project than the consent application for which the EIAR is being prepared. For example, IED (Industrial Emissions Directive) licence applications generally happen after a planning application is made. Others may be carried out at the same time as the preparation of the EIAR, Natura Impact Statements, for example. The EIAR should avoid duplicating the assessment covered by these but should incorporate their key findings as available and appropriate. A biodiversity section of an EIAR, for example, should not repeat the detailed assessment of potential effects on European sites<sup>45</sup> contained in documentation prepared as part of the Appropriate Assessment process<sup>46</sup>, but it should refer to the findings of that separate assessment in the context of likely significant effects on the environment, as required by the EIA Directive. It may also utilise data that is also included in the Appropriate Assessment documentation. The scoping process considers any other such assessments that apply to a project and reduces coverage of these issues in an EIAR accordingly. The rationale for reducing coverage of an issue should be clearly documented in the EIAR.

Applications for other consents that are not directly related to compliance with other EU Directives, such as Ministerial Consents under the National Monuments Acts, the Wildlife Acts or the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, are often made during or after the preparation of the EIAR. The EIAR should refer to these procedures as relevant, e.g. in the context of mitigation measures.

### 3.3.6 SELECTION OF HEADINGS UNDER WHICH TO ARRANGE ISSUES

The prescribed environmental factors must all be addressed in an EIAR. As they are a necessary simplification of the relevant components of the environment, each factor is typically explored by examining a series of headings and/or topics relevant to that factor, as indicated by the examples included in Annex IV of the Directive.

'A description of the factors specified in Article 3(1) likely to be significantly affected by the project: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.'

**Annex IV(4) of amended Directive**

These headings and topics are generally identified during the scoping process. Some typical headings and topics and their arrangement within an EIAR are shown in Table 3.1.

Typical topics which may be relevant under each environmental factor are set out on the following pages. These are indicative only. The relevant topics for any given EIAR should be established during scoping.

<sup>45</sup> Sites designated under the Habitats or Birds Directives.

<sup>46</sup> An assessment in accordance with the requirements of the Habitats Directive.

**Table 3.1 Sample organisation of headings and topics to address issues arising for each prescribed environmental factor**

Prescribed Environmental Factor	Typical Headings under which Environmental Factors could be addressed in an EIAR	Typical Topics
<b>Material Assets</b>	Roads & Traffic	Construction Phase Operational Phase Unplanned Events [i.e. Accidents]
	Built Services	Electricity Telecommunications Gas Water Supply Infrastructure Sewerage
	Waste Management	Construction Waste Operational Waste
<b>Water</b>	Surface Water	Construction Phase Operational Phase Unplanned Events [i.e. Accidents]
	Ground Water	Construction Phase Operational Phase Unplanned Events [i.e. Accidents]
	Waste Water	Effluent Characteristics On-site Treatment Capacity of Municipal Treatment Plant
<b>Landscape</b>	Visual Effects	Context Character Significance Sensitivity
	Amenity	Public access Public amenities Recreation Tourism

The inclusion of a table like this at the beginning of an EIAR can be helpful, because relevant issues and their arrangement as headings and topics within an EIAR varies from project to project. The table shows how the selected headings/topics in the project's EIAR relate to the prescribed environmental factors. This will show how each of the environmental factors has been addressed, demonstrating compliance with the statutory requirements.

Some topics could be placed under more than one heading, for example, where *hydrogeology* is a relevant topic it may be relevant under the heading of 'Aquatic Ecology' as well as under 'Water' or 'Ground Water'. Another example would be *amenity* which may be relevant under 'Population and Human Health' and 'Landscape'. The requirement for the EIAR to consider 'Interactions' addresses this issue by ensuring that effects are cross-referenced between topics, thus avoiding the need to duplicate coverage of such topics.

Some types of factors are particularly vulnerable to unplanned events that have the potential to cause significant sudden environmental effects. Unplanned events can include spill from traffic accidents, floods or landslides affecting the site, fire, collapse or equipment failure on the site. Topics such as human health, air and water, for example, should ensure that consideration extends beyond construction and operational activities – to include consideration of such unplanned events.

## Population & Human Health

- ▲ Employment
- ▲ Settlement patterns
- ▲ Land use patterns
- ▲ Baseline population
- ▲ Demographic trends
- ▲ Human health (considered with reference to other headings, such as water and air)
- ▲ Amenity (e.g. effects on amenity uses of a site or of other areas in the vicinity may be addressed under the factor of Landscape)

The transposing legislation does not require assessment of land-use planning, demographic issues or detailed socioeconomic analysis. Coverage of these can be provided in a separate Planning Application Report to accompany an application for planning permission. This should be avoided in an EIAR, unless issues such as economic or settlement patterns give rise directly to specific new developments and associated effects (ref. [section 3.5.7](#)). The main purpose of such identification and assessment is to provide the CA with a context for their determination. (Examples would include future warehousing beside a new port, transmission lines in the vicinity of a new electrical substation or commercial developments on zoned land beside a new road).

### **Human Health**

The recitals to the 1985 and 2011 Directives refer to 'Human Health' and include 'Human Beings' as the corresponding environmental factor. The 2014 Directive calls this factor 'Population and Human Health'.

While no specific guidance on the meaning of the term Human Health has been issued in the context of Directive 2014/52/EU, the same term was used in the SEA Directive (2001/42/EC). The Commission's SEA Implementation Guidance states 'The notion of human health should be considered in the context of the other issues mentioned in paragraph (f)'. (Paragraph (f)<sup>47</sup> lists the environmental factors including soils, water, air etc). This is consistent with the approach set out in the 2002 EPA EIS Guidelines where health was considered through assessment of the environmental pathways through which it could be affected, such as air, water or soil, namely:

'The evaluation of effects on these pathways is carried out by reference to accepted standards (usually international) of safety in dose, exposure or risk. These standards are in turn based upon medical and scientific investigation of the direct effects on health of the individual substance, effect or risk. This practice of reliance upon limits, doses and thresholds for environmental pathways, such as air, water or soil, provides robust and reliable health protectors [protection criteria] for analysis relating to the environment.'

In an EIAR, the assessment of impacts on population & human health should refer to the assessments of those factors under which human health effects might occur, as addressed elsewhere in the EIAR e.g. under the environmental factors of air, water, soil etc.. The Advice Notes provide further discussion of how this can be addressed.

Assessment of other health & safety issues are carried out under other EU Directives, as relevant. These may include reports prepared under the Industrial Emissions, Waste Framework, Landfill, Strategic Environmental Assessment, Seveso III, Water Framework Directive, Floods or Nuclear Safety Directives<sup>48</sup>. In keeping with the requirement of the amended Directive, an EIAR should take account of the results of such assessments without duplicating them.

47 [Section 5.2.6 of Implementation of Directive 2001/42 on the assessment of the effects of certain plans and programmes on the Environment](#)

48 Directives 2010/75/EU, 2008/98/EC, 1999/31/EC, 2001/42/EC, 2012/18/EU, 2000/60/EC, 2007/60/EC and 2009/71/EURATOM (all as amended).

## Biodiversity

### Recital (7) of Directive 2014/52/EU

'Over the last decade, environmental issues, such as resource efficiency and sustainability, biodiversity protection, climate change, and risks of accidents and disasters, have become more important in policy making. They should therefore also constitute important elements in assessment and decision-making processes.'

### Recital (12) of Directive 2014/52/EU

'With a view to ensuring a high level of protection of the marine environment, especially species and habitats, environmental impact assessment and screening procedures for projects in the marine environment should take into account the characteristics of those projects with particular regard to the technologies used (for example seismic surveys using active sonars).'

- ▲ Habitats
- ▲ Breeding/Feeding/Roosting Areas
- ▲ Routes and landscape features
- ▲ Mammals/Birds/Fish/Invertebrates/Reptiles
- ▲ Vascular plants/bryophytes/lichens/fungi
- ▲ Population Stability
- ▲ Population Management
- ▲ Critical Resources
- ▲ Terrestrial/Aquatic/Marine
- ▲ Seasonality
- ▲ Existing Management
- ▲ Ecosystem Services
- ▲ Legal protection

### **Biodiversity**

The amended Directive replaces the environmental factor of 'Flora & Fauna' with 'Biodiversity'. This change follows the publication by the Commission of 'Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment'<sup>49</sup>. It aligns the Directive with the United Nations Convention on Biological Diversity<sup>50</sup> and with 'Our life insurance, our natural capital: an EU biodiversity strategy to 2020'<sup>51</sup>.

Recital 14 of the amended Directive provides this context: 'The effects of a project on the environment should be assessed in order to take account of concerns ... to ensure maintenance of the diversity of species and to maintain the reproductive capacity of the ecosystem as a basic resource for life'. This recital is unchanged since it originally appeared in Directive 85/337/EEC.

49 European Union, 2013.

50 ref Recital 10 of amended Directive.

51 European Commission, 2011.

## Land & Soils

- ▲ Land (for example land take)<sup>52</sup>
- ▲ Soil (for example organic matter, erosion, compaction, sealing)<sup>53</sup>
- ▲ Agricultural capability
- ▲ Geology
- ▲ Hydrogeology (may alternatively be placed under the heading of Water)

### **Land**

The amended Directive introduces Land as a prescribed environmental factor. Recital 9 gives context to this addition, showing that it relates to the issue of 'land take'. This change aligns the Directive with the proceedings of the United Nations Conference on Sustainable Development (Rio de Janeiro, 2012) and with Commission strategy.

## Water

- ▲ Water (for example hydromorphological changes, quantity and quality)
- ▲ Ground/Surface/Estuarine/Marine
- ▲ Physical characteristics
- ▲ Chemical characteristics
- ▲ Q value
- ▲ Beneficial uses
- ▲ Flooding

## Air

- ▲ Air Quality
  - ▲ Pollutants
  - ▲ Suspended Particles
- ▲ Odour
- ▲ Noise & Vibration
  - ▲ Daytime Noise
  - ▲ Night time Noise
  - ▲ Vibration sources
  - ▲ Sensitive receptors
- ▲ Radiation

52 Removal of productive land from potential agricultural or other beneficial uses.

53 Annex IV(4) of amended Directive.

**Recital (13) of  
Directive  
2014/52/EU**

## Climate

'Climate change will continue to cause damage to the environment and compromise economic development. In this regard, it is appropriate to assess the impact of projects on climate (for example greenhouse gas emissions) and their vulnerability to climate change.'

- ▲ Greenhouse gases
- ▲ Acid Rain
- ▲ Thermal Pollution
- ▲ Climate change trends (macro and micro)
- ▲ Carbon Accounting / Carbon Balance

### **Climate**

The list of environmental factors which needed to be addressed under Directive 2011/92/EU included climate. The amended Directive also requires the vulnerability of a project to climate change to be addressed, particularly 'the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge'<sup>54</sup>. Other studies may substantially address climate and those assessments should be referred to where appropriate<sup>55</sup>; for example, assessment of climate change effects at a higher decision making level in an SEA or consideration of effects of climate change on a project in a Flood Risk Assessment.

See EU 'Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment'<sup>56</sup> for more details.

## Material Assets

- ▲ Built Services
- ▲ Roads and Traffic
- ▲ Waste Management

### **Material Assets**

In Directive 2011/92/EU this factor included architectural and archaeological heritage. Directive 2014/52/EU includes those heritage aspects as components of cultural heritage. Material assets can now be taken to mean built services and infrastructure. Traffic is included because in effect traffic consumes transport infrastructure. Sealing of agricultural land and effects on mining or quarrying potential come under the factors of land and soils.

<sup>54</sup> Annex III(1)(f) of amended Directive.

<sup>55</sup> ref. [Section 3.3.5](#) Consideration of Other Assessments.

<sup>56</sup> European Union, 2013.

## Cultural Heritage

- ▲ Archaeology
  - ▲ Known archaeological monuments
  - ▲ Areas of archaeological potential (including unknown archaeology)
  - ▲ Underwater archaeology
- ▲ Architectural heritage
  - ▲ Designated architectural heritage
  - ▲ Other significant architectural heritage
- ▲ Folklore and history
  - ▲ Designations or sensitivities

## The Landscape

- ▲ Landscape Appearance and Character
- ▲ Landscape Context
- ▲ Views & Prospects
- ▲ Historical Landscapes

## Interactions between Impacts on Different Factors

The scoping stage should consider the likely relevant interactions that need to be assessed in the EIAR. For example, if interaction between ecology and surface water is a likely issue this should be outlined. (Also see [section 3.7.6](#) Interactions Between Impacts on Different Factors).

[Section 4](#) provides more information on the arrangement of the appropriate material in an EIAR.

### 3.3.7 ONGOING SCOPING

Scoping continues throughout the preparation of an EIAR. The team working on the EIAR should maintain a flexible view of the scope throughout the work on the EIAR, particularly during the earlier stages. If information or analysis that emerges after the initial scoping stages indicates that additional issues should be considered, then these can be included.

### 3.3.8 DESIGN REVIEW

The project design is adapted and continually reviewed in light of predicted environmental effects emerging during the preparation of an EIAR. [Section 2.4.1](#) provides specific recommendations on the need for the developer, the design team and the environmental specialists to maintain a regular dialogue through the design preparations and revisions to ensure that this objective is achieved. Open, effective and ongoing communication between all members of the developer's team helps to achieve this.

Scoping should be linked with and informed by design reviews at any stage during the preparation of the EIAR.

## 3.4 CONSIDERATION OF ALTERNATIVES (STAGE 3 OF 7)

### 3.4.1 OVERVIEW

#### Annex IV(2) of the amended Directive

The EIA Directive requires an EIAR to contain:

'A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.'

The presentation and consideration of the various reasonable alternatives investigated by the developer is an important requirement of the EIA process.

The objective is for the developer to present a representative range of the practicable alternatives considered. The alternatives should be described with 'an indication of the main reasons for selecting the chosen option'. It is generally sufficient to provide a broad description of each main alternative and the key issues associated with each, showing how environmental considerations were taken into account in deciding on the selected option. A detailed assessment (or 'mini-EIA') of each alternative is not required<sup>57</sup>.

In an effective EIA process, different types of alternatives may be considered at several key stages during the process. As environmental issues emerge during the preparation of the EIAR, alternative designs may need to be considered early on in the process or alternative mitigation options may need to be considered towards the end of the process. These various levels of alternatives are discussed further in sections 3.4.2 to 3.4.7 and in Figure 3.3.

Clearly, in some instances some of the alternatives described below will not be applicable – e.g. there may be no relevant 'alternative location' for the upgrading of an existing road but there may be alternative design options.

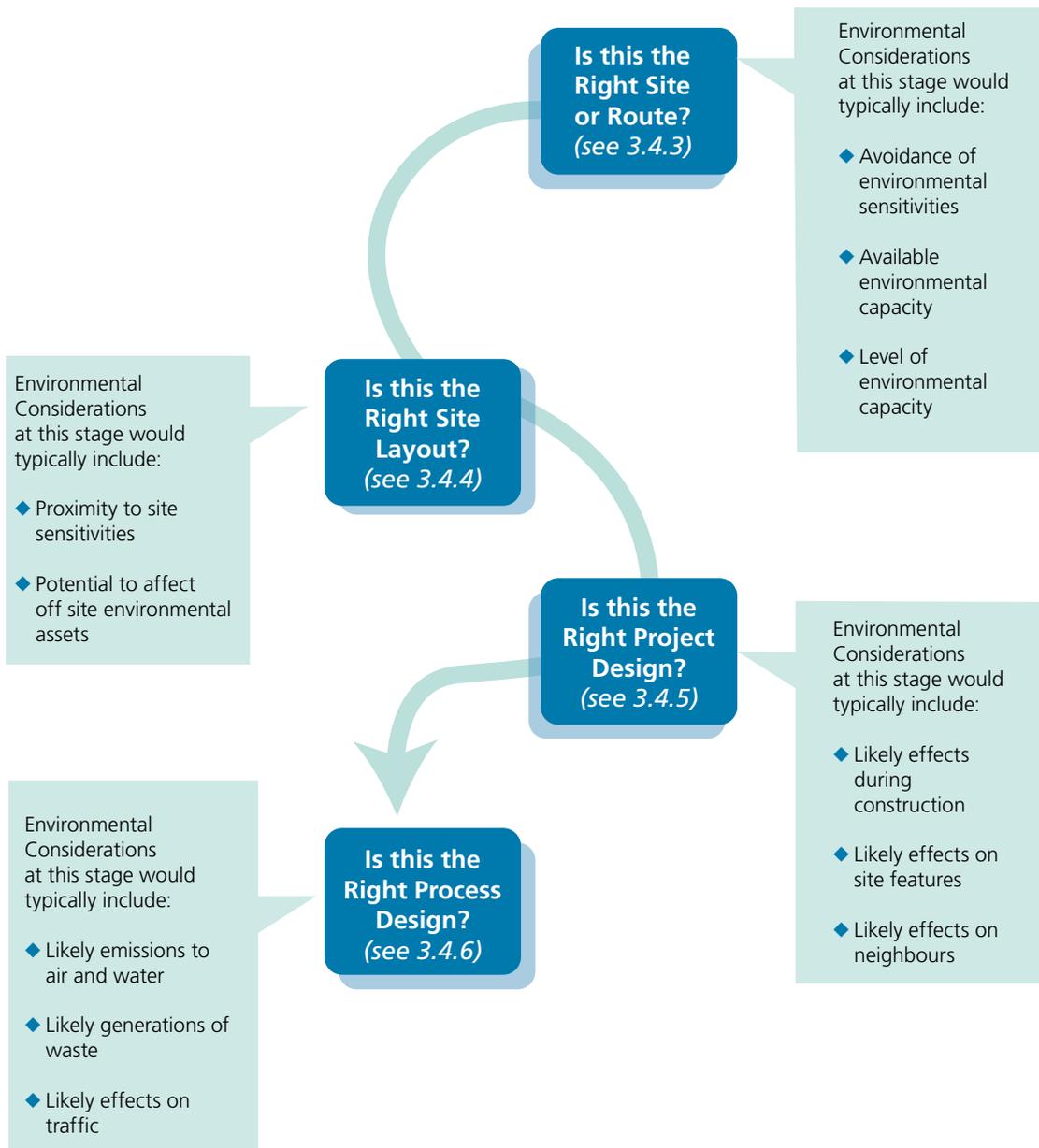
Higher level alternatives may already have been addressed during the strategic environmental assessment of relevant strategies or plans. Assessment at that tier is likely to have taken account of environmental considerations associated, for example, with the cumulative impact of an area zoned for industry on a sensitive landscape. Note also that plan-level/higher-level assessments may have set out project-level objectives or other mitigation that the project and its EIAR should be cognisant of. Thus, these prior assessments of strategic alternatives may be taken into account and referred to in the EIAR<sup>58</sup>. This is particularly the case for public sector projects where it is often appropriate to consider a wider range of alternatives than for private sector projects. (See [section 3.3.5](#) for more on consideration of other assessments<sup>59</sup>.) *Developing and Assessing Alternatives in Strategic Environmental Assessment, EPA 2015*, provides detailed information on consideration of alternatives in SEA.

57 Ref [CJEU Case 461/17](#).

58 see EPA Research Report 392: [Guidance on Strategic Environmental Assessment–Environmental Impact Assessment Tiering](#)

59 Alternatives for Habitats/Birds Directives assessments are addressed in other documents/ guidance from the Commission and elsewhere.

Analysis of high-level or sectoral strategic alternatives should not be expected within a project level EIAR. Types of high-level strategic alternatives include electricity generation from renewables rather than fossil fuels in the case of a proposal for expansion of an existing power station, for example, or extraction of stone from another location outside the control of the developer in the case of a proposal to extend a quarry. It should be borne in mind that the amended Directive refers to ‘reasonable alternatives... which are relevant to the proposed project and its specific characteristics’.



This illustrates the sequence of alternative options that exist. Not all options (such as alternative sites) may be available for every project. The applicant is required to describe the reasonable alternatives examined during the design process with an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

**Figure 3.3 Consideration of Alternatives in an EIAR**

### 3.4.2 'DO-NOTHING' ALTERNATIVE

The range of alternatives can include a 'do-nothing' alternative<sup>60</sup> where appropriate. This examines trends currently occurring at the site, for example likely land-use changes or other interventions, the likely effects of climate change, and the significance of these changing conditions. It can be particularly useful when assessing effects caused by projects which themselves are designed to alleviate environmental or infrastructural problems, e.g. waste treatment facilities, flood relief projects, road building, etc.

The 'do-nothing' alternative is a general description of the evolution of the key environmental factors of the site and environs if the proposed project did not proceed. It is similar to but typically less detailed than the 'likely future receiving environment' description discussed in [section 3.6 Describing the Baseline](#).

It should cumulatively consider the effects of projects which already have consent but are not yet implemented. It may also be appropriate to consider other projects that are planned but not yet permitted. For example, it would be prudent to consider a significant project for which a planning application has been lodged even if the consent decision has not been issued.

The 'do-nothing' alternative should describe consequences that are reasonably likely to occur. It ought not be used to exaggerate or catastrophise environmental consequences that may occur without the proposed project.

### 3.4.3 ALTERNATIVE LOCATIONS

Some locations have more inherent environmental sensitivities than others. Depending on the type of project and the range of alternatives that the developer can realistically consider, it may be possible to avoid such sites in favour of sites which have fewer constraints and more capacity to sustainably assimilate the project. It can be useful to ensure that a range of options, which may reasonably be available, are included in the evaluation.

### 3.4.4 ALTERNATIVE LAYOUTS

Alternative layouts can often be devised to consider how different elements of a proposal can be arranged on a site, typically with different environmental, as well as design implications.

### 3.4.5 ALTERNATIVE DESIGNS

Many environmental issues can be resolved by design solutions that vary key aspects such as the shape of buildings or the location of facilities. Where designers are briefed at an early stage on environmental factors, these can be considered during the design development process, along with other design parameters.

### 3.4.6 ALTERNATIVE PROCESSES

Within each design solution there can be several different options as to how the processes or activities of the project can be carried out, e.g. the management of processes that affect the volumes and characteristics of emissions, residues, traffic and the use of natural resources.

### 3.4.7 ALTERNATIVE MITIGATION MEASURES

It may be possible to mitigate effects in a few different ways. In these circumstances the EIAR can describe the various options and provide an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

60 Guidance on do-nothing alternatives is given in [Development of Strategic Environmental Assessment \(SEA\) Methodologies for Plans and Programmes in Ireland](#), EPA, 2003. While this is an SEA guidance document, it is also useful in the context of EIA as similar principles apply.

### 3.4.8 CONSULTATION ABOUT CONSIDERATION OF ALTERNATIVES

As mentioned in [section 3.3](#), it may also be useful to use consultation processes to help identify alternative options. (See sections [2.4](#), [3.3.5](#) and [3.8.1](#) for more coverage of alternatives.)

## 3.5 DESCRIBING THE PROPOSED PROJECT (STAGE 4 OF 7)

### 3.5.1 INTRODUCTION

The EIA Directive requires that the EIAR includes:

‘a description of the project comprising information on the site, design, size and other relevant features of the project’.

**Article 5(1)(a) of amended Directive**

The developer is required to provide a description of the whole proposed project, comprising information on the site, design, size and other relevant features of the project, within the EIAR. The actual level of detail required will vary according to the stage at which the consent procedure is taking place, the specific characteristics of the project and the environmental features likely to be affected, as may have been identified during scoping. The range of information and the level of detail required should be sufficient to fulfil the needs of the consent procedure that the EIAR is to be submitted for. Where the same EIAR is to be used to support more than one such consent procedure then it may need to include supplementary material for the other of the consent procedures. However, it is appropriate for most EIARs to include (to varying degrees of detail) a description of:

- ▲ the **location** of the project
- ▲ the **physical characteristics** of the whole project, including, where relevant, demolition works, the land-use requirements during construction and operation and other works that are integral to the project
- ▲ the **main characteristics of the operational** phase of the project (production and maintenance processes in particular), for example energy demand, energy used, nature and quantity of materials and natural resources (including water, land, soil, biodiversity, etc.,) used
- ▲ an estimate, by **type and quantity, of the expected residues and emissions** (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation, and quantities and types of waste produced during the construction and operational phases).

The description of the site, design and scale of the project considers all relevant phases of the life of the project, e.g. from construction through to existence and operation (and in some cases to its restoration or decommissioning).

The description of a project that is required for an EIAR is specific and is different to a description that would typically be used, for example, in the construction sector. It is also different to the description that

would be used to support a consent application, for example a land-use planning application that is not accompanied by an EIAR. The principal differences arise from the fact that the EIAR needs to describe the dynamics, for example, of the construction and day-to-day operations, as well as the use, disposal and transformation of materials in ways that traditional static descriptions of structures, layouts and land-uses do not. Similarly, in an EIAR it may be useful to describe avoidance measures that have been integrated into the project. (ref also [section 3.5.8](#)).

It should also be noted that the focus of the analysis required for the factors within the EIAR may change following initial baseline surveys; e.g. discovery of a zone of high archaeological potential adjacent to a site will trigger a need for increased detail on construction activities that will cause ground disturbance.

The implementation of a systematic approach will help to ensure that all relevant aspects of the project are accurately and fully described by the developer. The requirement is to provide a description in sufficient detail, which if taken together with the description of the existing environment, will allow a CA to understand the significant effects likely to arise from the proposed project.

Not all the following headings will be relevant for all projects. More detailed coverage of the information which may be relevant under each heading is provided in the Advice Notes.

(See also [section 3.2.3](#) re the need to describe the whole project and [3.5.7](#) Description of Other Related Projects.)

### 3.5.2 CHARACTERISTICS OF THE PROJECT

**Recital (22) of  
Directive  
2104/52/EU**

'...environmental impact assessments should take account of the impact of the whole project in question, including, where relevant, its subsurface and underground, during the construction, operational and, where relevant, demolition phases.'

The typical categories for describing the physical characteristics of a project are given below. These topics are frequently cross-referenced to drawings and illustrations:

- ▲ the site location
- ▲ the size, design and appearance of the proposed project
- ▲ the cumulation with other proposed projects
- ▲ the use of natural resources
- ▲ the production of waste
- ▲ emissions and nuisances
- ▲ a description of the risk of accidents – having regard to substances or technologies used.

Complex projects which require EIA are described in a manner that takes account of their full 'life-cycle'. They have the potential to generate different effects at different times and at different places both at and beyond the project site.

### 3.5.3 DESCRIPTION OF CONSTRUCTION

Effects during construction can often be more significant than those that arise during the operational life of a project. Larger projects can take several years to complete. During this period, there may be numerous significant effects. The description includes, but is not limited to: -

- ▲ construction phase land use requirement
- ▲ proposed works and construction methods
- ▲ duration and timing, including any phasing proposals
- ▲ environmental protection measures
- ▲ Construction Environmental Management Plan (CEMP).

### 3.5.4 DESCRIPTION OF COMMISSIONING

This may be useful if the proposed project will not be substantially operational in the period immediately following construction. This description could include:

- ▲ testing, certification and commissioning
- ▲ occupation/use
- ▲ establishment of mitigation measures (e.g. acoustic screening).

### 3.5.5 THE OPERATION OF THE PROJECT

This is one of the most important sections of an EIAR. While accurate descriptions are vital to ensure credibility, not all of these topics will be relevant to many projects, particularly smaller scale ones:

- ▲ principal processes or activities
- ▲ the scope of the project
- ▲ the operations described in general terms
- ▲ processes
- ▲ regular activities
- ▲ occasional activities
- ▲ occupants
- ▲ materials used
- ▲ natural resources used (including energy and materials)
- ▲ residues and emissions
- ▲ waste management
- ▲ secondary processes/activities.

### 3.5.6 CHANGES TO THE PROJECT

Very few projects remain unaltered throughout their existence. Success may bring growth; technology or market forces may cause processes or activities to alter. All projects change and – like living entities – will someday cease to function.

The life cycles of some types of projects, such as quarries, are finite and predictable. Such projects often consider their closure and decommissioning in detail from the outset, while for most projects a general indication of the nature of possible future changes may suffice.

While the examination of the potential consequences of change (such as extension) does not imply permission for such extension, its identification and consideration can be an important factor in the determination of the application. Descriptions of likely changes may cover:

- ▲ extension
- ▲ decommissioning
- ▲ other changes.

### CASE LAW

Fitzpatrick & Daly v An Bord Pleanála & Others [2019] IESC 23 involved a planning application for a data centre. The initial decision by Galway County Council to grant permission was appealed to An Bord Pleanála (the Board). Following a request for further information from the Board, the applicant, Apple Distribution International, provided a revised EIS for the proposed data centre. They also provided a site masterplan which indicated that the proposed data centre was the first phase of site development and that up to seven more data centre halls would potentially be built in future phases of development.

A second application was made for a large electrical substation and associated grid connection, which was designed to serve eight data halls. This was also accompanied by an EIS. The revised EIS for the data centre assessed the cumulative effects of the data centre in combination with the effects of the power supply project. The EIS for the power supply project took similar account of the data centre.

The Board considered that the revised EIS for the data centre ‘allows for an integrated assessment of the overall impact of the data centre and power supply developments as well as detailing the cumulative impacts of these projects with other relevant plans and projects, including the potential future expansion of the data centre.’

The Board granted permission. This decision was appealed to the courts on the grounds that the Board’s EIA process was not compliant with the requirements of the Directive. In October 2017 the High Court upheld the Board’s EIA process.

The case was further appealed to the Supreme Court, primarily on the grounds that the Board had not carried out an EIA of the entire masterplan. In April 2019 the Court found that:

- ▲ The EIAs only needed to assess the impacts ‘of the proposed development, or in this case developments, for which planning permissions were sought’.
- ▲ The entire masterplan did not need to be subject to EIA before deciding on the applications for the data centre hall and substation.
- ▲ The EIA process was required ‘to take account, as far as practically possible, of potential later phases of the masterplan’.

Further useful clarification on requirements for assessment of cumulative effects and on the concept of project splitting was provided in the judgment. ‘the obligation ... to take account, when conducting the EIA of the proposed development which is the subject of the planning application, of potential environmental impacts of future phases of a masterplan, as far as is practically possible, does not amount to an obligation to conduct an EIA of the masterplan. ... When and if an application for planning permission for further phases of the masterplan is made, a full EIA will be required which in turn will both assess cumulative impacts with all existing or approved developments, and look forward by taking account, as far as practically possible, of remaining future phases of the masterplan.’

(See also case law on project splitting in [section 3.2.3](#) and on indirect and cumulative effects in [section 3.7.3](#)).

### 3.5.7 DESCRIPTION OF OTHER RELATED PROJECTS

The description includes other projects (sometimes by other developers and sometimes off site) or individual project components which occur as a direct result of the main project, such as a power line, a substation or a road junction upgrade which may result in significant effects. Some of these may require parallel separate consent. Omission of such projects or components may be referred to as project splitting where they are 'integral' to the primary project (i.e. they are required for the primary project to operate). This issue is also discussed under the headings of Screening and Scoping (ref. sections [3.2](#) and [3.3](#) and case law at end of this section and in [section 3.7.3](#)).

The key considerations are whether such projects are integral (no matter who carries out the work) and whether they are subject to any separate consent procedure with separate environmental assessment requirements.

The description of other projects can loosely be grouped under two headings: Off-site and Secondary Projects. The effects of these can often be as significant as those of the main project and must not be overlooked. It should also be borne in mind that these ancillary works may generate the need for other types of assessments of the entire project (such as an appropriate assessment), which the primary aspect of the project on its own may not necessitate. The following are indicative of aspects which may need to be included in the project description:

#### Off-Site Projects

These include projects specifically required for the project which take place at a distance from the site, often on lands owned by others (such as public roads) and which are sometimes permitted and developed by others. For example:

- ▲ Transportation
  - ▲ The provision of new access facilities (e.g. access roads) or the upgrading of existing roads (e.g. road widths, bridges and junctions) carried out by other parties can give rise to significant environmental effects.
  - ▲ Energy transmission, e.g. power lines
  - ▲ The provision of new power lines or pipelines with associated substations or pumping stations can give rise (for instance) to effects on the landscape or ecological or archaeological heritage at a considerable distance from the project.
- ▲ Waste Water infrastructure.

#### Secondary Projects

These are projects that may arise largely because of the existence of the principal project, though they are usually not carried out by the developer of the principal project. These can be very difficult to describe with precision – but can be usefully examined as a series of 'what if' scenarios that can be used as a context for decision-making by the CA.

Examples include:

- ▲ Commercial projects at new major road junctions
- ▲ Industrial and warehousing projects near new inter-modal transportation nodes
- ▲ Recreational land-uses via new access in undeveloped areas (hunters and hill walkers using new access roads to windfarms, for example)
- ▲ Retail projects near new residential areas
- ▲ Land-use change including agricultural intensification, hunting, tourism, restructuring of land-holdings, afforestation, etc, because of new access.

**CASE LAW**

In *O’Grianna v An Bord Pleanála* (IEHC 632, 12/12/2014) the High Court quashed the decision of the Board granting planning permission for a wind farm in County Cork on ‘project splitting’ grounds. The developer maintained that the EIS could not consider the effects of the connection of the wind farm to the national grid as that design was not available and would be undertaken subsequently by ESB Networks. The Board accepted this position and clarified that the grid connection was not covered by its permission to develop the wind farm.

The Court held that grid connection was an integral part of the development and could not be considered as a separate project.

‘The wind turbine development on its own serves no function if it cannot be connected to the national grid. In that way, the connection to the national grid is fundamental to the entire project, and in principle at least the cumulative effect of both must be assessed in order to comply with the Directive.’

(See also case law on project splitting in [section 3.2.3](#) and on indirect and cumulative effects in [section 3.7.3](#))

**3.5.8 LEVEL OF DETAIL IN PROJECT DESCRIPTION**

The EIAR must contain adequate information to enable the CA to carry out an assessment of all likely significant effects of the project on the environment. The information to be provided by a developer in an EIAR when describing a project is set out in Article 5 and Annex IV of the Directive.

The nature of design and construction processes may limit the level of detail in a project description that is available at consent stage, particularly for land-use consent processes. For example, for certain larger projects some details may only become available after the consent stage, e.g. following a procurement process. In relation to construction, it may not be practicable to include full details at consent stage, however information on working areas, hours of work, principal construction methods and phases, volumes of materials, traffic and environmental controls should be sufficient to enable the assessment of effects.

Where provision of full details of the construction and/or operation of a project is not practicable in an EIAR, the extent of environmental effects of the project should be set out so that the CA has sufficient information about the context, for their assessment and decision. To do this, a description of the project should be provided to enable the worst-case effects of the project to be described in an EIAR. The detailed design can then vary without rendering the EIA process inadequate. See also case law overleaf.

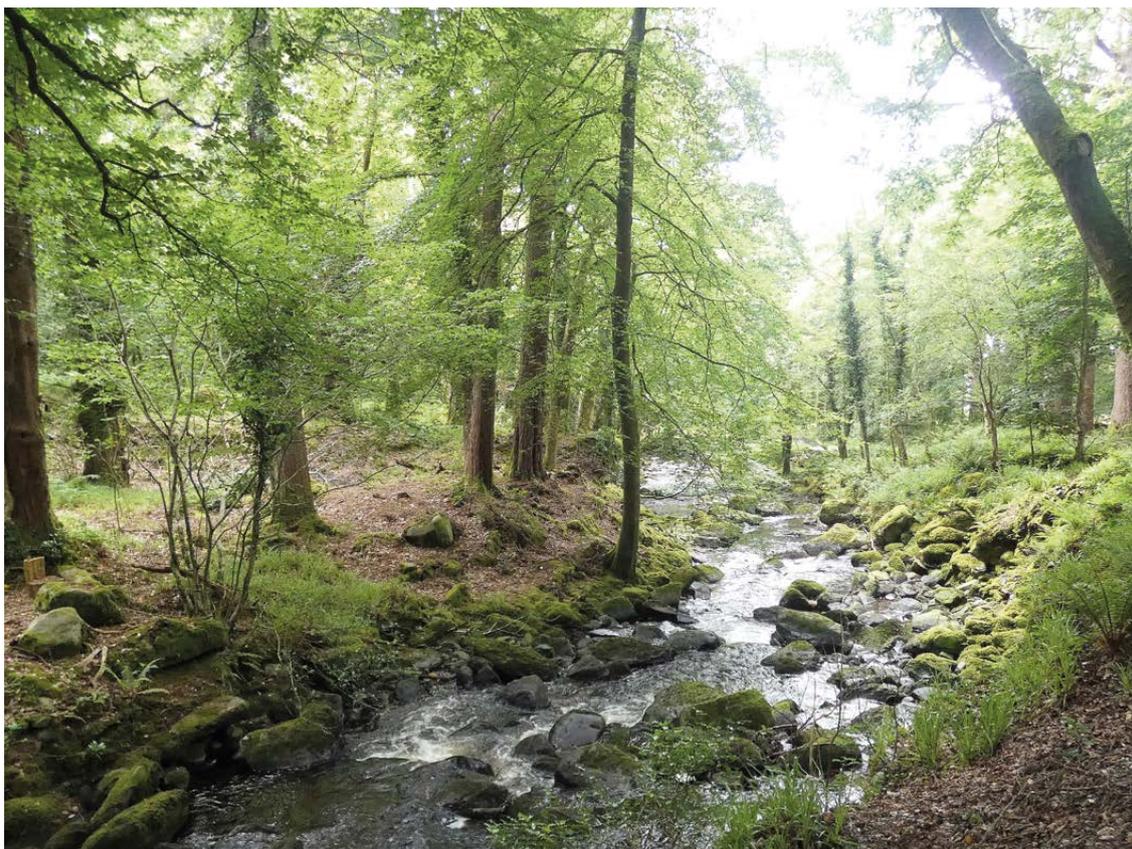
The above approach is generally not as relevant to EIARs associated with consents such as emission licences, which typically require detailed information about specific equipment, operating procedures, etc.

Notwithstanding any allowance for omission of full details of a proposal from the EIAR, the EIAR must contain adequate information to enable assessment of all likely significant effects. The more detailed the proposal is at the time of the consent application, the easier it will be to ensure compliance with the legislation.

### CASE LAW

In *People Over Wind v An Bord Pleanála* ([2015] ICEA 272) it was judged that matters of detail may be left over for agreement post consent, provided the results to be achieved are specified and provided the project cannot go ahead unless those objectives will be achieved.

It should also be noted that in *Sweetman v An Bord Pleanála & Ors* ([2021] IEHC 390) it was judged that provision of typical or maximum details (maximum height of wind turbines in this case) was insufficiently clear as basis for a strategic infrastructure development consent process being carried out under the Planning and Development Regulations, 2001 (as amended). This judgment was confined to planning consent considerations under the Planning & Development Regulations and EIA points did not come under consideration. The extent to which the same principles may apply to EIA is subject to emerging jurisprudence and interpretation.



## 3.6 DESCRIBING THE BASELINE (STAGE 5 OF 7)

### 3.6.1 OVERVIEW

The EIA Directive requires:

'A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.'

**Annex IV(3) of the amended Directive**

After the description of the proposed project, the description of the baseline scenario is the second of the two factual foundations of the EIAR.

The *baseline scenario* refers to the current state of environmental characteristics. It involves the collection and analysis of information on the condition, sensitivity and significance of relevant environmental factors which are likely to be significantly affected by the project.

The environment will change over time, even without the introduction of the proposed project. Therefore the EIAR must include a description of the likely evolution of the environmental factor in the absence of the project. This predicted changing baseline may be referred to as the *likely future receiving environment*.

Changes to the baseline may be natural changes (due to ecological trends, for example) or may be caused by other actions (nearby projects, for example; ref also coverage of cumulative effects in [section 3.7.3](#)). It is likely that some aspects of the baseline will not change (archaeology for example) whereas others will (water quality for example). Where changes are likely, then the effects of different stages of the proposed project are assessed against the likely future receiving environment.

Gathering of baseline data should ensure that sufficient data is gathered to enable assessment of all the types of effects that the EIAR needs to consider, as identified at scoping stage. These may include direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects.

The description of the baseline scenario needs to be sufficiently accurate to provide a reliable reference against which effects can be assessed and against which environmental monitoring of the effects of the project can be measured (where relevant). It is important to demonstrate that correct methodologies and experts have been used. It is also important that the methodology used in establishing the baseline scenario is documented to permit replicable future monitoring so that the later results can be properly compared (where required). Standard recognised methods should be applied where available and appropriate.

**Table 3.2 Baseline Scenarios**

Examples	
<b>(a) Water Discharge</b>	Water quality in a river to which a water discharge is proposed is going to improve due to an already permitted upgrade to a water treatment plant upstream of the project, which will be operational before the time of the proposed new discharge. In this case the EIAR should assess the impact of the proposed discharge against the receiving baseline water quality which will occur when the project is built.
<b>(b) Expansion of Industrial Site</b>	Where an intensification of other operations on a site have already been permitted but are not yet operational at the time of the assessment, then emissions from the proposed expansion should be assessed against the increased emissions levels which would apply when the intensification of operations has occurred.
<p><b>Scenarios</b></p> <p>In the case of the examples above, if it is not certain whether the change will be in effect before commencement of the proposed project then the impact of the proposed project may be assessed against two scenarios, i.e. with and without the water treatment plant upgrade in example (a) and with and without the intensifications of other operations in example (b).</p> <p>It is important to ensure in any event that the <i>worst-case scenario</i> is assessed. This is the scenario that would be likely to give rise to the most significant environmental impacts.</p>	

The following sections provide general guidance on the methodology and range of baseline information which an adequate description may include. The Advice Notes contain more detail on potentially relevant types of baseline data for each individual environmental factor.

### 3.6.2 METHODOLOGY

#### Sourcing Baseline Information

Baseline information should, in the first instance, be sourced from published references to ensure reliability and objectivity. Such data is increasingly available from state agencies. These sources provide readily available referable sources. These are likely to reduce the time and resources required to prepare an EIAR. They also make it easier for competent authorities and others to review the sources and verify the information used.

Note that the absence of a designation or documented feature (e.g. ecological or archaeological) does not mean that no such feature exists within the site. A detailed evaluation of the existing environment, by specialists (ref. [section 2.5](#)), is likely to be necessary for all topics that are likely to be significantly affected.

It is important for the EIAR to draw attention to limitations about factors that may affect the reliability of baseline data. These can include the availability, completeness, accuracy, age, accessibility and compatibility of data.

The need for site-specific and up-to-date data is reviewed on a case-by-case basis in the context of available data and to determine whether new surveys or research are required.

## Describing Baseline Information

To facilitate evaluation of the EIAR, references to recognised descriptive standards and classifications should be included, where appropriate, as well as supporting records, information and descriptions of methodologies employed.

The description of any aspect of the environment should provide sufficient data to facilitate the identification and evaluation of the likely significant effects on that topic. Systematic, accurate and comprehensive descriptions include descriptions of the context, character, significance and sensitivity of the existing environment. The following is a list of typical baseline descriptions required for each environmental factor in an EIAR. The actual relevant range of information and the appropriate standard of description should be related to the scope of the specific EIAR and needs to be ascertained on a case-by-case basis.

**Table 3.3 Typical Standards of Descriptions of Baseline Data for use in an EIAR<sup>61</sup>**

BASELINE DESCRIPTIONS REQUIRED	
<b>Context</b>	Describe the location, magnitude, spatial extent and trends of the environmental factor, e.g.: <ul style="list-style-type: none"> <li>▲ Where is the monument?</li> <li>▲ Are the air/water quality conditions representative?</li> <li>▲ Are there evident trends in the condition of the local environment?</li> <li>▲ What proportion of the habitat is managed?</li> </ul>
<b>Character</b>	Indicate the distinguishing aspects of the environment under consideration, e.g.: <ul style="list-style-type: none"> <li>▲ Is it unpolluted air/water?</li> <li>▲ What types of habitats are present?</li> <li>▲ What age are the buildings?</li> </ul>
<b>Significance</b>	What quality, value or designation is assigned to this aspect of the existing environment, e.g.: <ul style="list-style-type: none"> <li>▲ Is it protected by legislation or designation?</li> <li>▲ Is it rare/scarce/common/abundant?</li> <li>▲ Is it renewable/unique?</li> <li>▲ Is it scenic/ordinary/derelict?</li> </ul>
<b>Sensitivity</b>	How sensitive is this aspect of the environment to change, e.g.: <ul style="list-style-type: none"> <li>▲ Would any increase in nutrients cause eutrophication?</li> <li>▲ Would disturbance cause the nesting birds to leave?</li> <li>▲ Would any manmade structures detract from the character of the amenity or wilderness?</li> </ul>

## Sufficiency

Baseline information is ultimately used to inform decisions about whether to grant or withhold consent. The information provided should be enough to inform a reliable assessment of the implications for the environment.

The following criteria provide useful guidance on sufficiency of data:

- ▲ Is the information necessary for identification of the main effects available?
- ▲ Is the information necessary for assessment of the main effects available?
- ▲ Is the information focused on effects which are likely and significant?

Where it is the case that incomplete information is provided, it should be made clear that information is not intentionally withheld and that readers are made aware of the incompleteness.

61 See the Advice Notes for more detail on appropriate baseline data (available on the EPA website [www.epa.ie](http://www.epa.ie)).

The CA will then have to determine if the information included is sufficient or if absence of any information renders the EIAR non-compliant<sup>62</sup>. If the information is deemed to be sufficient although it is incomplete, then the resultant decision will usually be qualified or conditional.

‘Because permitted adjacent developments are not yet operational and have not been subject to detailed traffic impact assessments it is not possible to model receiving traffic flows (the flows that will be in effect at the time of the construction and operation of the proposed project) with full accuracy. The receiving flows have, however, been calculated based on best predictions using all available information and in keeping with recognised standards<sup>61</sup>.’

***Example of wording in an EIAR regarding sufficiency***

### 3.6.3 GROUPING OF BASELINE INFORMATION

The environment is an extremely complex combination of natural and human factors, many of which are constantly changing. To ensure that comprehensive, reliable and accurate baseline environmental descriptions are provided in a manner which is consistent from one EIAR to another the baseline information is broken down into its constituent elements and categorised under the factors, headings and topics identified during scoping (ref [section 3.3.6](#)) so that it can be systematically described.

### 3.6.4 RANGE AND LEVEL OF DETAIL OF BASELINE INFORMATION

The range and the level of detail of baseline information included in an EIAR should be directly informed by the scoping process. Only information that is required for the assessment of likely significant impacts should be included. Information that is not relevant to the scope of the EIAR should not be included. For example, information on water quality characteristics in adjacent water bodies should focus on parameters which are likely to be affected by the proposal and are analysed in the (later) assessment section of the EIAR. Inclusion of irrelevant information tends to reduce clarity of the assessment as well as adding to costs and time required to prepare the EIAR and unnecessarily increasing demands on all parties involved in the overall EIA process.

62 See sections 6.2 - 8.6 of [Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment](#), Department of Housing, Planning and Local Government, 2018.

63 The standards and any relevant traffic guidelines should be referenced.

## 3.7 ASSESSMENT OF EFFECTS (STAGE 6 OF 7)

### 3.7.1 INTRODUCTION

The main purpose of an EIAR is to identify, describe and present an assessment of the likely significant effects of a project on the environment. This informs the CA's assessment process, its decision on whether to grant consent for a project and, if granting consent, what conditions to attach.

The EIAR focuses on:

- ▲ effects that are both likely and significant; and
- ▲ description of effects that are accurate and credible.

It should contain:

'A description of the likely significant effects of the project on the environment resulting from, inter alia:

- a) the construction and existence of the project, including, where relevant, demolition works;
- b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;
- c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;
- d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);
- e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;
- f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;
- g) the technologies and the substances used.

The description of the likely significant effects on the [environmental] factors should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project.'

**Annex IV(5) of the amended Directive**

### Annex III(3) of the amended Directive

Effects should be described by reference to the individual environmental factors and their sensitivities<sup>64</sup>. It may be useful to consider such effects in light of the criteria listed in Annex III of the amended Directive.

- a) 'the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);
- b) the nature of the impact;
- c) the transboundary nature of the impact;
- d) the intensity and complexity of the impact;
- e) the probability of the impact;
- f) the expected onset, duration, frequency and reversibility of the impact;
- g) the cumulation of the impact with the impact of other existing and/or approved projects;
- h) the possibility of effectively reducing the impact.'

The following sections outline how to identify and describe the likely significant effects and how to ensure that sufficient information has been provided to satisfy the requirements of the amended Directive and the legislation.

### 3.7.2 DOCUMENTING THE PROCESS

The assessment of effects needs to leave a clear documentary trail of the analysis used to arrive at conclusions. Such documentation would include a description of data and methods used, the reasons for their selection from a range of reasonable alternative means of assessment, together with descriptions of the reliability and certainty of the results as well as the limitations and difficulties encountered. All the preceding information should, wherever possible or relevant, be set out using referable standards and methods that demonstrably conform to peer-reviewed standards used by established specialist organisations.

Some uncertainty is unavoidable in EIA, especially about matters that involve an element of judgement, such as assigning a level of significance to an effect. Such judgements should be explicit and substantiated rather than presented as objective fact. This is best done using agreed referable approaches, e.g. the *Guidelines on Landscape and Visual Impacts Assessment*<sup>65</sup> provide guidance on what constitutes a severe visual effect. (See also [section 2.4.2](#) Maintaining Objectivity.)

### 3.7.3 DESCRIPTIONS OF EFFECTS

The description of effects needs to be precise and concise. Each effect usually needs to be qualified to provide a comprehensive description of the predicted effect on receptors – for example 'The likely effect of the monthly quarry blasts will be a noise that will be audible at distances

64 See sections [3.3.6](#) Selection of Headings Under Which to Arrange Issues and [3.6](#) Describing the Baseline (Stage 5 of 7).

65 *Guidelines for Landscape and Visual Impact Assessment*, Landscape Institute & I.E.M.A., UK, 2013.

of up to two kilometres. The cumulative effect of the quarry blasts, in addition to the established motorway noise, will give rise to a momentary increase in noise levels that will have a slight adverse impact at the local primary school.'

The EIAR should focus on the **likely, significant** effects.

### The Likelihood of Effects

To ensure that the EIA adds value to the consent process it is necessary to focus on those effects that are probable or likely to occur. However, to be prudent, the EIAR also attempts to identify a reasonably foreseeable worst-case scenario as a context for 'likely significant effects'.

With competent scoping, it should be possible to greatly narrow down the key areas of concern and to derive a list confined to 'effects' that may reasonably be seen as 'likely'. Likely or probable effects can be described as those which are planned to take place (e.g. the projected emissions, the proposed earthmoving etc.) and those which can be reasonably foreseen to be inevitable consequences of the normal construction and operation of the project.

To address unforeseen or unplanned effects the Directive further requires that the EIAR takes account of the vulnerability of the project to risk of major accidents and /or disasters relevant to the project concerned and that the EIAR therefore explicitly addresses this issue. The extent to which the effects of major accidents and / or disasters are examined in the EIAR should be guided by an assessment of the likelihood of their occurrence (risk). This may be supported by general risk assessment methods or by systematic risk assessments required under other legislation e.g. a COMAH (Control of Major Accident Hazards involving Dangerous Substances) assessment.

The potential for a project to cause risks to human health, cultural heritage or the environment due to its vulnerability to external accidents or disasters<sup>66</sup> is considered where such risks are significant, e.g. the potential effects of floods on sites with sensitive facilities. Where such risks are significant then the specific assessment of those risks in the form of a Seveso Assessment (where relevant) or Flood Risk Assessment may be required<sup>67</sup>.

### The Significance of Effects

The significance attributed to effects can be a central issue when the findings of an EIAR come under scrutiny, for example during an appeal to An Bord Pleanála for a contested development application.

Significance of effects is usually understood to mean the importance of the outcome of the effects (the consequences of the change). Significance is determined by a combination of (objective) scientific and subjective (social) concerns.

While guidelines and standards help ensure consistency, the professional judgement of competent experts can play an important role in the determination of significance. These experts may place different emphases on the factors involved. As this can lead to differences of opinion, the EIAR sets out the basis of these judgements so that the varying degrees of significance attributed to different factors can be understood.

### Descriptive Terminology

The description of effects is usually subjected to closer scrutiny than any other part of the EIAR. Clarity of method, language and meaning are vital to accurately explain the full range of effects. Adherence to a systematic method of description can be of considerable assistance in this matter.

The relevant terms listed in the table below can be used to consistently describe specific effects. All categories of terms do not need to be used for every effect.

66 ref. Annex IV(5)(d) of amended Directive.

67 ref. [section 3.3.5](#) Consideration of Other Assessments.

**Table 3.4 Descriptions of Effects**

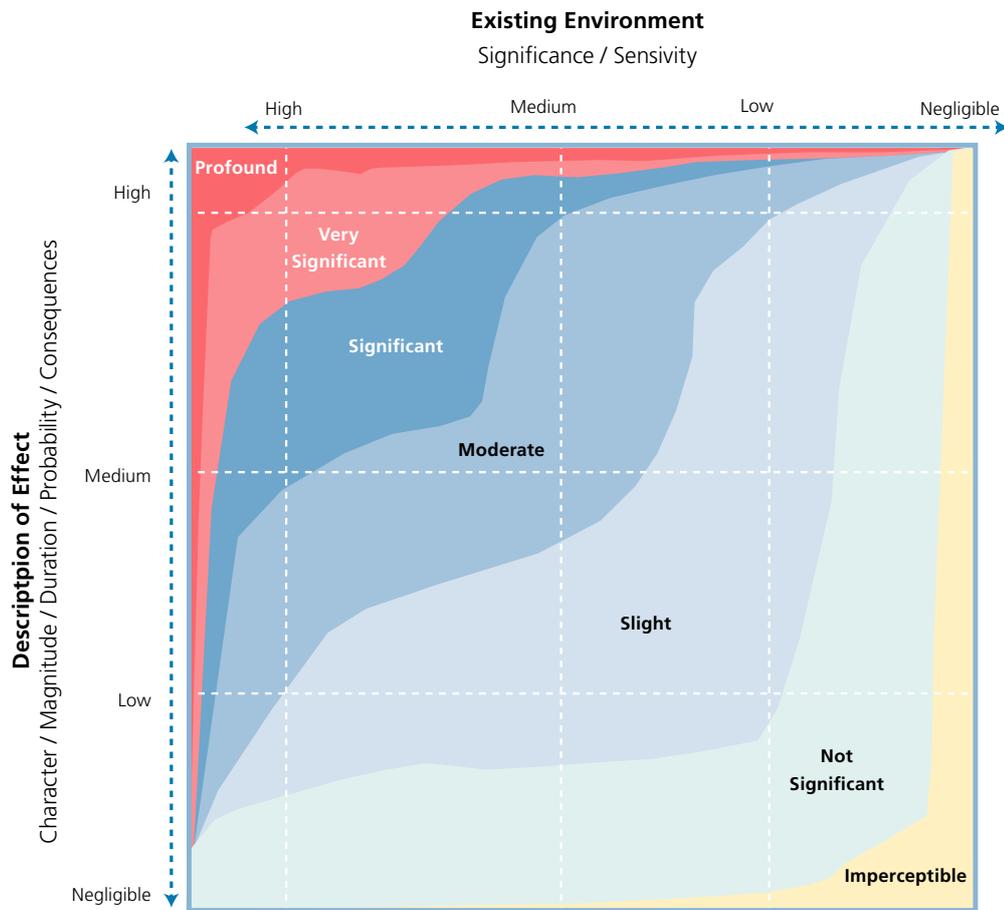
<p><b>Quality of Effects</b></p> <p>It is important to inform the non-specialist reader whether an effect is positive, negative or neutral.</p>	<p><b>Positive Effects</b></p> <p>A change which improves the quality of the environment (for example, by increasing species diversity, or improving the reproductive capacity of an ecosystem, or by removing nuisances or improving amenities).</p>
	<p><b>Neutral Effects</b></p> <p>No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.</p>
	<p><b>Negative/Adverse Effects</b></p> <p>A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem, or damaging health or property or by causing nuisance).</p>
<p><b>Describing the Significance of Effects</b></p> <p>‘Significance’ is a concept that can have different meanings for different topics – in the absence of specific definitions for different topics the following definitions may be useful (also see <i>Determining Significance</i>).</p>	<p><b>Imperceptible</b></p> <p>An effect capable of measurement but without significant consequences.</p>
	<p><b>Not Significant</b></p> <p>An effect which causes noticeable changes in the character of the environment but without significant consequences.</p>
	<p><b>Slight Effects</b></p> <p>An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.</p>
	<p><b>Moderate Effects</b></p> <p>An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.</p>
	<p><b>Significant Effects</b></p> <p>An effect which, by its character, magnitude, duration or intensity, alters a sensitive aspect of the environment.</p>
	<p><b>Very Significant</b></p> <p>An effect which, by its character, magnitude, duration or intensity, significantly alters most of a sensitive aspect of the environment.</p>
	<p><b>Profound Effects</b></p> <p>An effect which obliterates sensitive characteristics.</p>
<p><b>Describing the Extent and Context of Effects</b></p> <p>Context can affect the perception of significance. It is important to establish if the effect is unique or, perhaps, commonly or increasingly experienced.</p>	<p><b>Extent</b></p> <p>Describe the size of the area, the number of sites and the proportion of a population affected by an effect.</p>
	<p><b>Context</b></p> <p>Describe whether the extent, duration or frequency will conform or contrast with established (baseline) conditions (is it the biggest, longest effect ever?)</p>

<p><b>Describing the Probability of Effects</b></p> <p>Descriptions of effects should establish how likely it is that the predicted effects will occur so that the CA can take a view of the balance of risk over advantage when making a decision.</p>	<p><b>Likely Effects</b></p> <p>The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented.</p> <p><b>Unlikely Effects</b></p> <p>The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.</p>
<p><b>Describing the Duration and Frequency of Effects</b></p> <p>'Duration' is a concept that can have different meanings for different topics – in the absence of specific definitions for different topics the following definitions may be useful.</p>	<p><b>Momentary Effects</b></p> <p>Effects lasting from seconds to minutes.</p> <p><b>Brief Effects</b></p> <p>Effects lasting less than a day.</p> <p><b>Temporary Effects</b></p> <p>Effects lasting less than a year.</p> <p><b>Short-term Effects</b></p> <p>Effects lasting one to seven years.</p> <p><b>Medium-term Effects</b></p> <p>Effects lasting seven to fifteen years.</p> <p><b>Long-term Effects</b></p> <p>Effects lasting fifteen to sixty years.</p> <p><b>Permanent Effects</b></p> <p>Effects lasting over sixty years.</p> <p><b>Reversible Effects</b></p> <p>Effects that can be undone, for example through remediation or restoration.</p> <p><b>Frequency of Effects</b></p> <p>Describe how often the effect will occur (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually).</p>

<b>Describing the Types of Effects</b>	<p><b>Indirect Effects (a.k.a. Secondary or Off-site Effects)</b> Effects on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway.</p>
	<p><b>Cumulative Effects</b> The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.</p>
	<p><b>‘Do-nothing Effects’</b> The environment as it would be in the future should the subject project not be carried out.</p>
	<p><b>‘Worst-case’ Effects</b> The effects arising from a project in the case where mitigation measures substantially fail.</p>
	<p><b>Indeterminable Effects</b> When the full consequences of a change in the environment cannot be described.</p>
	<p><b>Irreversible Effects</b> When the character, distinctiveness, diversity or reproductive capacity of an environment is permanently lost.</p>
	<p><b>Residual Effects</b> The degree of environmental change that will occur after the proposed mitigation measures have taken effect.</p>
	<p><b>Synergistic Effects</b> Where the resultant effect is of greater significance than the sum of its constituents (e.g. combination of SOx and NOx to produce smog).</p>

### Determining Significance

Figure 3.4 shows how comparing the character of the predicted effect to the sensitivity of the receiving environment can determine the significance of the effect.



There are seven generalised degrees of effect significance that are commonly used in EIA. Imperceptible, Not Significant, Slight, Moderate, Significant, Very Significant and Profound. Generalised definitions of each of these are provided in Table 3.4. When more specific definitions exist within a specialised factor or topic, e.g. biodiversity, these should be used in preference to these generalised definitions. (ref. Advice Notes<sup>68</sup>.)

Figure 3.4 Chart Showing Typical Classifications of the Significance of Effects<sup>69</sup>

### Indirect, Secondary and/or Cumulative Effects

The EC *Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions*<sup>70</sup> provide the following definitions.

#### Indirect Effects

Sometimes referred to as secondary effects or impacts, these are defined by the EC as ‘Impacts on the environment, which are not a direct result of the project, often produced away from (the site) or as a result of a complex pathway.’

68 see Advice Notes for more detail on appropriate baseline data (available on the EPA website [www.epa.ie](http://www.epa.ie)).

69 This chart is adapted from guidance provided in section C8 of *A handbook on environmental impact assessment: Guidance for Competent Authorities, Consultees and others involved in the Environmental Impact Assessment Process in Scotland*, Scottish Natural Heritage, 5th Edition, 2018. The depiction of significance classifications is indicative and should not be relied on as being definitive. It is provided for general guidance purposes.

70 *Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions*, European Commission, 1999.

One example of an indirect effect would be deterioration of water quality due to soil erosion following tree clearance for a development on a woodland site. In this case the tree removal is a direct effect and the effects of the erosion are indirect effects.

#### **CASE LAW**

In *An Taisce v An Bord Pleanála* (2015 IEHC 633) Edenderry the High Court ruled that an EIA of a proposal to extend the operating life of the peat - and part biomass - fuelled power station at Edenderry, Co. Offaly, excluded indirect effects due to harvesting of peat to fuel the power plant. The judgment referred to the 'functional interdependence' between the plant and the bogs where the peat was harvested. It was held that the fact that the harvesting operations were governed by separate EPA licensing did not justify exclusion from the EIA process.

#### **Cumulative Effects**

The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.

While a single activity may itself result in a minor impact, it may, when combined with other impacts (minor or insignificant), result in a cumulative impact that is collectively significant. For example, effects on traffic due to an individual industrial project may be acceptable; however, it may be necessary to assess the cumulative effects taking account of traffic generated by other permitted or planned projects. It can also be prudent to have regard to the likely future environmental loadings arising from the development of zoned lands in the immediate environs of the proposed project.

(See also [section 3.5.7](#) Description of Other Related Projects for more on cumulative effects.)

### **3.7.4 CRITERIA FOR ASSESSMENT OF EFFECTS**

As identified in [section 3.7.1](#), the likely significant effects of projects on the environment must be considered in relation to a set of criteria identified in the Directive. To ensure sufficient information has been provided in this regard, the EIAR should aim to answer the types of questions included in the right-hand column of Table 3.5 in relation to each of the criteria.

Table 3.5 Checklist for Information Required to Describe Effects<sup>71</sup>

CRITERIA	DETAILED QUESTIONS - TO DETERMINE WHETHER THE EIAR HAS:
a. <b>Magnitude and spatial extent of the effects</b>	<ul style="list-style-type: none"> <li>▲ clarified the size and scale of the effects?</li> <li>▲ indicated the spatial extent of the effects (will some, much or all the areas be affected)?</li> <li>▲ identified the receptors which will be affected, indicating their sensitivity and significance?</li> </ul>
b. <b>Nature of the effects</b>	<ul style="list-style-type: none"> <li>▲ clarified which part of the environment will be affected and how significantly?</li> <li>▲ identified the aspect of the environment affected?</li> <li>▲ described whether the effects are positive, neutral or negative?</li> </ul>
c. <b>Transboundary nature of the effects</b>	<ul style="list-style-type: none"> <li>▲ indicated the spatial extent of the transboundary effects (will some, much or all of the jurisdiction be affected)?</li> </ul>
d. <b>Intensity and complexity of the effects</b>	<ul style="list-style-type: none"> <li>▲ quantified the amount or intensity by which the character/quality of any environmental factor will change?</li> <li>▲ described the degree of change (e.g. imperceptible, slight or significant)?</li> <li>▲ Identified the significance of the effect [e.g. profound or insignificant]</li> </ul>
e. <b>Probability of the effects</b>	<ul style="list-style-type: none"> <li>▲ established the level of certainty of the assessment's findings?</li> <li>▲ highlighted consequence that cannot be determined?</li> </ul>
f. <b>Expected onset, duration, frequency and reversibility of the effects</b>	<ul style="list-style-type: none"> <li>▲ stated whether the effects will be continuous, intermittent or occasional?</li> <li>▲ indicated whether the effects will be temporary, short, medium or long-term?</li> <li>▲ highlighted irreversible effects?</li> </ul>
g. <b>Cumulation of the effects with the effects of other existing and/or approved projects</b>	<ul style="list-style-type: none"> <li>▲ described cumulative effects?</li> <li>▲ considered cumulative effects due to cumulation of effects with those of other projects that are existing or are approved but not yet built or operational?</li> </ul>
h. <b>Possibility of effectively reducing the effects</b>	<ul style="list-style-type: none"> <li>▲ indicated whether the effects can be mitigated?</li> <li>▲ stated whether compensation is available, possible or acceptable?</li> </ul>

### 3.7.5 ASSESSMENT METHODS

Where relevant the EIAR should describe the forecasting methods or evidence used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge<sup>72</sup>) encountered in compiling the required information and the main uncertainties involved. These details should enable all parties to arrive at similar conclusions as to the significance of effects, having regard to the criteria above<sup>73</sup>. This is typically included on a topic-by-topic basis within each specialist section of the EIAR. There is more detailed discussion of this in the accompanying Advice Notes.

71 Adapted from criteria to determine whether projects would have significant environmental impacts as set out in Annex III of Directive 2014/52/EU.

72 ref. guidance on *Sufficiency* in section 3.6.2.

73 ref. sections 3.7.3 Description of Effects and 3.7.4 Impact Assessment Criteria.

### 3.7.6 INTERACTIONS BETWEEN EFFECTS ON DIFFERENT FACTORS

The interactions between effects on different environmental factors should be addressed as relevant throughout the EIA. For example, where it is established in the Hydrology section that there will be an increase in suspended solids in discharged surface waters during construction, then the Biodiversity section should assess the effect of that on sensitive aquatic receptors. Close coordination and management within the EIA team is needed to ensure that interactions are adequately addressed throughout an EIA. Further guidance on this important requirement is contained in [section 4.3](#) Language, Terms and Editorial Notes<sup>74</sup>.

It is general practice to include a matrix to show where interactions between effects on different factors have been addressed. This is usually done using the actual headings used in the EIA (which may differ from the factors contained in the Directive (ref [section 3.3.6](#)). This is typically accompanied by text describing the interactions. Further coverage of this is provided in the Advice Notes.



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74 See also [sections 3.3.6](#), [3.7.3](#) and [3.8.1](#).

Interaction	Population & Human Health		Biodiversity		Land, Soils & Geology		Hydrology & Hydrogeology		Air Quality & Climate		Noise & Vibration		Landscape		Material Assets		Roads, Traffic & Transportation		Waste Management		Archaeology		Architectural Heritage	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Population & Human Health			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Biodiversity					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Land, Soils & Geology							✓	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Hydrology & Hydrogeology									X	X	X	X	X	X	✓	X	X	X	X	X	X	X	X	X
Air Quality & Climate									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Noise & Vibration													✓	✓	X	X	X	X	X	X	X	X	X	X
Landscape													✓	✓	X	X	X	X	X	X	X	X	X	X
Material Assets															X	X	X	X	X	X	X	X	X	X
Roads, Traffic & transportation																	✓	✓	X	X	X	X	X	X
Waste Management															X	X	X	X	X	X	X	X	X	X
Archaeology																								
Architectural Heritage																								

Con.	Construction Phase
Op.	Operational Phase
X	No Interaction

✓	Weak Interaction
✓	Some Interaction
✓	Strong Interaction

Figure 3.5 Sample Matrix to show Interactions between Factors

### 3.8 MITIGATION & MONITORING (STAGE 7 OF 7)

An EIAR should include:-

#### Annex IV(7) of the amended Directive

'A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.'

#### 3.8.1 MITIGATION (& OFFSETTING)

##### Overview

Early in the design process, assessments are carried out to identify likely significant effects and to integrate mitigation measures into the fundamental design to address potential adverse effects.

Undertakings to mitigate are specific parts of the project that must be complied with – in the same way as features that are described in drawings or specifications. Therefore, it is in the applicant's interest to ensure that all undertakings to mitigate are fully understood and accepted and the resources will be available to ensure compliance with such commitments.

Non-compliance is increasingly likely to be detected by sophisticated monitoring and post-consent evaluation – leading to likely enforcement proceedings in relation to failure to fully or effectively implement mitigation measures.

At an early stage, for projects interacting with significant environmental sensitivities, it may even be of benefit to review whether emerging requirements for mitigation may affect project viability.

The best mitigation measures are fully incorporated into the permitted design and operation of the project. Other mitigation measures may respond to exceedances detected by monitoring and are expressed as 'if/then' measures. These measures clearly set out a sequence of actions and responsibilities that arise on detection of an exceedance, e.g. *'If the BOD levels in the holding pond exceed the (stated parameter) then the discharge valve shall be closed until the levels return to permitted levels'*.

The established strategies for mitigation of effects are avoidance, prevention and reduction, which are commonly referred to as 'Mitigation Measures'. Offsetting<sup>75</sup> can be considered a type of 'Compensation Measure'. The efficacy of each is related to the stage in the design process at which environmental considerations are taken into account. Effects avoidance is most applicable at the earliest stages, while prevention or reduction may be provided up to a much later stage.

<sup>75</sup> It should be noted that different considerations apply in relation to the application of mitigation measures and compensatory measures in the context of the assessments required by Articles 6(3) and 6(4) of the Habitats Directive.

Measures such as offsetting should only be considered as a last resort if they may be the only option available, for example where projects cannot avoid, prevent or reduce significant effects due to their need to locate on a particular site.

### Mitigation by Avoidance

Avoidance, usually referring to strategic issues – such as site selection, site configuration or selection of process technology - is generally the fastest, cheapest and most effective form of effect mitigation. Environmental effects and the consideration of alternatives need to be taken into account at the earliest stage in the site / route selection and project design processes. For example, the realignment of a transport corridor to avoid residential property, avoid habitat destruction or to reduce agriculture severance, etc. In many situations, mitigation by avoidance may be viewed as part of the ‘consideration of alternatives’.

### Mitigation by Prevention

This usually refers to technical measures. Where a potential exists for unacceptable significant effects to occur (such as noise or emissions) then measures are put in place to limit the source of effects to a permissible and acceptable level. Examples include the specification of process technology standards or building design to minimise height or contrasts of materials. Prevention measures are also put in place to prevent the effects of accidental events from giving rise to significant adverse effects. The installation of a fire-water retention basin is an example of mitigation against such risk by prevention.

### Mitigation by Reduction

This is a very common strategy for dealing with effects which cannot be avoided. It tends to concentrate on the emissions and effects and seeks to limit the exposure of the receptor. It is generally regarded as the ‘end of pipe’ approach because it tends not to affect the source of the problems. As such this is regarded as a less sustainable, though still effective, approach.

#### *Reducing the Effect*

This strategy seeks to intercept emissions, effects and wastes before they enter the environment. It monitors and controls them so that acceptable standards are not exceeded. Examples include waste water treatment, filtration of air emissions and noise attenuation measures.

#### *Reducing Exposure to the Effects*

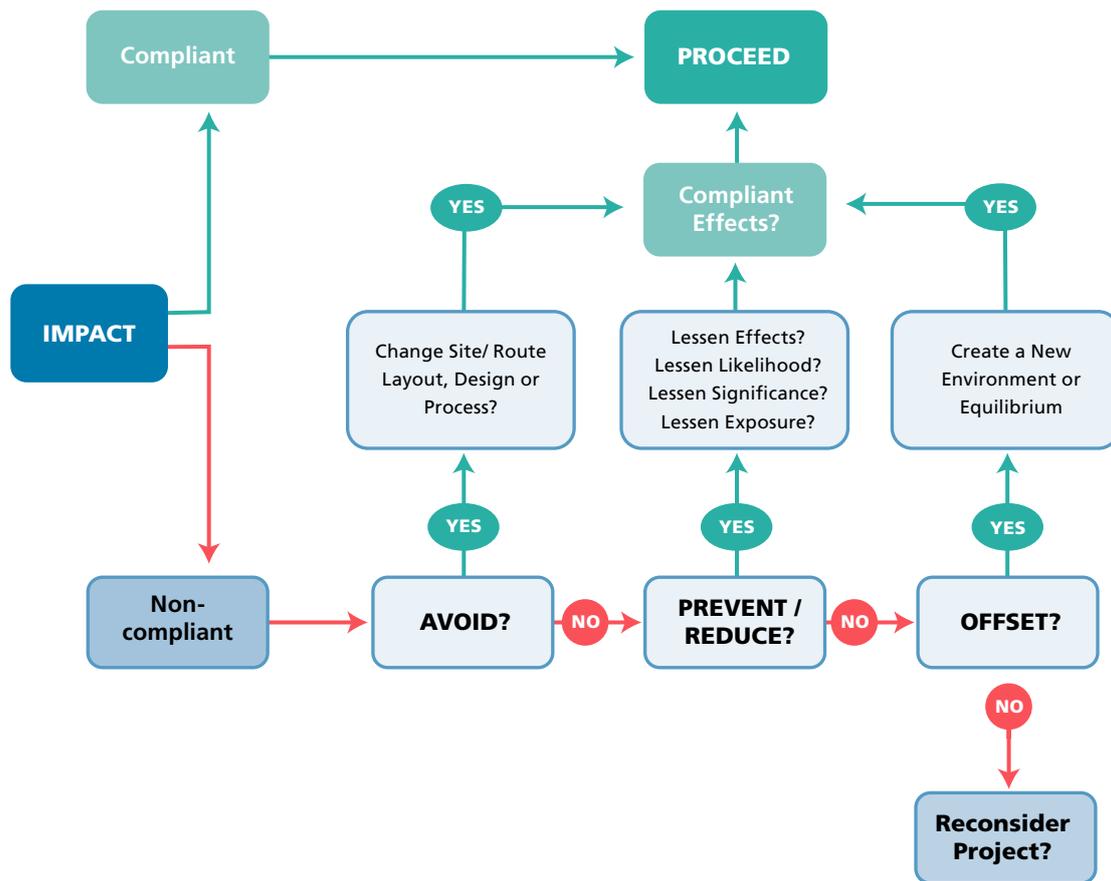
This strategy is used for effects which occur over an extensive and undefined area. Such effects may include noise, visual effects or exposure to accidents or hazards. The mitigation is achieved by installing barriers between the location(s) of likely receptors and the source of the effects.

### Offsetting

This is a strategy used for dealing with significant adverse effects which cannot be avoided, prevented or reduced. It includes measures to compensate for adverse effects.

#### *Examples*

- ▲ Restoration of buildings, walls or features to compensate for loss of similar features.
- ▲ Planting of new vegetation elsewhere to replace unavoidable loss of similar vegetation.
- ▲ Provision of a new amenity area to replace amenity lost as a result of a project.



For definition of *compliant* as used here see footnote<sup>76</sup>.

**Figure 3.6 Strategies for Identification of Appropriate Mitigation or Offsetting Measures Leading to a Decision to Proceed with the Project**

Mitigation or offsetting measures may unintentionally cause indirect effects, e.g. an acoustic screen wall to mitigate noise effects may have a significant visual effect or waste water treatment to mitigate water quality effects may require disposal of sludge waste. All mitigation and offsetting measures, including those devised in the latter stages of preparation of an EIA need to be clearly described. Careful co-ordination to ascertain if they need to be referred to or assessed in other sections of the EIA is essential<sup>77</sup>. As an example, road widening mitigation proposals to address traffic congestion may cause effects on other factors including biodiversity, land, soil, water, air, cultural heritage and the landscape. It is also important to fully consider interactions between effects and cumulative effects arising from the mitigation or offsetting measure.

<sup>76</sup> In this context, *compliant* means effects that are in accordance with legislation, appropriate guidelines or accepted standards.

<sup>77</sup> See also [section 3.7.6 Interactions Between Impacts on Different Factors](#)

### 3.8.2 MONITORING

The Annex IV extract in section 3.8 includes the requirement regarding coverage of monitoring in an EIAR, as set out in the Directive.

It may be appropriate, where relevant, to propose monitoring takes place after consent is granted in order to check that the project in practice conforms to the predictions made during the EIA and to record any unforeseen effects in order to undertake appropriate remedial action<sup>78</sup>.

Monitoring checks that proposed systems are operating as intended. This allows adjustments of operations to be made to ensure compliance with consent conditions such as emission limit values, conditions of operation, performance criteria indicators and detection of unexpected mitigation failures.

It is important to avoid excessive reliance on monitoring because this has the potential to lead to operational changes that fall outside the scope of project that was subject to scrutiny during the consent process. Monitoring post consent should similarly not be used to allow the deferral of the gathering of information that is necessary for the assessment/consent<sup>79</sup>.

In this context, it is important to ensure that monitoring is described within the context of the operations of the project processes. Monitoring descriptions should refer to remedial actions to be taken, as well as responsible parties, i.e. the developer and/or the consent authority (if monitoring thresholds are exceeded). In this way, all monitoring proposals and actions should be expressed as 'if-then' scenarios.

### 3.8.3 CONSULTATION ABOUT PREDICTED EFFECTS, MITIGATION & MONITORING MEASURES

Once likely significant effects are identified it can be useful to consult with the CA or other authorities<sup>80</sup> with responsibility for the relevant environmental characteristics. This can help to determine the practicality, acceptability and enforceability of any mitigation and monitoring measures that are being considered.

### 3.8.4 CLARITY OF MITIGATION & MONITORING MEASURES

The commitment to all mitigation and monitoring measures need to be made clear in the EIAR. Terms such as *...is recommended* or *...should be considered* need to be avoided. All commitments need to be clear and specific.

For ease of reference and clarity, and to facilitate enforcement, all such measures contained in an EIAR can be included in a compendium of mitigation and monitoring commitments (only). This may be a separate section or appendix to the EIAR. Such a compendium should comprise a list of relevant measures but should not elaborate on the reasoning or expected effectiveness of those measures, as the elaboration will take place within the main body of the EIAR.

78 Note that, like many other terms used in these Guidelines, the term *monitoring* can mean different things in different contexts. A specific definition of its meaning in the context of Archaeology is given in section 3.3.2 (c) of the *Policy and Guidelines on Archaeological Excavation*, Department of Arts, Heritage, Gaeltacht and the Islands, 1999.

79 ref. Section 7 of *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*, Department of Environment, Community and Local Government, 2018.

80 Bodies specified in the applicable legislation, e.g. Article 28 of the Planning and Development Regulations, 2001 (as amended).

## 3.9 RESIDUAL EFFECTS AND CONCLUSIONS

### 3.9.1 RESIDUAL EFFECTS

The residual effects are the final predicted or intended effects which occur after the proposed mitigation measures have been implemented.

It will not always be possible or practical to mitigate all adverse effects. The effects that remain after all assessment and mitigation are referred to as 'Residual Effects'. These are the remaining environmental 'costs' of a project that could not be reasonably avoided. These are a key consideration in deciding whether the project should be permitted or not.

For this reason, it is important that residual effects are clearly described in accordance with the standardised terminology set out previously.

### 3.9.2 CONCLUSIONS

The EIAR, or sections of an EIAR, should avoid including a 'Conclusions' section. Instead, an EIAR can include a summary of effects, a mitigation and monitoring measures compendium (as described in [section 3.8.4](#)), or a section on 'Residual Effects,' as described above.

While an EIAR is being scrutinised during the consent determination process, particularly during any appeal or challenge, it is not uncommon to encounter a request from a CA, statutory consultee or member of the public for an EIAR to provide an overall summary of the effects on the environment – or indeed on one aspect – asking, for example, to 'describe the overall effect of the proposed project on the landscape of the area'. The tendency to try to answer simplistic questions needs to be resisted because it fails to recognise that it is the nature of effects to affect individual, discrete, receptors at specific and separate times.

It can, however, be useful to provide an overview of the ways that the EIA process has helped to avoid reduce or mitigate significant effects of the proposed project. This can be done by including an overview of how the impact assessment and mitigation process has influenced the evolution of the design. This may be particularly useful when there are complex project or environmental issues to be considered and can form part of the section dealing with the consideration of alternatives.

## 3.10 DOCUMENT REVIEW

While it is not provided for in the legislation, all parties can benefit from a pre-application review of a draft EIAR by the CA or other statutory consultees – who are sometimes assisted by specialist advise. This may be particularly useful when there are complex project or environmental issues to be considered and can help to identify and resolve any issues before the application is finalised.

Such a review by the CA or other statutory consultees is carried out without prejudice to the subsequent determination.

The principal advantages of this kind of document review can include:

- ▲ Ensuring that the material submitted will be clearly understood by the public
- ▲ Avoidance of requests for additional information during the formal consent application process
- ▲ Clarifying descriptions of residual effects, reference criteria and relevant mitigation proposals
- ▲ Highlighting interactions or conflicts that may not have been evident at the earlier scoping stage.

Such reviews are at the discretion of the relevant authorities because resources may not always be available to facilitate this kind of review and engagement. The CA may review the whole EIAR, while other consultees are unlikely to review sections of the EIAR that fall outside their remit.

Within the EIA team, ongoing document review is an essential part of an effective EIA process. Internal reviews should take place throughout the preparation of an EIA from initial drafts to the application stage. All relevant team members should have roles in reviewing the document before the document is finalised and submitted to a consent process. This should include key specialists who have contributed to the EIA as well as lead design team members, the project manager and the client. (See *sections 2.4* and *4.3* for more guidance on this essential aspect of EIA preparation.)

## 4. PRESENTING THE INFORMATION IN AN EIAR

While the amended Directive and the legislation include many requirements about the factors that need to be addressed in an EIAR, there are few requirements regarding the presentation of an EIAR. In practice, the structure of an EIAR tends to follow the same sequence as the requirements set out in in the Directive and legislation.

Compliance with the legislation<sup>81</sup> ensures that the information needed for decision makers is available, adequate and accurate.

### 4.1 CONTENT

To assist assessment and increase clarity and the systematic organisation of information in an EIAR, it is good practice to separately describe the:

- i) key alternatives considered
- ii) proposed project
- iii) receiving environment
- iv) likely significant effects
- v) mitigation and monitoring measures
- vi) residual effects.

A non-technical summary must also be provided (ref [section 4.6](#)).

The receiving environment and the effects of the project are explained by reference to its possible effects on a series of environmental factors:

- ▲ Population and Human Health
- ▲ Biodiversity
- ▲ Land & Soils
- ▲ Water
- ▲ Air
- ▲ Climate
- ▲ Material Assets
- ▲ Cultural Heritage
- ▲ Landscape
- ▲ Interactions.

Different specialist topics may be relevant under some of these factors (ref [section 3.3](#)).

In practice the descriptions of items (iii) to (vi) above are usually addressed under each individual environmental factor (or specialist topic), along with the description of project details which are particularly relevant to that factor (or topic).

Effects address direct, indirect, secondary, cumulative, transboundary, short- medium- and long-term, permanent, temporary, positive and negative effects.

If it has been decided during scoping that a topic is not relevant, then the EIAR should nonetheless include a specific explanation as to why it has been determined that it is not relevant, i.e. why it has been decided that it is appropriate for the topic to be 'scoped out'.

81 ref. [section 1.3](#) Legislation.

## 4.2 STRUCTURE

The format, which is a matter for the proponent to determine, should be rational, systematic and clearly show how it relates to the mandatory requirements. Accessibility and clarity should be key considerations. The non-technical summary can be part of the main EIAR document or can be presented separately.

The structure should ensure that facts and prediction are kept separate. This keeps facts to the forefront and reduces the potential for bias or selective information.

The typical format starts with an introduction, followed by descriptions of the screening and scoping stages and an overall project description. It then examines each environmental factor (as listed in [section 4.1](#)) as a separate section. These sections may contain separate parts or subsections to address the individual headings and/or topics identified during scoping.

## 4.3 LANGUAGE, TERMS & EDITORIAL NOTES

Thorough briefing and editing ensures a consistent and well-integrated EIAR. This should greatly improve accessibility and keep the EIAR focused on assessment of the likely significant effects. It should also reduce the possibility of conflicting information being included in the EIAR. Inconsistencies can compromise compliance, leading to delays in the consent process or even forming grounds for legal challenge.

The editing role will often identify interactions between issues arising under separate factors which might otherwise not be noticed but which need to be assessed to ensure compliance.

Inclusion of separately prepared assessments for different topics without adequate editing is likely to result in a disjointed EIAR. This increases the potential for inconsistencies or for significant interactions with other topics to be overlooked.

Key editing considerations include:

- ▲ The phrases ‘...effects will occur’ or ‘is likely to occur’ are always preferable to terms like *may*, *could*, or *might occur* unless there is a particularly high degree of unavoidable uncertainty about the effects. If it is not possible to provide such definitive statements, then the use of tentative language should be explained.
- ▲ Euphemisms should be avoided (e.g. the description of the clear-felling of mature trees ought not to be described as ‘a woodland management programme’).
- ▲ Terms should be used consistently throughout an EIAR. This is particularly important when compiling contributions from different experts into one EIAR document. Use terms that have a widely accepted meaning. Specialised or technical terms used in an EIAR should be explained so that their usage and meaning is clear to the average non-specialist reader. If numerous such terms are used, then inclusion of a *glossary of terms* can be very beneficial.
- ▲ Repetition should be avoided. For example, avoid repetition of site location and project description information. Similarly, the methodology description in each specialist section should avoid repetition of references to the same guidelines.
- ▲ Use of cross-referencing should help make the EIAR easier to follow, pointing the reader to relevant related material, e.g. to figures, tables or interacting topics. This should also help avoid repetition of material.
- ▲ Footnotes can similarly help make the EIAR easier to follow by removing details such as document references and technical information from the body of the report text.
- ▲ Clear page numbering, logical arrangement and numbering of sections and subsections improve accessibility. A table of contents that includes lists of tables, figures and appendices will also help to make the EIAR easier to navigate.

- Review and editing by a lead author or central editing team should help achieve a consistency of style and format. This increases the legibility and accessibility of the overall EIA and makes it more useful in the EIA process.

## Illustrations

Illustrations, including maps, plans, sections, diagrams, photographs and sketches, can be used to explain aspects of the assessment. Illustrations need to be prepared that will be legible at the scale at which they are included in the EIA. Drawings that are intended to be printed in large format (e.g. A1 or A0 size) will usually not be sufficiently clear if reduced in the EIA to A3 or A4 page size. Simplified versions of drawings may need to be separately prepared in order to clearly describe the relevant parts of a project in the EIA. The date and source of mapping and other externally sourced data used in illustrations should be included where relevant. Clear captions are required to explain the purpose of each illustration.

Illustrations should only be included where they help to explain information that is relevant to the EIA. So, for example, large sets of floor plans, elevations and process diagrams are rarely helpful in an EIA and their inclusion may make it harder to find other information that is relevant. Lack of clarity can undermine credibility or lead to requests for additional information.

## 4.4 APPENDICES

Appendices can be useful for including supporting information that is not core to an EIA but which may nonetheless be required for a more detailed understanding, or technical scrutiny, of significant issues. The appendices can be particularly useful for minimising the size of the main EIA. Inclusion of unnecessary technical data or material such as legislation that may be available elsewhere (online) should be avoided.

For example, the appendix may include a detailed traffic impact assessment report that may contain numerous junction diagrams and engineering calculations while the findings of the report will be accurately summarised in plain language in the main body of an EIA. This approach helps to keep the main EIA document clear and succinct.

Where appendices are used, then cross-references to them should be included in the body of the EIA to advise the reader of relevant appendices and of specific relevant material within them.

## 4.5 SIZE

The size of an EIA will vary as a result of the range and complexity of the significant issues. It is in the interest of all parties for an EIA to be kept as concise as possible. Excessive length can be a considerable barrier to effective public participation. It is best to keep supplementary or detailed information out of the main volume of the EIA and present it as an appendix, separate to the main EIA document. [Section 4.7](#) provides guidance on presentation to assist in ensuring accessibility. This is particularly relevant in the case of long documents and documents containing numerous appendices.

The EIA, together with its appendices, ought to generally constitute a self-contained document, i.e. direct reliance on references to documentation that is not readily available (e.g. online) is to be avoided.

Topics which are not directly relevant to the EIA are excluded to maintain focus on environmental matters. For example material on project justification is generally inappropriate for inclusion in the EIA or the appendices and is better included elsewhere (in a Planning Application Report, for example).

## 4.6 NON-TECHNICAL SUMMARY

### Introduction

The Directive includes the requirement for a non-technical summary because one of the fundamental objectives of the EIA process is to ensure that the public is made aware of the environmental implications of any decisions about whether to allow new projects to take place. This should be a summary of the information provided under points 1 to 8 in Annex IV of the amended Directive.

While it is a summary, it is important to cover the issues that arose in sufficient detail so that the key issues and their implications can be clearly understood.

For larger projects it can be useful to present the non-technical summary as a separate document, which can be widely distributed to the public who are likely to be affected by the project.

A non-technical summary of an EIAR is different to and should not be confused with public relations or promotional material, which should not form any part of an EIAR (see also [section 2.6](#)).

### Structure and Contents

The non-technical summary is generally laid out in a similar, but condensed, format to the main EIAR, i.e. describing the project, existing environment, effects and mitigation measures, etc. The inclusion of clear maps, plans and other illustrations can be useful.

### Language and Terms

The non-technical summary should be short and easily followed, but it should not omit or understate any effects which may be controversial. All key likely significant effects should be included.

Technical terms, abbreviations, references or jargon should not be used.

## 4.7 PRESENTATION / MEDIA

For ease of use, most EIARs are printed in A4 format. A3 format is sometimes used for illustrations to aid legibility, and this is considered acceptable. It is best to avoid excessive use of colour illustrations because this impedes making copies available at a reasonable cost.

The copies of an EIAR submitted to accompany a consent application need to be made available in whatever format is required by the CA and in accordance with requirements of the legislation<sup>82</sup>. Provision of digital copies of EIARs is increasingly recognised as being practical because it reduces cost and facilitates ease of access for the public. In some consent procedures, the applicant is legally required to make them available online.

Provision of digital copies also helps the state to meet its obligation under the Directive to make relevant information accessible in electronic format:

‘With a view to strengthening public access to information and transparency, timely environmental information with regard to the implementation of this Directive should also be accessible in electronic format. Member States should therefore establish at least a central portal or points of access, at the appropriate administrative level, that allow the public to access that information easily and effectively.’

**Recital (18) of  
Directive  
2014/52/EU**

Digital copies should:

- ▲ be in a locked format that is laid out and numbered the same as the paper copy (normally PDF)
- ▲ be searchable
- ▲ be clearly indexed and labelled
- ▲ ensure that the digital file size readily facilitates uploading and distribution.

Internal hyperlinks, e.g. to footnotes and cross-references can be useful and aid accessibility provided they do not affect the numbering or arrangement of content.

<sup>82</sup> ref also *section 5.1* Scrutiny and Consent and section 5 of *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*, Department of Housing, Planning and Local Government, 2018.

## 5. NEXT STEPS IN THE EIA PROCESS

After completion of an EIAR, the remaining stages in the EIA process are *scrutiny & consent* and *enforcement & monitoring* (See Figure 2.1). These are not part of the preparation of an EIAR but are worthwhile considering in order to improve the applicant's focus on how to present material in a way that facilitates the CA's role in the EIA process.

### 5.1 SCRUTINY & CONSENT

#### Submission to the Competent Authority

Once the EIAR has been completed, public notification requirements must be complied with. These will state that an EIAR is being (or has been) submitted with a consent application. For larger or complex projects it can be advisable to discuss the details of these and other requirements with the CA in advance of submission. Discussions can, for example, include the requirements for the number of copies or the most suitable format – for ease of reproduction or display. EIA Portal requirements must also be complied with, as applicable<sup>83</sup>.

#### Competent Authority Assessment

The CA will assess the EIAR to ensure that it is compliant with the requirements of the Directive and transposing legislation. This is usually done by checking that it contains all of the main requirements, as set out in [section 2.4.4](#). If any of these items are not included, the CA will expect to see an explanation as to why the particular item or items were omitted (e.g. on account of scoping). The CA will also check that the EIAR was prepared by competent experts (ref. [section 2.5](#)).

The CA consults with certain authorities<sup>84</sup> and with the public to seek their observations on submissions. They must consider these observations as part of the determination process.

The CA assesses the EIAR and other submitted documents to determine whether it has sufficient information on the environmental effects of the project to enable it to make an adequately informed determination.

#### Competent Authority Decision

The CA can then make one of three decisions, namely to seek further information, grant or refuse the application.

If, during the review, the CA determines that the information presented in an EIAR is not sufficient for it to make a determination, then the developer may be asked to provide further information.

If granting, the CA attaches conditions to the consent. The conditions will typically seek to ensure adherence to mitigation and monitoring measures presented in the EIAR. These may be augmented and modified by the CA.

If refusing, the CA may cite specific evidence from the EIAR such as the non-conformity of residual effects with official standards, impractical mitigation measures or uncertainty about environmental interactions.

Article 8a of the Directive specifies various requirements in relation to the making of the decision. These mainly relate to reasoned conclusion, conditions, mitigation measures and monitoring. These requirements are transposed into the relevant legislation. A consent decision may be

83 EIA Portal, Department of Housing, Local Government and Heritage  
<https://www.gov.ie/en/publication/9f9e7-eia-portal/>

84 Bodies specified in the applicable legislation, e.g. Article 28 of the Planning and Development Regulations, 2001 (as amended).

subject to appeal and/or legal challenge. The provisions for appeals and challenges vary according to the consent regime and a range of other considerations. These stages may involve further scrutiny of the EIAR and of the EIA process.

## 5.2 MONITORING & ENFORCEMENT

'1. The decision to grant development consent shall incorporate at least the following information:

....

(b) any environmental conditions attached to the decision, a description of any features of the project and/or measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment as well as, where appropriate, monitoring measures.

...

4. In accordance with the requirements referred to in paragraph 1(b), Member States shall ensure that the features of the project and/or measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment are implemented by the developer, and shall determine the procedures regarding the monitoring of significant adverse effects on the environment.

The type of parameters to be monitored and the duration of the monitoring shall be proportionate to the nature, location and size of the project and the significance of its effects on the environment.

Existing monitoring arrangements resulting from Union legislation other than this Directive and from national legislation may be used if appropriate, with a view to avoiding duplication of monitoring.'

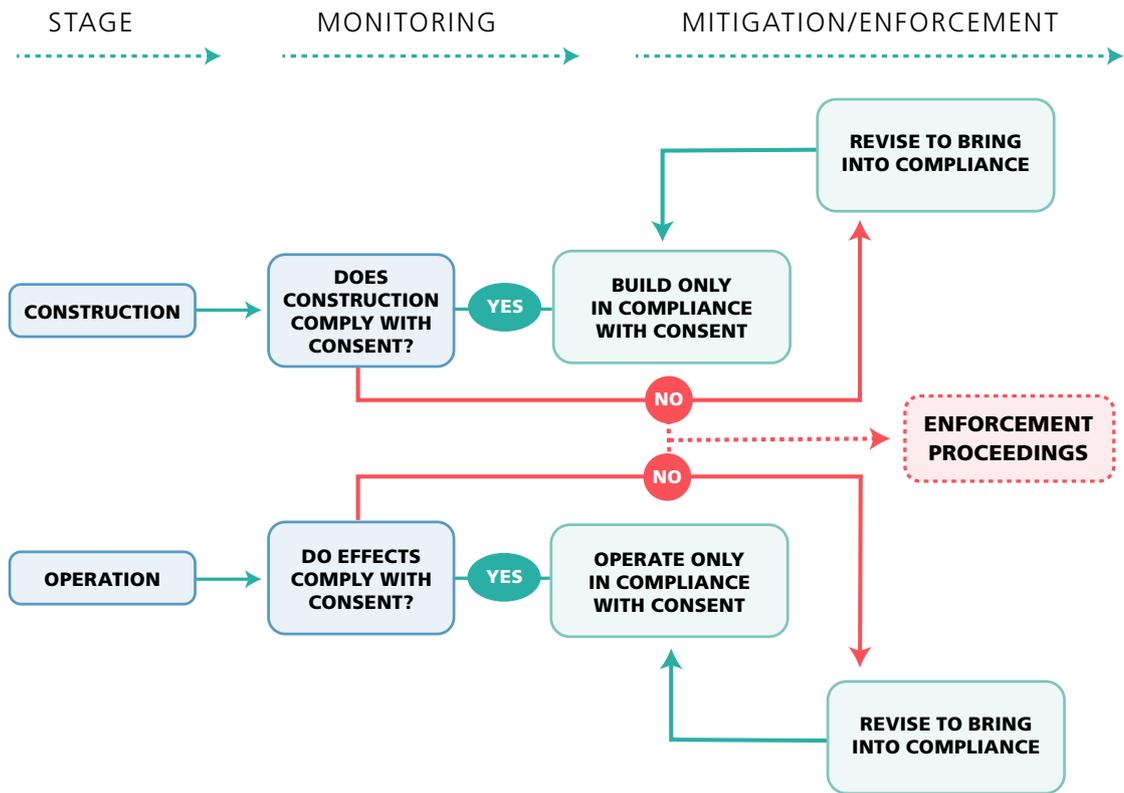
**Article 8a of  
amended Directive**

If consent has been granted and the project proceeds, then the developer is obliged to adhere to the specific mitigation measures and monitoring commitments contained in the EIAR<sup>85</sup>, as modified by any conditions attached to the consent.

Applicants are strongly advised to give careful consideration to the wording of undertakings to mitigate – to ensure that they clearly result in actions that can be readily identified by monitoring and acted upon by enforcement procedures.

Monitoring requirements may include reporting to the CA. Where triggers have been attached to monitoring results then relevant mitigation measures are activated as required by the EIAR or consent conditions. This could be during construction (or commissioning), operations or modifications (or decommissioning or reinstatement).

85 ref [section 3.8.4](#) Clarity of Mitigation & Monitoring Measures.



**Figure 5.1 Monitoring, Mitigation and Enforcement**

Modifications to a project should be subject to screening for further consent requirements including EIA screening. If they do not require any separate consent then the above monitoring and mitigation considerations apply.

## APPENDIX I – GLOSSARY OF TERMS

This glossary provides standard definitions of terms that may be useful in preparation of EIARs.

### Alternatives

A description of other options that may have been considered during the conception of a project; these include alternative locations, alternative designs and alternative processes.

### Appropriate Assessment – AA

An appropriate assessment is an assessment of the potential adverse effects of a plan or project (in combination with other plans or projects) on Special Areas of Conservation and Special Protection Areas. These sites are protected by national and European law.

### Archaeology

The study of past societies of any period through the material remains and the evidence of their environment. The material things (objects, monuments, sites, features, deposits) which archaeology uses to study past societies are referred to as 'archaeological heritage'.

### Baseline Scenario

The current state of environmental characteristics – including any evident trends in its status.

### Baseline Survey

A survey to establish the current state of environmental characteristics.

### Biodiversity

'The variability among living organisms from all sources, including, *inter alia*, terrestrial, marine, and other aquatic ecosystems, and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems'<sup>86</sup>.

### Commissioning

The activities occurring after the construction of a project that occur before it becomes fully operational. On large or complex projects, this can include extended periods of testing, certification and calibration, for instance.

### Competent Authority (CA)

The term 'competent authority' means the Minister or public authority to which an EIAR is required to be submitted, i.e. the authority charged with examining an EIAR with a view to issuing a consent to develop or operate.

### Decommissioning

The final closing down and putting into a state of safety of a development, project or process when it has come to the end of its useful life.

### Developer

A term used in the EIA Directive to describe persons or organisations proposing a project which is subject to the EIA Directive.

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86 *Convention on Biological Diversity*, Secretariat of the Convention on Biological Diversity, Montreal, Canada, 1992.

## Development

A project involving new works [including alteration and/or demolition] or altered patterns of activity.

## 'Do-nothing' Scenario

The situation or environment which would exist if a proposed, development, project or process were not carried out. This scenario needs to take account of the continuation or change of current management regimes, as well as the continuation or change of trends currently evident in the environment.

## Ecology

The study of the relationships between living organisms and between organisms and their environment (especially animal and plant communities), their energy flows and their interactions with their surroundings.

## Effect / Impact

A change resulting from the implementation of a project.

## Effluent

Any liquid discharged from a source into the environment.

## Emission

Under the EPA Act 1992, as amended, 'emission' means, in relation to an activity referred to in Part IV, IVA, IVB or IVC, any direct or indirect release of substances, heat or noise from individual or diffuse sources in the activity into the atmosphere, water or land, and includes:

- a) an emission into the atmosphere of a pollutant within the meaning of the Air Pollution Act, 1987,
- b) the release of a greenhouse gas or a precursor of a greenhouse gas into the atmosphere,
- c) a discharge of polluting matter, sewage effluent or trade effluent within the meaning of the Local Government (Water Pollution) Act 1977, to waters or sewers within the meaning of that Act, or
- d) waste,

but does not include a radioactive substance within the meaning of Council Directive 96/29/Euratom, a genetically modified micro-organism within the meaning of Council Directive 90/219/EEC or a genetically modified organism within the meaning of Directive 2001/18/EC of the European Parliament and of the Council.

## Environmental Factor

EIA legislation has defined a number of factors that are used to organise descriptions of the environment. The discussions of the characteristics of the environment in an EIA are grouped under headings which correspond to these factors or closely related headings (ref. [section 3.3.6](#) Selection of Headings Under Which to Arrange Issues).

## Environmental Impact Assessment – EIA

The process of examining the anticipated environmental effects of a proposed project – from consideration of environmental aspects at design stage, through consultation and preparation of an Environmental Impact Assessment Report (EIA), evaluation of the EIA by a competent authority, and the subsequent decision as to whether the project should be permitted to proceed, encompassing public response to that decision.

## Environmental Impact Assessment Report – EIAR

A report or statement of the effects, if any, that the proposed project, if carried out, would have on the environment.

### EPA

The Environmental Protection Agency.

### Geology

The science of the earth, including the composition, structure and origin of its rocks.

### Ground Water

The water which flows underground through naturally porous parts of the soil or rock.

### Habitat

'A habitat is described as the area in which an organism or group of organisms lives, and is defined by the living (biotic) and non-living (abiotic) components of the environment. The latter includes physical, chemical and geographical factors, in addition to human impact or management'<sup>87</sup>.

### Hydrology

The science concerned with the occurrence and circulation of water in all its phases and modes, and the relationship of these to man.

### Impact / Effect

A change resulting from the implementation of a project.

### Impact Avoidance

The modification of project decisions (about site location or design, for example) having regard to predictions about potentially significant environmental effects.

### Industrial Emissions – IE Licence

Industrial Emissions Directive activities are defined in Annex I of the Industrial Emissions Directive (Directive 2010/75/EU). These activities were incorporated into the First Schedule to the Environmental Protection Agency Act 1992 by the European Union (Industrial Emissions) Regulations 2013. Industrial Emissions Directive activities are subject to an Industrial Emissions licensing system administered by the EPA. An IE licence is a single integrated licence which covers all emissions from the installation and its environmental management. More information is available on the EPA website <http://www.epa.ie/licensing/industrialemissionslicensing/#.VQIV3tKsUph>

### Infrastructure

The basic structure, framework or system which supports the operation of a project, for example roads and sewers, which are necessary to support development projects.

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87 A Guide to Habitats in Ireland, Fossitt, J.A., 2000. Heritage Council.

### Integrated Pollution Control – IPC Licence

IPC licensing applies to certain activities specified in the First Schedule of the Environmental Protection Agency Act 1992, as amended. IPC licences aim to prevent or reduce emissions to air, water and land, reduce waste and use energy/resources efficiently. An IPC licence is a single integrated licence which covers all emissions from the installation and its environmental management. More information is available on the EPA website.

### Integrated Pollution Prevention and Control – IPPC (see Directive 96/61/EC)

This was an EU-wide licensing/enforcement regime for specified activities. It aimed to prevent, reduce and, as far as possible, eliminate pollution by giving priority to intervention at source and ensuring prudent management of natural resources, in compliance with the ‘polluter pays’ principle and the principle of pollution prevention. Emphasis was placed on energy efficiency and residuals management. It has been superseded by the Industrial Emissions Directive (Directive 2010/75/EU – see above).

### Land Use

The human activities which take place within a given area of space.

### Likely Effects (or Likely Impacts)

The effects that are specifically predicted to take place – based on an understanding of the interaction of the proposed project and the receiving environment. (See also *Potential Effects* and *Residual Effects*.)

### Methodology

The specific approach or techniques used to analyse impacts or describe environments.

### Mitigation Measures

Measures designed to avoid, prevent or reduce impacts. These measures can mitigate impacts:

- ▲ *by Avoidance*  
When no impact is caused (often through consideration of alternatives).
- ▲ *by Prevention*  
When a potential impact is prevented by a measure to avoid the possibility of the impact occurring.
- ▲ *by Reduction*  
When an impact is lessened.

### Monitoring

The observation, measurement and evaluation of environmental data to follow changes over a period of time, to assess the efficiency of control measures and to record any unforeseen effects in order to be able to undertake appropriate remedial action. This is typically a repetitive and continued process carried out during construction, operation or decommissioning of a project.

### NGO

An acronym used to describe a Non-governmental Organisation.

### Offsetting

Resolution of a significant adverse impact by a balancing positive action.

### **Pathway**

The route by which an effect is conveyed between a source and a receptor.

### **Planning Application Report**

Documentation that accompanies the planning application which describes the conformity of the proposal with relevant legislation and planning matters – such as the County, City or Local Area Plans – and sectoral policies, as well as social and economic activity.

### **Pollution**

Any release to the environment which has a subsequent adverse effect on the environment or man.

### **Potential Effect/ Impact**

The effect / impact that would occur without mitigation.

### **Processes**

The activities which take place within a project.

### **Project**

For the purposes of the Guidelines, the term project is used to encompass all of the various forms of development, works and activity which are subject to EIA requirements, as set out in the relevant legislation and as understood by the Directive<sup>88</sup>.

### **Reasonably Foreseen**

A working assumption about the future that assumes that a project will be developed as planned and used within a receiving environment that will change in accordance with currently evident trends. It will include a consideration of the likelihood and consequences of abnormal occurrences – such as accidents.

### **Receiving Environment**

The likely evolution of baseline environmental characteristics without implementation of the proposed project.

### **Receptor**

Any element in the environment which is subject to impacts.

### **Residual Effect (or Residual Impact)**

The final predicted effect / impact remaining after mitigation.

### **Risk Assessment**

An analytical study of the probabilities and magnitude of harm to human health and the environment associated with a biological, physical or chemical agent, activity or occurrence.

### **Scoping**

The process of identifying the significant issues which should be addressed by a particular Impact Assessment, as well as the means or methods of carrying out the assessment.

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88 Article 1(2)(a) of amended Directive.

**Screening**

The process of assessing the requirement for a project to be subject to Impact Assessment based on project type and scale, as well as the significance or environmental sensitivity of the receiving environment.

**Services**

The conduits, pipes and lines that carry water, phones, electricity, sewage etc. Sometimes referred to as *built services*.

**Sensitivity**

The potential of a receptor to be significantly affected.

**Significance (of impact)**

The importance of the outcome of the impact (or the consequence of change) for the receiving environment.

**Source**

The activity or place from which an effect originates.

**Statutory Consultees**

An organisation or authority stipulated by legislation to be notified by a CA or developer if an application is made which might give that organisation a cause for concern<sup>89</sup>.

**Strategic Environmental Assessment – SEA**

Assessment of the effects of certain plans and programmes (and, in some jurisdictions, policies) on the environment. It presents a structured and participative process containing a set of tools to assist in the integration of environmental considerations and promote informed decision-making at plan/programme level.

**Surface Water**

Natural water bodies such as streams, lakes and rivers and artificial features, such as canals and impoundments, that are visible on the surface of the earth.

**Threshold**

The magnitude of a project which, if exceeded, will trigger the requirement for an Environmental Impact Assessment to be carried out.

**Waste Licence**

Specified waste activities listed in the Third and Fourth Schedules to the Waste Management Act 1996, as amended, require a Waste Licence from the EPA. A waste licence is a single integrated licence dealing with emissions to all environmental media and the environmental management of the facility.

**Waste Water Discharge Authorisation**

A system for the licensing or certification of waste water discharges from areas served by Irish Water sewer networks in accordance with the requirements of the *European Union (Waste Water Discharge) Regulations 2007 to 2020*. The authorisation process provides for the EPA to place stringent conditions on the operation of such discharges to ensure that potential effects on the receiving water bodies are strictly limited and controlled.

<sup>89</sup> Bodies specified in the applicable legislation, e.g. Article 28 of the Planning and Development Regulations, 2001 (as amended).

# APPENDIX II – ANNEX IV OF 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.

## INFORMATION REFERRED TO IN ARTICLE 5(1)

(INFORMATION FOR THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT)

1. Description of the project, including in particular:
  - a) a description of the location of the project;
  - b) a description of the physical characteristics of the whole project, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;
  - c) a description of the main characteristics of the operational phase of the project (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used;
  - d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operation phases.
2. A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.
3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.
4. A description of the factors specified in Article 3(1) likely to be significantly affected by the project: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.
5. A description of the likely significant effects of the project on the environment resulting from, inter alia:
  - a) the construction and existence of the project, including, where relevant, demolition works;
  - b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;
  - c) (the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste);
  - d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);

- e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;
- f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;
- g) the technologies and the substances used.

The description of the likely significant effects on the factors specified in Article 3(1) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project.

6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.
7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.
8. A description of the expected significant adverse effects of the project on the environment deriving from the vulnerability of the project to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.
9. A non-technical summary of the information provided under points 1 to 8.
10. A reference list detailing the sources used for the descriptions and assessments included in the report.



# AN GHNÍOMHAIREACTH UM CHAOMHNÚ COMHSHAOL

Tá an GCC freagrach as an gcomhshaol a chosaint agus a fheabhsú, mar shócmhainn luachmhar do mhuintir na hÉireann. Táimid tiomanta do dhaoine agus don chomhshaol a chosaint ar thionchar díobhálach na radaíochta agus an truailithe.

## Is féidir obair na Gníomhaireachta a roinnt ina trí phríomhréimse:

**Rialáil:** *Rialáil agus córais chomhlíonta comhshaoil éifeachtacha a chur i bhfeidhm, chun dea-thorthaí comhshaoil a bhaint amach agus díriú orthu siúd nach mbíonn ag cloí leo.*

**Eolas:** *Sonraí, eolas agus measúnú ardchaighdeán, spriocdhírthe agus tráthúil a chur ar fáil i leith an chomhshaoil chun bonn eolais a chur faoin gcinnteoireacht.*

**Abhcióideacht:** *Ag obair le daoine eile ar son timpeallachta glaine, táirgiúla agus dea-chosanta agus ar son cleachtas inbhuanaithe i dtaobh an chomhshaoil.*

## I measc ár gcuid freagrachtaí tá:

### Ceadúnú

- Gníomhaíochtaí tionscail, dramhaíola agus stórála peitрил ar scála mór;
- Sceitheadh fuíolluisce uirbigh;
- Úsáid shrianta agus scaoileadh rialaithe Orgánach Géinmhodhnaithe;
- Foinsí radaíochta ianúcháin;
- Astaíochtaí gás ceaptha teasa ó thionscal agus ón eitlíocht trí Scéim an AE um Thrádáil Astaíochtaí.

### Forfheidhmiú Náisiúnta i leith Cúrsaí Comhshaoil

- Iníúchadh agus cigireacht ar shaoráidí a bhfuil ceadúnas acu ón GCC;
- Cur i bhfeidhm an dea-chleachtais a stiúradh i ngníomhaíochtaí agus i saoráidí rialáilte;
- Maoirseacht a dhéanamh ar fhreagrachtaí an údaráis áitiúil as cosaint an chomhshaoil;
- Caighdeán an uisce óil poiblí a rialáil agus údaruithe um sceitheadh fuíolluisce uirbigh a fhorfheidhmiú
- Caighdeán an uisce óil poiblí agus phríobháidigh a mheasúnú agus tuairisciú air;
- Comhordú a dhéanamh ar líonra d'eagraíochtaí seirbhíse poiblí chun tacú le gníomhú i gcoinne coireachta comhshaoil;
- An dlí a chur orthu siúd a bhriseann dlí an chomhshaoil agus a dhéanann dochar don chomhshaol.

### Bainistíocht Dramhaíola agus Ceimiceáin sa Chomhshaol

- Rialacháin dramhaíola a chur i bhfeidhm agus a fhorfheidhmiú lena n-áirítear saincheisteanna forfheidhmithe náisiúnta;

- Staitisticí dramhaíola náisiúnta a ullmhú agus a fhoilsiú chomh maith leis an bPlean Náisiúnta um Bainistíocht Dramhaíola Guaisí;
- An Clár Náisiúnta um Chosc Dramhaíola a fhorbairt agus a chur i bhfeidhm;
- Reachtaíocht ar rialú ceimiceán sa timpeallacht a chur i bhfeidhm agus tuairisciú ar an reachtaíocht sin.

### Bainistíocht Uisce

- Plé le struchtúir náisiúnta agus réigiúnacha rialachais agus oibriúcháin chun an Chreat-treoir Uisce a chur i bhfeidhm;
- Monatóireacht, measúnú agus tuairisciú a dhéanamh ar chaighdeán aibhneacha, lochanna, uiscí idirchreasa agus cósta, uiscí snámha agus screamhuisce chomh maith le tomhas ar leibhéil uisce agus sreabhadh abhann.

### Eolaíocht Aeráide & Athrú Aeráide

- Fardail agus réamh-mheastacháin a fhoilsiú um astaíochtaí gás ceaptha teasa na hÉireann;
- Rúnaíocht a chur ar fáil don Chomhairle Chomhairleach ar Athrú Aeráide agus tacaíocht a thabhairt don Idirphlé Náisiúnta ar Gníomhú ar son na hAeráide;
- Tacú le gníomhaíochtaí forbartha Náisiúnta, AE agus NA um Eolaíocht agus Beartas Aeráide.

### Monatóireacht & Measúnú ar an gComhshaol

- Córais náisiúnta um monatóireacht an chomhshaoil a cheapadh agus a chur i bhfeidhm: teicneolaíocht, bainistíocht sonraí, anailís agus réamhaisnéisiú;
- Tuairiscí ar Staid Thimpeallacht na hÉireann agus ar Tháscairí a chur ar fáil;
- Monatóireacht a dhéanamh ar chaighdeán an aeir agus Treoir an AE i leith Aeir Ghlain don Eoraip a chur i bhfeidhm chomh maith leis an gCoinbhinsiún ar Aerthruailliú Fadraoin Trasteorann, agus an Treoir i leith na Teorann Náisiúnta Astaíochtaí;
- Maoirseacht a dhéanamh ar chur i bhfeidhm na Treorach i leith Torainn Timpeallachta;
- Measúnú a dhéanamh ar thionchar pleananna agus clár beartaithe ar chomhshaol na hÉireann.
- Taighde agus Forbairt Comhshaoil
- Comhordú a dhéanamh ar ghníomhaíochtaí taighde comhshaoil agus iad a mhaoiniú chun brú a aithint, bonn eolais a chur faoin mbeartas agus réitigh a chur ar fáil;
- Comhoibriú le gníomhaíocht náisiúnta agus AE um thaighde comhshaoil.

### Cosaint Raideolaíoch

- Monatóireacht a dhéanamh ar leibhéil radaíochta agus nochtadh an phobail do radaíocht ianúcháin agus do réimsí leictreamaighnéadacha a mheas;
- Cabhrú le pleananna náisiúnta a fhorbairt le haghaidh éigeandálaí ag eascairt as tairmí núicléacha;
- Monatóireacht a dhéanamh ar fhorbairtí thar lear a bhaineann le saoráidí núicléacha agus leis an tsábháilteacht raideolaíochta;
- Sainseirbhísí um chosaint ar an radaíocht a sholáthar, nó maoirsiú a dhéanamh ar sholáthar na seirbhísí sin.

### Treoir, Ardú Feasachta agus Faisnéis Inrochtana

- Tuairisciú, comhairle agus treoir neamhspleách, fianaise-bhunaithe a chur ar fáil don Rialtas, don tionscal agus don phobal ar ábhair maidir le cosaint comhshaoil agus raideolaíoch;
- An nasc idir sláinte agus folláine, an geilleagar agus timpeallacht ghlan a chur chun cinn;
- Feasacht comhshaoil a chur chun cinn lena n-áirítear tacú le hiompraíocht um éifeachtúlacht acmhainní agus aistriú aeráide;
- Tástáil radóin a chur chun cinn i dtithe agus in ionaid oibre agus feabhsúchán a mholadh áit is gá.

### Comhpháirtíocht agus líonrú

- Oibriú le gníomhaireachtaí idirnáisiúnta agus náisiúnta, údarais réigiúnacha agus áitiúla, eagraíochtaí neamhrialtais, comhlachtaí ionadaíochta agus ranna rialtais chun cosaint comhshaoil agus raideolaíoch a chur ar fáil, chomh maith le taighde, comhordú agus cinnteoireacht bunaithe ar an eolaíocht.

### Bainistíocht agus struchtúr na Gníomhaireachta um Chaomhnú Comhshaoil

Tá an GCC á bainistiú ag Bord lánaímseartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóir. Déantar an obair ar fud cúig cinn d'Oifigí:

- An Oifig um Inbhuanaitheacht i leith Cúrsaí Comhshaoil
- An Oifig Forfheidhmithe i leith Cúrsaí Comhshaoil
- An Oifig um Fhianaise agus Measúnú
- An Oifig um Chosaint ar Radaíocht agus Monatóireacht Comhshaoil
- An Oifig Cumarsáide agus Seirbhísí Corparáideacha

Tugann coistí comhairleacha cabhair don Gníomhaireacht agus tagann siad le chéile go rialta le plé a dhéanamh ar ábhair imní agus le comhairle a chur ar an mBord.



Environmental Protection Agency  
*An Ghníomhaireacht um Chaomhnú Comhshaoil*

### **Headquarters**

**PO Box 3000,  
Johnstown Castle Estate  
County Wexford, Ireland**

**T: +353 53 916 0600**

**F: +353 53 916 0699**

**E: [info@epa.ie](mailto:info@epa.ie)**

**W: [www.epa.ie](http://www.epa.ie)**

**LoCall: 1890 33 55 99**

### **Regional Inspectorate**

McCumiskey House,  
Richview, Clonskeagh Road,  
Dublin 14, Ireland

T: +353 1 268 0100

F: +353 1 268 0199

### **Regional Inspectorate**

Inniscarra, County Cork,  
Ireland

T: +353 21 487 5540

F: +353 21 487 5545

### **Regional Inspectorate**

Seville Lodge, Callan Road,  
Kilkenny, Ireland

T +353 56 779 6700

F +353 56 779 6798

### **Regional Inspectorate**

John Moore Road, Castlebar  
County Mayo, Ireland

T +353 94 904 8400

F +353 94 902 1934

### **Regional Inspectorate**

The Glen, Monaghan, Ireland

T +353 47 77600

F +353 47 84987

### **Regional Offices**

The Civic Centre  
Church St., Athlone  
Co. Westmeath, Ireland  
T +353 906 475722

Room 3, Raheen Conference Centre,  
Pearse House, Pearse Road  
Raheen Business Park, Limerick,  
Ireland

T +353 61 224764

