

**Office for Environmental Protection**

**Analysis of environmental  
assessment regimes  
Final Report**

**Final report**  
Prepared by LUC  
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**Office for Environmental Protection**

**Analysis of environmental assessment regimes in jurisdictions outside the UK**  
**Final Report**

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# Chapter 1

## Our Understanding

### Introduction

**1.1** The Levelling Up and Regeneration Bill (LURB), that was introduced to Parliament in May 2022, includes proposals for developing a new domestic system of environmental assessment. Doing so will lead to two existing regimes being replaced, namely **Environmental Impact Assessment (EIA)** and **Strategic Environmental Assessment (SEA)**. While both of these regimes were developed in response to a mandate from the European Union, the terms also have global significance with EIA and SEA being practised around the world. Broadly speaking, SEA involves assessing those plans and programmes that set a framework for development likely to have a significant environmental impact. EIA operates at a project scale and involves an assessment of the significant environmental effects that a particular development could give rise to.

**1.2** While the LURB is light on detail, further detail has been published since via a consultation paper that was published in March 2023<sup>1</sup> (the 'EOR consultation paper'). This paper was prepared by the Department of Levelling Up, Housing and Communities (DHLUC) who are sponsoring the Bill. DHLUC argue how the replacement system should offer better environmental outcomes, while at the same time, maintain the value and rigour of the existing regimes. Although the EOR consultation paper only relates to practice in England, DHLUC have outlined their intention to work 'across sectors and borders' to help create a 'workable solution' for the faster and more effective delivery of development that the country needs<sup>2</sup>. Through its promotion of the proposals, the consultation paper identifies potential benefits for communities, for developers, for decision makers, for environmental interests, and for policy makers. These are shown in **Figure 1.1** overleaf.

**1.3** The LURB intends to secure powers for replacing existing processes associated with EIA and SEA with a new system of **Environmental Outcomes Reports (EORs)**. The production of these EORs will be supported by some of the other initiatives of the LURB. These include those associated with digital reform, such as the push towards using more

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<sup>1</sup> Department for Levelling Up, Housing and Communities [DLUHC] (2023) 'Environmental Outcomes Reports: a new approach to environmental assessment' [online]. Available at:

<https://www.gov.uk/government/consultations/environmental-outcomes-reports-a-new-approach-to-environmental-assessment>  
<sup>2</sup> Ibid, para. 1.4.

interactive forms of reporting, and the use of common data standards.

**Figure 1.1: Proposed benefits arising from the use of Environmental Outcome Reports, by user group.**

**For communities** – A more navigable system will give people a clear understanding of how development will affect the environment without having to search through mountains of material for the relevant information. The system will take a stronger approach to mitigation to give communities confidence that action will be taken to minimise the environmental effect of development.

**For developers** – An outcomes-based approach will provide the certainty developers need to embed environmental considerations into the earliest stages of the project. This certainty will allow developers to focus on delivering for the environment rather than guarding against the risk of legal challenge which will reduce costs and delays from unnecessary work.

**For decision-makers** – Clearer information will allow decision-makers to make more robust decisions, with greater confidence. Supported by improved data, the new approach will allow decision-makers to better understand how local decisions play into national priorities. Shorter, simpler assessment reports, and a more robust approach to monitoring and mitigation, will increase transparency and ensure greater confidence in decisions.

**For environmental interests** – The new system will establish a golden thread from national commitments through to the individual developments. Assessments will focus on the critical environmental issues and will be underpinned by better access to robust data. A stronger focus on monitoring will ensure mitigation measures are delivering so remedial action can be taken if required.

**For policy makers, planning and environmental professionals** – A more navigable framework will support the creation of a robust evidence base to inform future policies and assessments. Focused reports will pinpoint the most important environmental considerations and ways of managing them. Better access to the most important information will ensure policy makers continuously learn and develop their approach over time.

**1.4** Although there were initial suggestions about how the proposed reform could encompass a third regime, the **Habitats Regulations Assessment (HRA)**, the DHLUC consultation paper rejects this and removes HRA from the scope of the review.

**1.5** With respect to geographic coverage, the EOR consultation paper mirrors the position of the LURB and is limited to those areas of environmental assessment that fall within the competence of the UK government or where the UK government has historically legislated in areas of devolved competence.

**1.6** Steps for introducing EORs will be outlined through secondary legislation that will be published after the Royal Assent of the Bill. The consultation paper recognises the importance of including an adequate transition period, with DHLUC offering respondents the opportunity to select lead-in times of six months, one year or two years. The consultation paper acknowledges how some engagement has already been undertaken, with some contrasting quotes being provided about the effectiveness and value of each assessment regime.

**1.7** This engagement has seemingly been undertaken with users of the assessment regimes linked to town and country planning, and the delivery of nationally significant infrastructure projects. Collectively their feedback seems to have defined a series of ‘central issues’, namely:

- **Inefficiency**, on the basis that some assessments are undertaken too late in the plan or project-development stage to generate any significant value;
- **Duplication**, on the basis that the information presented via an assessment will often be represented in other documents. Similarly, decisions taken through the assessment process, might also be undertaken by other parties through the plan-making or project development cycle.
- **Risk aversion**, on the basis that assessments will often be written and developed to protect against legal challenge, leading to disproportionate levels of assessment and voluminous assessments.
- **Loss of focus**, on the basis that the assessment regimes now cover a multitude of issues, rather than just those of an environmental nature. The focus that the assessment regimes give to economic and social and matters is considered particularly problematic given that these are considered elsewhere and by others.
- **Issues with data**, on the basis felt that effectiveness and timeliness are often compromised by a lack of relevant, accessible, robust and quality assured data.

**1.8** While some of these issues have been raised before, the consultation paper, as well as the initial material that supported the LURB, makes little reference to the broader body of literature surrounding the effectiveness of EIA and SEA. Indeed, through its critique, the EOR consultation paper

only refers to a single article, namely an academic study published by Singh, Lerner, Mach et al in 2020<sup>3</sup>.

**1.9** The Government's programme of consultation promises to provide an opportunity for a wide-range of views to be shared. It will also provide an opportunity for additional evidence to be shared, both on how the current assessment regimes are performing, as well to identify how the new system might operate. This latter point is particularly relevant since the consultation paper neither states, or gives any examples, to show how the envisaged system is already being practised elsewhere in the world. It is therefore unclear as to whether the proposals are new and potentially un-tested, or whether they are merely seeking to translate identified best practice into a domestic context.

**1.10** In order to prepare for the consultation, the Office for Environmental Protection (OEP), that has a statutory duty to monitor and report on the implementation of environmental law in England and Northern Ireland, decided to commission three integrated studies. Collectively, these were intended to generate additional evidence and insight that could be used to inform the consultation responses provided by the OEP. Two of the three projects have considered domestic practice and have gathered evidence about the current performance of both EIA and SEA across England and Northern Ireland. These two studies have also examined the existing system of HRA, since while this regime seems to have been excluded from the programme of reform via the consultation paper of March 2023, this was not known when the studies were commissioned in December 2022. As we explain below, HRA seeks to test whether a plan or project, either individually or in combination with others, could significantly harm the designated features of a protected site.

**1.11** The first of the two domestic projects has been undertaken by **WSP**, an international consultancy that offers a wide suite of services associated with engineering and the environment. Their research has focused upon the perceived effectiveness of EIA, SEA and HRA as assessment regimes, with online surveys and focus groups being used to facilitate engagement with a wide range of stakeholders and practitioners. Collectively their feedback has helped to identify the elements that seem to be working well, as well as areas where improvement could be made. The research has also sought professional opinion on whether EIA, SEA or HRA should be reformed, and if so, on the areas where change should be prioritised. Although the research was undertaken in advance of the consultation paper of March 2023, the research team, and those who have contributed, were aware

of the powers included in the LURB to shift to a system of EOR.

**1.12** The second domestic project has been undertaken by **39 Essex Chambers**, a leading set of barristers' chambers that has expertise in a variety of legal sectors and practice areas, including environmental assessment.

**1.13** Their research has allowed for the detailed analysis of legislation, case law and grey literature to identify whether EIA, SEA and HRA have any specific issues in an implementation and interpretative sense.

## Our focus

**1.14** This report relates to the third of three projects and has been undertaken by Land Use Consultants (LUC), a planning, impact assessment, landscape design, ecology and geospatial consultancy that has expertise across a broad cross-section of environmental disciplines. The LUC team has been supported by:

- **Dr. Alan Bond**<sup>4</sup>, an Associate Professor in Environmental Management in the School of Environmental Sciences at the University of East Anglia (UEA) and Extraordinary Professor in the School of Geo and Spatial Sciences, North West University (South Africa), with 30 years' experience in EIA. He runs a full-time MSc programme on Environmental Assessment and Management at the UEA and is a Professional Development Programme trainer for the International Association of Impact Assessment (IAIA).
- **Ric Eales**, an independent environmental consultant and a Visiting Professor at the University of Strathclyde. An environmental scientist by training, Ric was the founder and Managing Director of Collingwood Environmental Planning (CEP) for 26 years and has more than 30 years' experience of environmental, sustainability and planning consultancy.
- **Prof. Thomas Fischer**<sup>5</sup>, who is Director of the Environmental Assessment and Management Research Centre at the Department of Geography and Planning, University of Liverpool. His specialist areas revolve around ex-ante impact assessment tools in spatial, transport, energy, waste and other sectoral policy, plan, programme and project decision making. He has worked in consultancy, public administration and academia on SEA, sustainability appraisal, EIA and other environmental planning and management tools for over 27 years.

<sup>3</sup>

<sup>4</sup> See: <https://research-portal.uea.ac.uk/en/persons/alan-bond>

<sup>5</sup> See: <https://www.liverpool.ac.uk/environmental-sciences/staff/thomas-fischer/>

**1.15** While our research has been conducted iteratively with the two domestic projects, our brief was to look beyond England and Northern Ireland and to explore international practices. Specifically, we have sought to identify whether the type of assessment system being envisaged, with its focus on environmental outcomes, is a feature of other global assessment systems. The study therefore sought to identify whether the proposed reform is seeking to replicate practice elsewhere, or whether the proposals are entirely new. Should similar practices be found, the research also sought to identify whether the push towards the use of environmental outcomes was recent, or whether it was a more engrained feature of the assessment system. Where recent changes had been made, the research also sought to identify how these changes had been brought about and the type of transitional arrangements that had been put in place to ensure a smooth re-positioning of practice. Our findings are detailed through Chapter 4.

**1.16** Alongside this central goal, the research has also sought to identify whether international assessment practices can offer potential solutions to some of the areas that have been identified for improvement through the work of both WSP and 39 Essex Chambers. Although the practices we identify through **Chapter 5** of this report could be used to enhance the performance of the existing systems of EIA, SEA and HRA, they could also be incorporated into any replacement system as well.

**1.17** Following our commissioning in December 2022, our research activity has been guided by the following overarching question:

**What can be learnt for improving the implementation and effectiveness of HRA, EIA and SEA in England and NI by making comparisons with and using examples from other jurisdictions?**

**1.18** We have also sought to respond to the following three research objectives:

1. To explore whether there is explicit reference to the pursuit of 'environmental outcomes' through international impact assessment regimes.
2. To identify whether there are aspects of the international application of impact assessment that could potentially

address the perceived deficiencies of EIA, SA/SEA and HRA as operated across England and Northern Ireland.

3. To consider the role of contextual factors in supporting or inhibiting the application of identified international good practice to England and Northern Ireland.

## Definitions

### Environmental outcomes

**1.19** As noted above, the pursuit of 'environmental outcomes' will form an important part of the new system. According to the Cambridge Dictionary, an '*outcome*' can be defined as "*a result or effect of an action or situation*"<sup>6</sup>, in comparison to the word '*output*' (the amount of something produced) or the word '*impact*' (the effect that something, especially something new, has on something)". In addition to explaining how the pursuit of outcomes tends to be more objective and meaningful, Harding<sup>7</sup> also introduces a time dimension, by recognising how "*an impact is the longer term effect of an outcome*".

**1.20** The use of outcomes, in a policy sense, has increasingly gained traction. For example, assessing 'impacts' against defined 'outcomes' is presented as an important part of HM Treasury's policy evaluation process (as outlined through the Magenta Book)<sup>8</sup>. An early example of use in the context of the natural environment dates to a 2014 research project conducted by Natural England. This study sought to investigate, and was ultimately able to demonstrate, the potential of using environmental outcomes in the management of protected landscapes<sup>9</sup>.

**1.21** With respect to the proposed system of environmental assessment, the LURB has been drafted to allow the Secretary of State (SoS) to set outcomes which a plan or project will have to report against (clause 138). In setting these outcomes, the LURB identifies how the SoS is duty bound, through clause 142, to ensure that outcomes are not worded in a way that would reduce the overall level of environmental protection provided by existing environmental law.

**1.22** Building on the provisions set out in the Environment Act 2021, the Bill – subject to Royal Assent – will require the SoS to have regard to the government's Environmental Improvement Plan<sup>10</sup> when setting outcomes (clause 138(5)).

<sup>6</sup> Cambridge Dictionaries [online]. Available at: <https://dictionary.cambridge.org/dictionary/english/>

<sup>7</sup> Harding, A. (2014). What is the difference between an impact and an outcome? Impact is the longer term effect of an outcome. Impact of Social Sciences. LSE Blog [online]. Available at: <https://blogs.lse.ac.uk/impactofsocialsciences/2014/10/27/impact-vs-outcome-harding/>

<sup>8</sup> HM Treasury (2020) *Magenta Book: Central Government Guidance on Evaluation* [online]. Available at:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/879438/HMT\\_Magenta\\_Book.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/879438/HMT_Magenta_Book.pdf)

<sup>9</sup> Natural England (2014) *Framework for monitoring environmental outcomes in protected landscapes (NERR055)* [online]. Available at: <http://publications.naturalengland.org.uk/publication/5646437593382912>

<sup>10</sup> Department for Environment, Food & Rural Affairs [Defra] (2023) *Environmental Improvement Plan 2023* [online]. Available at:

However, the consultation paper of March 2023 explains how the SoS can consider other relevant material when setting outcomes, such as the Clean Air Strategy<sup>11</sup> or the UK Marine Strategy<sup>12</sup>, both of which are referenced in the Environmental Improvement Plan.

**1.23** The consultation paper explains how draft environmental outcomes will be presented through secondary legislation and will be subject to parliamentary scrutiny and public consultation. Use of this secondary legislation will allow for the environmental outcomes to be updated should any new evidence arise. A series of principles are outlined through the consultation paper to help provide an element of consistency as outcomes are set<sup>13</sup>. These principles identify how outcomes should:

- Drive the achievement of statutory environmental targets and the Environment Improvement Plan.
- Be measurable using indicators at the correct scale.
- Be designed using the knowledge and experience of sector groups and environmental experts.
- Have an organisation responsible for monitoring overall progress of specific outcomes i.e., have a responsible ‘owner’.
- Be reviewed on a regular basis to ensure they remain relevant.
- Do not duplicate matters more effectively addressed through policy.

**1.24** As for theme, the consultation paper identifies<sup>14</sup> how outcomes are to be defined for the following:

- Biodiversity
- Air quality
- Landscape and seascape
- Geodiversity, soil and sediment

- Noise and vibration
- Water
- Waste
- Cultural heritage and archaeology

**1.25** However, the consultation paper also notes<sup>15</sup> how additional regime specific outcomes can also be prepared, in accordance with the specific legislative and policy framework, and pressures and needs, of each regime.

**1.26** The outcome-themes listed above have an association with the ten goals that were presented through the government’s Environmental Improvement Plan<sup>16</sup> which was published in January 2023. Interestingly, there is no specific outcome relating to climate change and adaptation, despite this forming the basis to goal seven.

**1.27** The EOR consultation document gives an example of an outcome linked to biodiversity:

**Outcome:** An increase in the abundance of protected species and supporting habitat.

**Rationale:** To complement the roll out of biodiversity net gain across the planning system, this outcome focusses on the support for protected species.

**Strategic level indicator:** Changes in the status of protected species and supporting habitat across the geographic area.

**Project level indicator:** Changes in the abundance and/or distribution of protected species and supporting habitat in the relevant geography, agreed study area or immediate locality.

**1.28** Applying to England only, the improvement plan provides an update to the government’s 25-Year Environment Plan (25YEP)<sup>17</sup> that was published in 2018. The ten goals for environmental improvement are shown through **Figure 1.2**.

<https://www.gov.uk/government/publications/environmental-improvement-plan>

<sup>11</sup> Department for Energy Security and Net Zero [DESNZ], Department for Environment, Food & Rural Affairs [Defra], Department for Transport [DfT], Department of Health and Social Care [DHSC], Ministry of Housing, Communities & Local Government [MHCLG] (2019) Clean Air Strategy [online]. Available at : [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/770715/clean-air-strategy-2019.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf)

<sup>12</sup> Department for Environment, Food & Rural Affairs [Defra] (2019) UK Marine Strategy [online]. Available at: <https://www.gov.uk/government/publications/marine-strategy-part-one-uk-updated-assessment-and-good-environmental-status>

<sup>13</sup>

Department for Levelling Up, Housing and Communities [DLUHC] (2023) *Environmental Outcomes Reports: a new approach to environmental assessment* [online]. Available at:

<https://www.gov.uk/government/consultations/environmental-outcomes-reports-a-new-approach-to-environmental-assessment>

<sup>14</sup> Ibid, paragraph 4.10

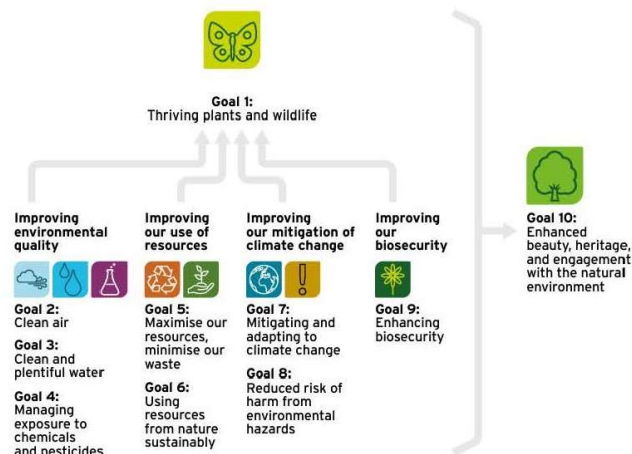
<sup>15</sup> Ibid, paragraph 4.10

<sup>16</sup> Department for Environment, Food & Rural Affairs (Defra) (2023) Environmental Improvement Plan 2023 [online]. Available at: <https://www.gov.uk/government/publications/environmental-improvement-plan>

<sup>17</sup> Department for Environment, Food and Rural Affairs (2018) *25-Year Environment Plan* [online]. Available at: <https://www.gov.uk/government/publications/25-year-environment-plan>



Figure 1.2: The ten goals of the 25-Year Environment Plan



## Indicators

1.29 Indicators are also identified as an important part of the new assessment system since they will allow for progress, in the achievement of each outcome, to be assessed. As with outcomes, the consultation paper presents a series of principles to help define what an effective indicator should like. Specifically, the paper<sup>18</sup> identifies how an indicator should be:

- Clearly and directly relevant to one or more priority outcomes
- Non-duplicative
- Proportionate
- Drawn from existing data sets, wherever possible
- Measurable at the correct scale (i.e. strategic or project level)
- Evidence based
- Replicable
- Owned and managed
- Supported by a clear methodology and guidance – including how they will be updated as new data emerges.

1.30 The 25YEP and subsequent Improvement Plan is supported by an Outcome Indicator Framework<sup>19</sup> that presents 66 different indicators to measure progress against

the goals. For example, in relation to air quality, the indicators relate to:

- Emissions for five key air pollutants
- Emissions of greenhouse gases from natural resources
- Concentrations of fine particulate matter (PM2.5) in the air
- Rural background concentrations of ozone (O3)
- Roadside nitrogen dioxide (NO2) concentrations
- Exceedance of damaging levels of nutrient nitrogen deposition on ecosystems
- Area of land exposed to damaging levels of ammonia (NH3) in the atmosphere.

## Regimes

1.31 Through our report we use the word ‘regime’, which is typically used to describe a particular way of organising something. In the context of this research, we have focused upon international comparators associated with:

- Environmental Impact Assessment (EIA)
- Strategic Environmental Assessment (SEA).
- Habitats Regulations Assessment (HRA).

1.32 As EOR consultation paper explains, the LURB does not include any specific powers to reform assessment under the HRA regulations. However, our research has continued to explore international practices and comparators to HRA in order to consider the broader assessment landscape.

1.33 As **Chapter Two** explains, practices surrounding EIA and SEA extend across a number of practice areas. For this study, we have restricted our focus to those EIA and SEA regimes with a direct association with planning.

## Jurisdictions

1.34 In order to explore international practices, we have directed our efforts at particular jurisdictions. The method for long-listing and short-listing these is discussed in **Chapter Three**. This term ‘jurisdiction’ is typically used to describe the authority that a specific body has to make laws and / or rules, develop policy and / or issue guidance, and take legal decisions. A jurisdiction can be used in the context of a specific local area, a state, a region, a country, or federal area. In other words, the term has a spatial dimension. Accordingly,

<sup>18</sup> Department for Levelling Up, Housing and Communities [DLUHC] (2023) *Environmental Outcomes Reports: a new approach to environmental assessment* [online]. Available at: <https://www.gov.uk/government/consultations/environmental->

[outcomes-reports-a-new-approach-to-environmental-assessment](#), paragraph 18.

<sup>19</sup> Department for Environment, Food and Rural Affairs (2018) *Outcome Indicator Framework* [online]. Available at: <https://oifdata.defra.gov.uk/>

while there is international understanding as to what a specific assessment regime might entail, there are variations in practice ‘on the ground’ given the wide-ranging geographical units that any legislation can be applied to.

**1.35** While our initial focus was directed to exploring practices at a national level, for instance by looking at the work of central government, our focus also extended to looking at the respective role played by such entities as states, regions, and municipalities. Inevitably, an element of selection was required in our approach, and again this is explored through **Chapter Three**.

## Report structure

**1.36 Chapter Two** introduces each of the three regimes, with the text summarising the nature, form and history of each of these three regimes. The chapter also considers some of the past attempts to review the performance and effectiveness of these regimes. The chapter concludes by offering a summary of the accompanying studies that have been undertaken by WSP and 30 Essex Chambers. As part of this, our report identifies a number of areas where each of the regimes can be improved, and links to further summaries included as **Appendices A1 and A2**.

**1.37 Chapter Three** presents the methodology that we followed in undertaking the work. It summarises key stages of our approach, from the collection and analysis of relevant literature, to the selection of the short-listed jurisdictions. The chapter make reference to the extensive literature that surrounds each of the assessment regimes, with **Appendix B** providing a thematic summary comprising key texts. As the chapter explains, contextual factors are often key with respect to explaining how specific regimes are focused and operated. Considering context is also important when reflecting on whether international practices can be potentially applied to England and Northern Ireland. To support this, **Appendix C** presents a selection of contextual information for each of the selected regimes. **Chapter Four** presents the first part of our findings. Although linking back to the central request question, the text specifically responds to research objective one and provides commentary on the extent to which ‘environmental outcomes’ and ‘environmental indicators’ feature through the assessment regimes we have considered.

**1.38 Chapter Five** links to research objective two and introduces, by theme, a selection of identified practices that could potentially contribute to delivering improvement across the regimes. Some 54 practices are introduced, with the text providing a summary of their potential desirability and deliverability. Some of these practices are considered to be entirely new.

**1.39 Chapter Six** presents the study’s conclusions and outlines potential next steps.

## Chapter 2

### Our approach

#### Introduction

**2.1** This chapter presents our understanding of the project brief. We provide a summary of how EIA, SEA and HRA are currently practised in England and Northern Ireland. We also provide further detail on the programme of reform that was introduced through the previous chapter.

**2.2** We then consider the three regimes in an international context and note how the regimes, or at least those with similar intentions, have grown exponentially. We then consider the wide-ranging debates surrounding their 'performance' and 'effectiveness'. By referring to work of WSP and 39 Essex Chambers, the chapter concludes by presenting a series of areas where an element of improvement can be potentially applied to the operation of EIA, SEA and HRA in England and Northern Ireland today. While some of these improvement areas link to the deficiencies that have been identified through the EOR consultation paper of March 2023, reference will also be made to the broader pool of literature.

#### The assessment regimes

**2.3** As we have stated above, our research has sought to identify potential variations in the international application of the three assessment regimes, namely:

- Environmental Impact Assessment (EIA)
- Strategic Environmental Assessment (SEA)
- Habitats Regulations Assessments (HRA).

**2.4** To help us make these comparisons, we provide a baseline account of how the three regimes currently operate in England and Northern Ireland. While we refer to relevant legislation and guidance, we also cover other elements too, such as the provision of training. Providing this information provides some of the context, as well as the broader justification, for pursuing some of the identified practices that we present through **Chapter Five**.

**2.5** The three regimes contribute to a broader family of 'impact assessment', that the International Association for Impact Assessment (IAIA) defines as "*the process of*

identifying the future consequences of a current or proposed action”<sup>20</sup>.

### Environmental Impact Assessment (EIA)

**2.6** A range of definitions exist but the IAIA defines EIA as the “process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of proposed development proposals prior to major decisions being taken and commitments made”<sup>21</sup>

**2.7** (The origins of EIA date to the passing of the National Environmental Policy Act in the USA that was approved in 1969. EIA in the UK was initially implemented in response to European Community Directive 85/337/EEC, which was amended in 1997 (97/11/EC), 2003 (2003/35/EC), 2009 (2009/31/EC) and 2014 (2014/52/EC).

**2.8** Despite the UK’s withdrawal from the European Union, EIA continues to be implemented in England and Northern Ireland through a wide suite of legislation relating to different sectors and practice areas. The EOR consultation paper<sup>22</sup> lists 18 different strands of EIA in England, including:

- The Town and Country Planning (TCPA) (Environmental Impact Assessment) Regulations 2017
- The Infrastructure Planning (NSIP) (Environmental Impact Assessment) Regulations 2017
- The Environmental Impact Assessment (Agriculture) (England) (No. 2) Regulations 2006 (and as amended, 2017)
- The Environmental Impact Assessment (Forestry) (England and Wales) Regulations 1999 (and as amended 2017)

**2.9** Given the selected focus of this research on planning, the first set of regulations – namely the Town and Country Planning (Environmental Impact Assessment) Regulations 2017<sup>23</sup> - are the most relevant. In Northern Ireland, the equivalent regulations are the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017<sup>24</sup>. However,

despite the myriad of regulations surrounding EIA, the requirements are broadly similar in terms of what they require.

**2.10** In England, the Department for Levelling Up, Housing and Communities (DLUHC) provides guidance on EIA as part of a broader suite of Planning Practice Guidance<sup>25</sup>. The guidance, which was initially published in 2014, with updates being applied in 2020, is pitched to all users, with no obvious differentiation for specific stakeholder groups. The guidance describes why EIA is necessary, and introduces each of the five constituent stages. These comprise *screening* (the process for determining whether an EIA is required), *scoping* (the process for determining what an EIA should focus on), the *production of an environmental statement (ES)*, the *process for presenting an Environmental Statement with a planning application*, and the final *decision making stage*. The guidance also outlines requirements for *consultation and public participation, as well as monitoring*. Hyperlinks are embedded throughout the guidance, directing users to relevant parts of the legislation or other resources, such as a Screening Checklist<sup>26</sup>, as prepared by the Planning Inspectorate.

**2.11** The English EIA guidance refers to the importance of engaging with a defined list of statutory consultees who form part of a much larger pool of stakeholders. The consultees are defined via the legislation and comprise Natural England, the Environment Agency; and the Marine Management Organisation. All three are executive non-departmental public bodies linked to the Department for Environment, Food and Rural Affairs (Defra). Beyond consulting these, those preparing an Environmental Statement will inevitably need to engage with others, with these depending on the environmental matter being considered.

**2.12** For example, to assess transport impacts, an applicant may need to consult with the Department for Transport, and the non-departmental public body that it sponsors, National Highways. Engagement with local partners, such as transport officers at the relevant local authority, and those delivering a transport service, will also be necessary.

**2.13** Those preparing an ES will typically comprise a team of consultants who would have been appointed by the applicant, namely the person or organisation wishing to advance the

<sup>20</sup> International Association for Impact Assessment (IAIA) Impact Assessment [online]. Available at: <https://www.iaia.org/>

<sup>21</sup> International Association for Impact Assessment [IAIA] Principles of Environmental Impact Assessment Best Practice. Fargo, ND: IAIA.

<sup>22</sup> Department for Levelling Up, Housing and Communities [DLUHC] (2023) *Environmental Outcomes Reports: a new approach to environmental assessment* [online]. Available at: <https://www.gov.uk/government/consultations/environmental-outcomes-reports-a-new-approach-to-environmental-assessment>, Table 1.

<sup>23</sup> The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 [online]. Available at: <https://www.legislation.gov.uk/ukSI/2017/571/contents/made>

<sup>24</sup> The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017 [online]. Available at: <https://www.legislation.gov.uk/nisr/2017/83/made>

<sup>25</sup> Department for Levelling Up, Housing and Communities [DLUHC] (2014) Planning Practice Guidance: Environmental Assessment [online]. Available at: <https://www.gov.uk/guidance/environmental-impact-assessment>

<sup>26</sup> Planning Inspectorate, The (2021) Environmental Impact Assessment Screening Checklist [online]: <https://www.gov.uk/government/publications/environmental-impact-assessment-screening-checklist>

development. As required by the legislation<sup>27</sup>, the applicant must ensure their consultants are competent in preparing an ES in order to ensure the “completeness and quality of the environmental statement”. While universities have an important role in developing initial competencies for those who become planners, environmental managers and so on, the relevant professional bodies, such as the Institute of Environmental Management and Assessment (IEMA), the Chartered Institute of Ecology and Environmental Management (CIEEM) and the Royal Town Planning Institute (RTPI), contribute to ongoing professional development activities for their membership. For example, all three of these institutes offer a range of membership packages, with IEMA offering a specific routeway for becoming a Registered Environmental Practitioner<sup>28</sup>.

**2.14** IEMA also operates ‘The EIA Quality Mark’, a scheme that allows organisations (both developers and consultancies), who lead the co-ordination of EIAs in the UK, to make a commitment to excellence in their EIA activities and have this commitment independently reviewed<sup>29</sup>. The scheme, that has run since 2011, requires registrants to make seven key commitments. These commitments are wide-ranging and extend to all parts of the EIA process, from ensuring that registrants commit to undertaking a robust analysis of the relevant baseline, to ensuring that Environmental Statements set out environmental information in a transparent and understandable manner<sup>30</sup>.

**2.15** Beyond the requirements of this specific scheme, professional affiliation also requires subscribed members to adhere to relevant Codes of Conduct and to engage with Continuing Professional Development (CPD). For example, Chartered Town Planners are required to complete 50 hours of CPD in any two-year period. While there is flexibility with respect to how this CPD can be gained, the RTPI delivers a suite of learning resources themselves, and a selection of these resources do focus upon the three assessment regimes considered here. Some of these are free to access, and can be used by anyone, while others, such as their ‘master-classes’ are chargeable<sup>31</sup>.

**2.16** Applicants in England who are following the Town and Country Planning (EIA) Regulations will submit their final

Environment Statement, alongside their planning application, to the local authority in which their scheme falls. Current planning applications can be viewed online, with pages providing access to submitted documents and associated correspondence. These portals will typically provide an overview of key dates, for instance when a consultation period ends, but these will be bespoke to the particular application because of that, and because they are managed by each planning authority, there is no opportunity to search or view applications that relate to another authority area. Instead, the viewer would need to navigate to another authority’s site and re-start their search. This is therefore an example of information being fragmented and difficult to access.

**2.17** The level of sophistication in these portals varies. All will provide an ability to search for schemes either via a text search facility, or via map-based tools. A map-based version will typically give access to other digital data sets, such as relevant designations or constraints. The Planning Inspectorate, in its management of Nationally Significant Infrastructure Projects, provides for a more holistic presentation of projects, with their portal categorising projects (across England and Wales) by type and their stage in the development process.

**2.18** The description above is also applicable to summarising EIA practices in Northern Ireland, and the relevant legislation<sup>32</sup> is similar to that which applies in England. Information about EIA is provided by the Department of Agriculture, Environment and Rural Affairs (DAERA)<sup>33</sup>. However, there is far less information and guidance available, at least compared to what DHLUC offers via its Planning Practice Guidance.

### Strategic Environment Assessment (SEA)

**2.19** Strategic Environmental Assessment (SEA) relates to a tier of assessment above the project scale. Being more strategic in focus, SEA considers the environmental performance of plans, programmes and policy. As Fischer (2007) explains, SEA “is a systematic, objectives-led, evidence-based, proactive and participative decision making support process for the formulation of sustainable policies, plans, and programmes, leading to improved governance”<sup>34</sup>. SEA is expected to be conducted in parallel with programme,

<sup>27</sup> The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 [online]. Available at: <https://www.legislation.gov.uk/uksi/2017/571/contents/made>. Part 4, Section 18(5), paragraph 2.

<sup>28</sup> IEMA (2023) Registered Environmental Practitioner [online]. Available at: <https://www.iema.net/skills/path-to-chartership/registered-environmental-practitioner-renvp>

<sup>29</sup> IEMA (2023) EIA Quality Mark [online]. Available at: <https://www.iema.net/corporate-programmes/eia-quality-mark>

<sup>30</sup> Ibid.

<sup>31</sup> For example, the RTPI offers a chargeable EIA masterclass with variable rates depending upon whether the attendee is a member or

not. See: <https://www.rtpi.org.uk/events/2023/june/online-cpd-environmental-impact-assessments/#PaymentAndBooking>

<sup>32</sup> The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017 [online]. Available at: <https://www.legislation.gov.uk/nisr/2017/83/made>

<sup>33</sup> Department of Agriculture, Environment and Rural Affairs (2023) Environmental Impact Assessment [online]. Available at: <https://www.daera-ni.gov.uk/articles/environmental-impact-assessment-eia#toc-1>

<sup>34</sup> Fischer, T. (2007) *The Theory and Practice of Strategic Environmental Assessment. Towards a More Systematic Approach*. London: Earthscan, page 6.

plan and policy making activities and is identified as an important stage in the identification and assessment of options. These options could focus upon alternative policies, proposals or sites, with the identification of a preferred site, for example, leading to a proposed development that could be subject to an EIA itself.

**2.20** SEA was introduced to the European Union through Directive 2001/42/EC. Although the Directive does not encompass policy, it does apply to a wide-range of public plans and programmes, including those relating to land use, transport, energy, waste and agriculture<sup>35</sup>. Member States were required to implement the Directive by July 2004, and legislators in England achieved this via the *Environmental Assessment of Plans and Programmes Regulations 2004*<sup>36</sup>. The legislation was supported by 'A Practical Guide to the Strategic Environmental Assessment Directive'<sup>37</sup>. SEA is required for plans and programmes relating to a range of sectors, including agriculture, fisheries, forestry, the energy industry, telecommunications, transport, and tourism. Those plans and programmes that need to be assessed comprise those that set the framework for projects requiring EIA. Consequently, SEA, as a tier of assessment, sits above EIA.

**2.21** SEA applies to town and country planning via the spatial plans that planning systems produce. During the early 1990s, some local planning authorities in England were practising a process known as Environmental Appraisal, which provided a basic appraisal of a plan's objectives against a set of sustainability objectives.

**2.22** This practice was extended, made compulsory, and re-labelled Sustainability Appraisal (SA) through the Planning and Compulsory Purchase Act (PCPA) 2004<sup>38</sup>. Since this planning legislation requires plan makers to consider sustainability in its broadest sense, with appraisals being required to consider social, economic and environmental matters together, it was felt that the PCPA would deliver a sound route for meeting the expectations of Directive 2001/42/EC. For this reason, SAs required via the PCPA are

often pitched as 'also incorporating' the requirements of SEA. In other words, SA is used to implement SEA requirements in relation to the production of spatial plans in England. Consequently, while we use SEA when we consider international practices at this tier of assessment, we use the term 'SEA / SA' when considering the application of SEA in the preparation of plans within the English planning system.

**2.23** The PCPA legislation, and the requirement to produce Sustainability Appraisals, continues to apply today although the EOR consultation paper seeks to replace the existing system with one that uses environmental outcomes. A companion guide to support the PCPA was published in 2005 under the title *'Sustainability Appraisal (SA) of Regional Spatial Strategies and Local Development Documents'*<sup>39</sup>. This document continues to have relevance and is still used by practitioners.

**2.24** The application of SEA / SA through English land-use planning is provided by DHLUC via its 'Guidance on Strategic Environmental Assessment and Sustainability Appraisal'<sup>40</sup>. Much of this was written in 2014, although some updates were applied in 2020. The document now forms part of the broader suite of Planning Practice Guidance (PPG)<sup>41</sup> and is text-based, like the other guidance that is provided through PPG. The guidance includes a process flowchart that shows the relationship between the application of SA and the preparation of a typical local plan<sup>42</sup>.

**2.25** SA / SEAs are required for any of the documents that can form part of a local plan, including core strategies, site allocation documents and area action plans<sup>43</sup>. An appraisal needs to be initiated at the start of the plan making process and be continued throughout all subsequent stages.

**2.26** While some planning authorities choose to prepare their own appraisal themselves, others will appoint consultants to complete the work on their behalf. There are no explicit references to the competency of those undertaking appraisals,

<sup>35</sup> European Commission (2023) Strategic Environmental Assessment [online]. Available at : [https://environment.ec.europa.eu/law-and-governance/environmental-assessments/strategic-environmental-assessment\\_en](https://environment.ec.europa.eu/law-and-governance/environmental-assessments/strategic-environmental-assessment_en)

<sup>36</sup> The Environmental Assessment of Plans and Programmes Regulations 2004 [online]. Available at: <https://www.legislation.gov.uk/ukSI/2004/1633/introduction/made>

<sup>37</sup> Office of the Deputy Prime Minister (2005) *A Practical Guide to the Strategic Environmental Assessment Directive* [online]: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/7657/practicalguidesea.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf)

<sup>38</sup> Planning and Compulsory Purchase Act 2004 [online]. Available at: <http://www.legislation.gov.uk/ukpga/2004/5/section/19>

<sup>39</sup> Office of the Deputy Prime Minister (2005) *Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents* [online]. Available at: <https://apps.caerphilly.gov.uk/LDP/Examination/PDF/UK22.pdf>

<sup>40</sup> Department for Levelling Up, Housing and Communities (2020) Strategic Environmental Assessment and Sustainability Appraisal [online]. Available at: <https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal>

<sup>41</sup> Ibid.

<sup>42</sup> Department for Levelling Up, Housing and Communities (2020) Strategic Environmental Assessment and Sustainability Appraisal: SEA process [online]. Available at : [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/580028/sea2\\_033\\_20150209\\_fixed.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/580028/sea2_033_20150209_fixed.pdf)

<sup>43</sup> Department for Levelling Up, Housing and Communities (2020) Strategic Environmental Assessment and Sustainability Appraisal [online]. Available at: <https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal> 005 Reference ID: 11-005-20190722

but due care is required in order to save potential judicial reviews.

**2.27** Some of the key terms inherent in EIA are equally applicable to SA / SEA, with scoping being used to review appropriate baseline information, and other plans and programmes, to help define the suite of ‘sustainability objectives’ that will be used to appraise the policies and proposals of the plan. Updated SAs / SEAs are published as the relevant plan evolves and are made available for comment via the website of the relevant planning authority. The format for releasing this information varies and, as with EIA, each authority website only provides information about their own jurisdiction.

**2.28** Again, practice relating to SEA is similar in Northern Ireland, with Directive 2001/42/EC being implemented through the Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 (the EAPP(NI) Regulations). This legislation encompasses the same sectors as noted above and includes land-use planning. For the assessment of spatial plans, the Planning Act (Northern Ireland) 2011<sup>44</sup> and the Planning (Local Development Plan) Regulations (Northern Ireland) 2015 apply<sup>45</sup>. The process for producing a Sustainability Appraisal- that, as with England incorporates the requirements surrounding SEA- are the same as described for England<sup>46</sup>.

**2.29** Guidance is available through *Development Plan Practice Note 4*, as published in 2015, which relates to ‘Sustainability Appraisal Incorporating Strategic Environmental Assessment’<sup>47</sup>. The document was published, and is maintained, by the Department for Agriculture, Environment and Rural Affairs. It is predominantly text-based although it does include a useful flow-chart together with some templates as appendices.

Other bodies of the Northern Ireland Executive also offer support to the application of Sustainability Appraisal. For instance, the Department for Communities published *Guidance on Sustainability Appraisal and Strategic*

*Environmental Assessment for the Historic Environment* in June 2018<sup>48</sup>.

### Habitats Regulations Assessment (HRA)

**2.30** The European Union’s Habitats Directive is an abbreviated name for European Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. The Directive led to the creation of a network of protected sites across Europe (Natura 2000) and the issuing of direction as to how they should be protected. The regulations seek to scrutinise whether a plan or project might have a significant impact on a European site of biodiversity protection. These ‘European Sites’ include Special Areas of Conservation (SAC) and Special Protection Areas (SPA). They also comprise designated Wetlands of International Importance (known as Ramsar sites), which often overlap with SACs and SPAs and may be designated for the same or different species and habitats.

**2.31** Since the withdrawal of the UK from the European Union, domestic references to Natura 2000 have been dropped, with both SACs and SPAs (both designated and proposed) now forming part of a new national network. While the Ramsar sites do not form part of this national site network, government guidance<sup>49</sup> identifies how the Ramsar sites remain protected in the same way as SACs and SPAs.

**2.32** The relevant legislation in England comprises the Conservation of Habitats and Species Regulations 2017<sup>50</sup> and the Conservation of Offshore Marine Habitats and Species Regulations 2017<sup>51</sup>. Both pieces of legislation transposed the land and marine aspects of the EU-derived Habitats Directive (Council Directive 92/43/EEC) and certain elements of the EU derived Wild Birds Directive (Directive 2009/147/EC). Since the withdrawal of the UK from the European Union, the 2017 regulations have been amended in part through the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019<sup>52</sup>.

<sup>44</sup> The Planning (Local Development Plan) Regulations (Northern Ireland) 2015 [online]. Available at:

<https://www.legislation.gov.uk/nisr/2015/62/contents/made>

<sup>45</sup> The Planning (Local Development Plan) Regulations (Northern Ireland) 2015 [online]. Available at:

<https://www.legislation.gov.uk/nisr/2015/62/contents/made>

<sup>46</sup> Office of the Deputy Prime Minister (2005) *A Practical Guide to the Strategic Environmental Assessment Directive* [online]:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/7657/practicalguidesea.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf)

<sup>47</sup> Department of the Environment (2015) *Development Plan Practice Note 4: Sustainability Appraisal Incorporating Strategic Environmental Assessment* [online]. Available at: [https://www.infrastructure-ni.gov.uk/sites/default/files/publications/infrastructure/dppn-4-sa-incorporating-sea-v1-april-2015\\_0.pdf](https://www.infrastructure-ni.gov.uk/sites/default/files/publications/infrastructure/dppn-4-sa-incorporating-sea-v1-april-2015_0.pdf)

<sup>48</sup> Department for Communities (2018) *Guidance on Sustainability Appraisal and Strategic Environmental Assessment for the Historic*

*Environment* [online]. Available at:

<https://niopa.qub.ac.uk/bitstream/NIOPA/10103/1/heritage-guidance-on-sustainability-appraisal-and-strategic-environmental-assessment-for-the-historic-environment.pdf>

<sup>49</sup> Department for Environment, Food and Rural Affairs (2021) *Changes to the Habitats Regulations 2017* [online]. Available at:

<https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017/changes-to-the-habitats-regulations-2017>

<sup>50</sup> The Conservation of Habitats and Species Regulations 2017 [online]. Available at:

<https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

<sup>51</sup> The Conservation of Offshore Marine Habitats and Species Regulations 2017 [online]. Available at:

<https://www.legislation.gov.uk/uksi/2017/1013/contents/made>

<sup>52</sup> The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 [online]. Available at:

<https://www.legislation.gov.uk/ukdsi/2019/9780111176573>

**2.33** Section 63 of the Conservation of Habitats and Species Regulations 2017 introduces the requirement for an Appropriate Assessment (AA) to be undertaken for a plan, or any project, that is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and that this plan or project is not directly connected with, or necessary to, the management of that site. The AA must assess the implications of the plan or project upon the site's conservation objectives, and be undertaken by a competent authority before they decide to undertake, or give any consent, permission or other authorisation for, the plan or project. The plan or project proponent is required to provide the competent authority with relevant information in order that the authority can determine whether an appropriate assessment is required (a process of screening). Section 63 (3) states how the competent authority must, for the purposes of the assessment, consult the appropriate nature conservation body (Natural England and the Joint Nature Conservation Committee) have regard to any representations subsequently made by the contacted body.

**2.34** Where a plan or project would have an adverse effect on the integrity of a protected habitats site, it may be approved provided three tests are met: (1) There are no feasible alternative solutions to the plan or project which are less damaging; (2) There are "imperative reasons of overriding public interest" (IROPI) for the plan or project to proceed; and (3) Compensatory measures are secured to ensure that the overall coherence of the network of European sites is maintained<sup>53</sup>.

**2.35** In England, detailed accompanying guidance is provided via the resource 'Habitats Regulations Assessments: Protecting a European Site'. This was jointly published by DEFRA and Natural England in February 2021<sup>54</sup>. Separate guidance, published by DLUHC in July 2019, considers Appropriate Assessment<sup>55</sup>. Some additional guidance is provided by Defra and Natural England for local planning authorities as and when they review planning applications relating to protected sites and areas, and includes an overview of the HRA and AA processes<sup>56</sup>.

**2.36** In the context of planning practice, processes depend on whether screening for an HRA / AA relates to a project or a plan. For a plan, screening will be undertaken by officers at the planning authority, or consultants working on their behalf. The conclusions of the HRA / AA need to be considered by the competent authority before a decision can be made on whether the plan or project can progress. In this scenario, the competent authority is the Local Planning Authority although, in relation to projects, the views of the competent authority can be informed by material presented by the applicant and their consultants. Outputs from the process will typically be displayed on the Council's plan making pages.

**2.37** As with the application of SEA / SA in England, the format and provision of HRA documents will vary, and planning authorities will only provide details of the HRA relating to their area or the immediate area. There is no overarching depository or registry that compiles HRA outputs in one place.

**2.38** The equivalent legislation in Northern Ireland is the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995<sup>57</sup>, although the aforementioned Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species Regulations 2017 also have relevance. Following the withdrawal of the UK from the European Union, parts of this legislation have been amended via the Conservation (Natural Habitats, etc.) (Amendment) (Northern Ireland) (EU Exit) Regulations 2019<sup>58</sup>. There is limited supporting guidance, with there being no specific *Development Plan Practice Note* for HRA/Appropriate Assessment as there is for Sustainability Appraisal. There is some basic advice about HRA on the website of the Department for Infrastructure, including a selection of recent schemes where such an assessment has been undertaken<sup>59</sup>.

**2.39** It should be noted that HRA, as a term, is very much derived from the European Union since it is linked to specific Directives. As we note later, this proved somewhat problematic in our searches for practices elsewhere. To address this, we also used 'Ecological Impact Assessment' as an alternative phrase which has currency elsewhere in the

<sup>53</sup> Part 6 of the Conservation of Habitats and Species Regulations 2017 and Part 2 of the Conservation of Offshore Marine Habitats and Species Regulations 2017.

<sup>54</sup> Department for Environment, Food & Rural Affairs, Natural England, Welsh Government, and Natural Resources Wales (2021) Habitats Regulations Assessments: Protecting a European Site [online]. Available at: <https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site#derogation>

<sup>55</sup> Department for Levelling Up, Housing and Communities (2019) Appropriate Assessment [online] Available at: <https://www.gov.uk/guidance/appropriate-assessment>

<sup>56</sup> Department for Environment, Food & Rural Affairs (Defra) and Natural England (2016) *Protected Sites and Areas: How to Review*

*Planning Applications* [online]. Available at: <https://www.gov.uk/guidance/protected-sites-and-areas-how-to-review-planning-applications>

<sup>57</sup> Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 [online]. Available at:

<https://www.legislation.gov.uk/nisr/1995/380/contents/made>

<sup>58</sup> The Conservation (Natural Habitats, etc.) (Amendment) (Northern Ireland) (EU Exit) Regulations 2019 [online]. Available at:

<https://www.legislation.gov.uk/ukdsi/2019/9780111176634/contents>

<sup>59</sup> Department for Infrastructure (2023) Habitats Regulations Assessment [online]. Available at: <https://www.infrastructure-ni.gov.uk/articles/a6-londonderry-dungiven-dualling-habitats-regulations-assessment-hra>



world when impacts are being considered in relation to protected sites (such as Ramsar sites).

## An evolving platform for reform

**2.40** As we explained through Chapter One, a key driver for this research is the programme of reform that the UK government is seeking to make to the above assessment regimes. We will refer to some of the arguments that have been made in support of making change, but in a sense, the appetite for reform is not unique to the UK. Indeed, as we note later, a number of the jurisdictions that we focus on have recently finished, or are currently engaged, with legislative reform. A range of reasons are often put forward, but the words ‘simplification’<sup>60</sup> and ‘streamlining’<sup>61</sup> are regularly used. Often there is a desire to reduce the scope of assessment, for instance by seeking to reduce the type of plans or projects requiring assessment. There may also be attempts to reduce or remove certain ‘burdens’ to help reduce costs or save time.

**2.41** In the context of the UK, the opening chapter referred to proposals of a more significant nature. These are being advanced through the Levelling Up and Regeneration Bill (LURB)<sup>62</sup>. Although the details for this replacement system have yet to be fully defined, we provide a summary of how the narrative for change has evolved.

### The Planning White Paper (2020)

**2.42** The White Paper, Planning for the Future<sup>63</sup>, was published by the Ministry of Housing, Communities and Local Government in 2020 and presented multiple proposals for reforming the English planning system. These were justified on the basis of a series of perceived deficiencies, including an assertion that while environmental assessments add “complexity and bureaucracy”, they “do not necessarily lead to environmental improvements”<sup>64</sup>. Similarly, as a challenge to current practices surrounding SEA, the White Paper also suggested how Local Plans should be “subject to a single statutory ‘sustainable development’ test”<sup>65</sup>. In addition, the

White Paper also expresses a desire to create “... a quicker, simpler framework for assessing environmental impacts and enhancement opportunities, that speeds up the process while protecting and enhancing England’s unique ecosystems”<sup>66</sup>.

### Nature Recovery Green Paper (March 2022)

**2.43** The Nature Recovery Green Paper<sup>67</sup> was published by Defra in March 2022. A variety of proposals were presented to restore nature and to halt the decline in species abundance by 2030. One of these was positioned to make changes to EU-derived domestic legislation, “to ensure that the new framework we have established works as intended”<sup>68</sup>. The Green Paper also identified a desire to follow an approach that “focusses more on outcomes and recovery”, and to place “science above process in determining conservation outcomes”<sup>69</sup>.

### The Levelling Up and Regeneration Bill (May 2022)

**2.44** The Levelling Up and Regeneration Bill<sup>70</sup> (LURB) was published in May 2022. A variety of measures are proposed across a series of themes, including those designed to re-balance the distribution of power, to make better places, and to support the delivery of infrastructure<sup>71</sup>.

**2.45** A policy paper prepared in support of the Bill outlines how the proposed legislation seeks to improve “the process used to assess the potential environmental effects of relevant plans and major projects, through a requirement to prepare ‘Environmental Outcome Reports [EORs]’”<sup>72</sup>. Subsequent text explains how these EORs will replace “the existing EU-generated systems of Strategic Environmental Assessment (including Sustainability Appraisals) and Environmental Impact Assessment and introduce a clearer and simpler process where relevant plans and projects are assessed against tangible environmental outcomes set by government, rather than in Brussels”<sup>73</sup>. Although there was initial uncertainty about how the proposals could affect or interact with HRA, the recent EOR consultation paper has since clarified this by

<sup>60</sup> Enriquez-de-Salamanca, A. (2021) ‘Simplified environmental impact assessment processes: Review and implementation proposals’. *Environmental Impact Assessment Review*. 90: 106640.

<sup>61</sup> As discussed through Bond, A., Pope, J., Morrison-Saunders, A., Retief, F., and Gunn, J. (2014) ‘Impact assessment: Eroding benefits through streamlining?’, *Environmental Impact Assessment Review*, vol 45, pp 46-53

<sup>62</sup> Fischer, T. (2022) ‘Replacing EIA and SEA with environmental outcome reports (EORs) - the 2022 levelling up and regeneration bill in the UK’. *Impact Assessment and Project Appraisal*, 40(4):267–268.

<sup>63</sup> Ministry of Housing, Communities and Local Government (2020) *White Paper: Planning for the Future*. August.

<sup>64</sup> Ibid, page 12

<sup>65</sup> Ibid, page 20.

<sup>66</sup> Ibid, page 22.

<sup>67</sup> Department for Environment, Food and Rural Affairs (2022) *Nature Recovery Green Paper: Protected Sites and Species*.

<sup>68</sup> Ibid, page 7

<sup>69</sup> Ibid, page 6.

<sup>70</sup> Levelling-up and Regeneration Bill, as sponsored by the Department for Levelling Up, Housing and Communities [online]. Available at: <https://bills.parliament.uk/bills/3155>

<sup>71</sup> Fischer, T. B. (2022a). Replacing EIA and SEA with Environmental Outcome Reports (EORs) - The 2022 Levelling Up and Regeneration Bill in the UK, *Impact Assessment and Project Appraisal*, 40(4), pp. 267–268.

<sup>72</sup> Department for Levelling Up, Housing and Communities (2022) *Policy Paper: Levelling Up and Regeneration Bill. Further information* [online]. Available at:

<https://www.gov.uk/government/publications/levelling-up-and-regeneration-further-information/levelling-up-and-regeneration-further-information#creating-beautiful-places-and-improving-environmental-outcomes>

<sup>73</sup> Ibid.

stating how the HRA is to be excluded from the proposed reform.

**2.46** The policy paper makes it clear that the Bill seeks to deliver more, not less, for the environment. To ensure this, the proposed legislation places a duty on the Secretary of State to ensure that the new system of environmental assessment does not reduce the overall level of environmental protection. Such a pledge accords with the ‘non-regression’ commitment of the UK/EU Trade and Cooperation Agreement<sup>74</sup> which states how the UK should not try to undo, either by legislation or by lack of enforcement, the harmonised standards on environmental protection that were in place at 31 December 2020<sup>75</sup>.

**2.47** The LURB has progressed through the House of Commons and, at the time of writing, has reached the Committee Stage of the House of Lords.

#### Environmental Improvement Plan (January 2023)

**2.48** As mentioned through Chapter One, the Environmental Improvement Plan<sup>76</sup>, that relates to England only, provides a 5-year review of the 25-Year Environment Plan (25-YEP) that was published in 2018. The improvement plan re-states the ten goals that were published in the original version of the 25-YEP, provides a summary of recent activity, and outlines a series of activities that the government seeks to lead on. While the improvement plan notes how the government’s overarching suite of planning policies – as presented through the National Planning Policy Framework - will be refreshed in order to maximise environmental improvement, the plan also re-states the commitment towards preparing *Environmental Outcomes Reports* (EORs). The word ‘outcomes’ is frequently used throughout the improvement plan in a variety of contexts, including as part of a commitment to prepare a new outcomes framework for Protected Landscapes<sup>77</sup>

#### Energy Security Bill Policy Statement (January 2023)

**2.49** This policy statement was also published in January 2023<sup>78</sup>. The document links to the Energy Bill, that was

published in July 2022, and the broader commitment to develop an Offshore Wind Environmental Improvement Package that seeks to facilitate investment in new infrastructure. While the improvement package seeks to address the impacts of offshore wind infrastructure in the marine environment, it also seeks to speed up the consenting process. Processes surrounding environmental assessment are considered as part of a broader commitment to streamline, with a proposal being included that would allow for mitigation measures to be considered at an earlier stage of the HRA process, and specifically before a judgement is made about whether an AA is needed or not. The policy statement also includes provisions for data sharing and resolving conflict. It also identifies the delays that can sometimes come about with the delivery of strategic compensation.

#### Nationally Significant Infrastructure: action plan for reforms to the planning process (February 2023)

**2.50** This action plan, that applies to England and Wales, was published in February 2023<sup>79</sup>. The document, by reflecting upon recent experiences surrounding the planning of Nationally Significant Infrastructure Projects. Five areas of reform are identified, with the third of these relating to the pursuit ‘of better outcomes for the natural environment’. As part of the pretext for this, the document states how there remains “*questions over the effectiveness of the processes in managing environmental issues and ensuring positive environmental outcomes*”<sup>80</sup>. In supporting this evaluation, the action plan refers to how assessments are often too long and technical; are prone to legal challenge; repetitive; and are often ineffective. In terms of this point about effectiveness, the action plan notes how “*environmental concerns are buried under multiple layers of assessment and uncertainties in the assessments are ignored*”<sup>81</sup>.

**2.51** The action plan refers to the proposed system of using Environmental Outcomes Reports (EORs) and sets the framework for the EOR consultation paper that we further discuss below.

<sup>74</sup> UK/EU and EAEC: Trade and Cooperation Agreement [TS No.8/2021] [online]. Available at: <https://www.gov.uk/government/publications/ukey-and-eaec-trade-and-cooperation-agreement-ts-no82021>

<sup>75</sup> The TCA states that the EU and UK “shall not weaken or reduce, in a manner affecting trade or investment between the Parties, its environmental levels of protection or its climate level of protection below the levels that are in place at the end of the transition period, including by failing to effectively enforce its environmental law or climate level of protection”.

<sup>76</sup> Department for Environment, Food & Rural Affairs [Defra] (2023) Environmental Improvement Plan 2023 [online]. Available at: <https://www.gov.uk/government/publications/environmental-improvement-plan>

<sup>77</sup> HM Government (2023) *Environmental Improvement Plan 2023: First Revision of the 25 Year Environment Plan* [online]. Available at: <https://assets.publishing.service.gov.uk/government/uploads/system/u>

[loads/attachment\\_data/file/1133967/environmental-improvement-plan-2023.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1133967/environmental-improvement-plan-2023.pdf)

<sup>78</sup> Department for Business, Energy and Industrial Strategy [BEIS] (2023) Energy Security Bill Policy Statement Offshore Wind Environmental Improvement Package Measures [online]. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1127791/Policy\\_Statement\\_Offshore\\_Wind\\_Environmental\\_Improvement\\_Package\\_Measures.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1127791/Policy_Statement_Offshore_Wind_Environmental_Improvement_Package_Measures.pdf)

<sup>79</sup> Department for Levelling Up, Housing & Communities (2023) Nationally Significant Infrastructure: Action Plan for Reforms to the Planning Process [online]. Available at: <https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-nsip-reforms-action-plan/nationally-significant-infrastructure-action-plan-for-reforms-to-the-planning-process#reform-area-3--realising-better-outcomes-for-the-natural-environment>

<sup>80</sup> Ibid, paragraph 4.1.

<sup>81</sup> Ibid, paragraph 4.1.

**Environmental Outcomes Report: a new approach to environmental assessment (March 2023)**

**2.52** We introduced this document through the opening chapter and referred to its explanatory text surrounding the use of environmental outcomes and environmental indicators<sup>82</sup>. While the document – that we are calling the EOR consultation paper- seeks feedback to help further define the new system, it represents the clearest expression of what is currently proposed.

**2.53** The EOR consultation paper, in outlining the need for change, notes how strategic and project-level assessments need to be better aligned, with the strategic or plan-level assessment significantly narrowing the extent of assessment at the project scale<sup>83</sup>. Linked to this, the EOR consultation paper advocates “a more standardised approach to assessment across different spatial scales, working towards a common set of environmental outcomes”<sup>84</sup>.

**2.54** While the consultation paper notes how EORs will be configured to respond to the needs of each regime and sector, it does provides an example of what an EOR might look like if applied under the Town and Country Planning Act 1990. Specifically the consultation paper notes how such an EOR would be likely to include:

- A short introduction (which references the project details in the accompanying Planning Statement).
- A short, high level, summary of how reasonable alternatives and the mitigation hierarchy were considered early in the development of the project
- An assessment of contribution towards achieving an outcome supported by the indicators set out in guidance. This will include

- The residual effects on the environment identified through the underlying technical work, with relevant conclusions in the technical work clearly pinpointed.
- The current baseline and relevant trend data, similarly identified.
- Commentary on levels of uncertainty for that data or indicator set.
- Proposed mitigation.
- Monitoring proposals.
- A summary of the contribution of the cumulative effects of the project as a whole on outcomes and how this relates to the conclusions of any strategic or plan level assessment.

**2.55** Part 6 of the EOR consultation document refers to how plans and projects will be screened with respect to whether an EOR will be required. The proposed system seeks to maintain the current approach under the EIA regulations where the need for an Environmental Statement (and now an EOR moving forward), will be dependent on the criteria presented through two schedules. However, greater prescription is promised to help lessen ambiguity and promote greater efficiency. The EOR consultation paper also outlines proposals for strengthening mitigation; mainstreaming monitoring; and unlocking data.

**2.56** By way of a summary, the EOR consultation document offers a summary of what the proposed system could look like, against the ‘the current system’ (although this is not defined). The comparison is re-produced through **Table 2.1**.

<sup>82</sup> Department for Levelling Up, Housing & Communities (2023) Environmental Outcomes Report: a New Approach to Environmental Assessment [online]. Available at: <https://www.gov.uk/government/consultations/environmental-outcomes-reports-a-new-approach-to-environmental->

[assessment/environmental-outcomes-report-a-new-approach-to-environmental-assessment/what-an-environmental-outcomes-report-will-cover](https://www.gov.uk/government/consultations/environmental-outcomes-reports-a-new-approach-to-environmental-assessment/what-an-environmental-outcomes-report-will-cover)

<sup>83</sup> Ibid, paragraph 5.1.

<sup>84</sup> Ibid, paragraph 5.1.

Table 2.1: Suggested differences, as outlined through the EOR consultation document, between the current and new regimes<sup>85</sup>

Stage	The current system	Environmental Outcomes Reports
<b>Screening</b>	<ul style="list-style-type: none"> <li>A case-by-case approach to screening introduces uncertainty and delay through risk of legal challenge.</li> </ul>	<ul style="list-style-type: none"> <li>Clear criteria for what requires assessment will remove the need for screening in the vast majority of cases.</li> </ul>
<b>Scoping</b>	<ul style="list-style-type: none"> <li>Expanded scoping has led to bloated assessments that don't support communities or decision makers. Scoping can take months and fear of legal challenge means that scope is rarely effectively reduced. This, together with duplication with other activity, increases the scale and cost of assessment, and assessment timeframes.</li> </ul>	<ul style="list-style-type: none"> <li>Proportionate assessment against agreed outcomes will remove the need for lengthy scoping exercises. Outcomes can be scoped out based on a desktop analysis of accessible, up to date, and reliable data. Clarity about what is assessed at strategic and project levels.</li> </ul>
<b>Assessment</b>	<ul style="list-style-type: none"> <li>Assessments have become unclear and complex. Considerations of alternatives can be carried out too late in the process to make any real difference.</li> <li>Assessments can duplicate work carried out elsewhere in the primary, overlying, planning processes.</li> <li>Management of uncertainty is unclear. Effectiveness of mitigation is assumed, often with little evidence in support.</li> </ul>	<ul style="list-style-type: none"> <li>Assessment against outcomes supported by approved indicators will ensure assessment tells the story of how the development is contributing to the government's environmental ambitions.</li> <li>A requirement to apply the mitigation hierarchy in the design and development of the plan or project. Greater clarity about what reasonable alternatives should be considered, and how.</li> </ul>
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Voluminous documentation with repetitive and excessively detailed descriptions, methodologies, and policy act as a barrier to effective reporting. For EIA other 'non-EIA' matters included in reports.</li> <li>Assessments of significance are often subjective and vague.</li> </ul>	<ul style="list-style-type: none"> <li>Reporting against agreed outcomes will allow for concise summaries that pinpoint relevant sections in supporting technical analysis.</li> <li>The findings of the technical analyses are more accessible, making them of real use to decision makers and communities.</li> </ul>
<b>Monitoring and remediation</b>	<ul style="list-style-type: none"> <li>Requirements are often unclear, under-resourced and unenforced. Inflexible plan-making and consenting regimes make changes to mitigation and delivery of remediation challenging. Useful information is permanently lost.</li> </ul>	<ul style="list-style-type: none"> <li>Strengthened requirements will better address uncertainty and post-implementation issues. This will help drive best practice backed up by stronger enforcement of mitigations and remedial actions. Data will be stored and inform future assessments.</li> </ul>
<b>Performance reporting</b>	<ul style="list-style-type: none"> <li>The lack of reporting means the government lacks data on the effectiveness of the processes in protecting the environment.</li> </ul>	<ul style="list-style-type: none"> <li>Agreed reporting requirements will support our understanding of the environment and the impact of development.</li> </ul>

<sup>85</sup> Source: Department for Levelling Up, Housing and Communities (2023) 'Environmental Outcomes Report: a new approach to environmental assessment' (Table 2) [online]. Available at: <https://www.gov.uk/government/consultations/environmental-outcomes-reports-a-new-approach-to-environmental-assessment/environmental-outcomes-report-a-new-approach-to-environmental-assessment>

## International prevalence

**2.57** The US National Environment Policy Act of 1969 was the first piece of global legislation associated with EIA. Countries such as Canada (1973), Australia (1974), West Germany<sup>86</sup> (1975) and France (1976) followed, bringing forward their own form of EIA. The approval of the European Directive on EIA in 1985 was particularly important in stimulating an enactment of EIA legislation in many European countries during the mid-1980s.

**2.58** The literature refers to the many factors that have encouraged the spread of assessment legislation worldwide, including the role for bodies such as the World Bank and the European Bank for Reconstruction and Development. The United Nations Economic Commission for Europe has also played an important role, for instance in hosting conventions and publishing protocols. The Espoo Convention of 1997, relating to EIA in a Transboundary Context, is a particularly important instrument and reinforces the importance of preventing environmental damage before it occurs. The Convention defines 'impact', under Article 1 (vii), as:

"any effect caused by a proposed activity on the environment including human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interaction among these factors» it also includes effects on cultural heritage or socio-economic conditions resulting from alterations to those factors"<sup>87</sup>.

**2.59** A Protocol on Strategic Environmental Assessment followed in 2003<sup>88</sup>. The Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (2001) was also a significant influence. The convention empowers the role of citizens and civil society organisations in environmental matters and is founded on the principles of participative democracy.

**2.60** Both instruments have helped to promote the importance of environmental assessment globally. With respect to EIA, research undertaken by the Netherlands Commission for Environmental Assessment (NCEA) reports how 187 countries have a legal requirement for EIA (or Environmental and Social

Impact Assessment, as the NCEA describes it). The only countries listed on the NCER website without EIA legislation comprise North Korea, Somalia, South Sudan, Brunei, East Timor, Puerto Rico, the Bahamas and North Macedonia<sup>89</sup>. Coverage is shown visually by **Figures 2.2 and 2.2**. With respect to SEA, the NCEA reports lower coverage, with **Figures 2.3 and 2.4** showing the countries where the regime is active. Previous research by the Convention on Biodiversity note how SEA is actively used in 90 countries<sup>90</sup>.

**2.61** Although HRA is undertaken throughout the European Union, it is difficult to find data concerning the global coverage of Ecological Impact Assessment.

<sup>86</sup> International Institute for Sustainable Development (IISD) (2023) *EIA Timeline* [online]. Available at:

<https://www.iisd.org/learning/eia/eia-essentials/timeline/>

<sup>87</sup> <https://unece.org/environment-policy/environmental-assessment/text-convention>

<sup>88</sup> United Nations Economic Commission for Europe (2003) *Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context* [online]. Available at:

<https://unece.org/DAM/env/eia/documents/legaltexts/protocolenglish.pdf>

<sup>89</sup> Netherlands Commission for Environmental Assessment (2023) *Topic ESIA and SEA* [online]. Available at:

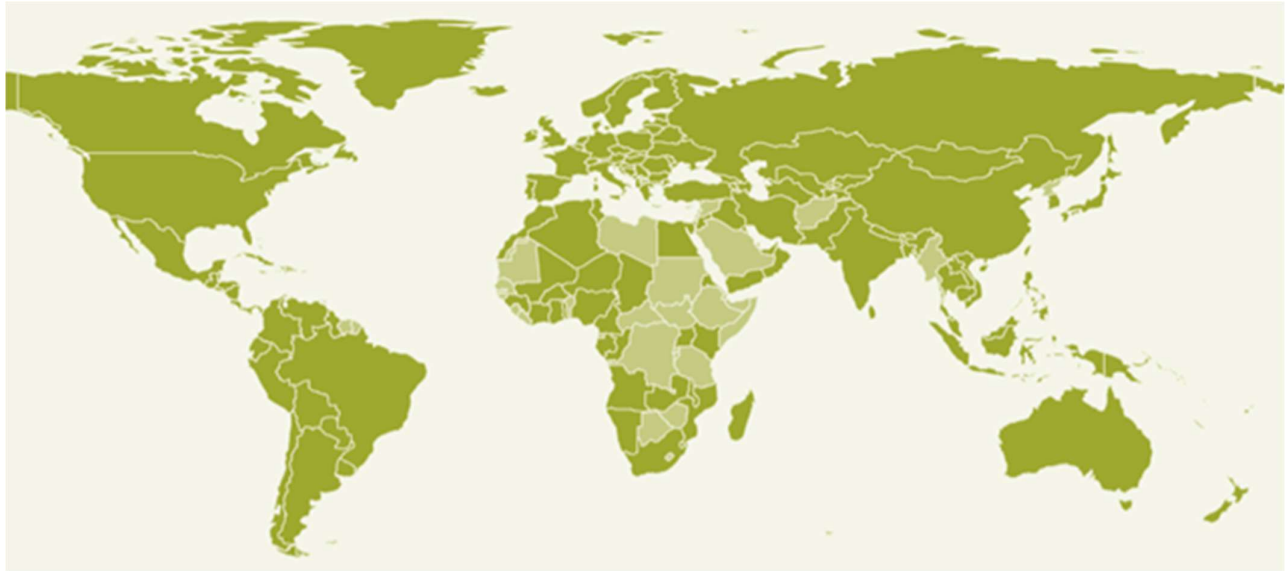
<https://www.eia.nl/en/topics/esia-sea/introduction2>

<sup>90</sup> Convention on Biological Diversity [CBD] (2017) *Global State of the Application of Biodiversity-Inclusive Impact Assessment* [online].

Available at: <https://www.cbd.int/impact/doc/IAIA17-Draft-Report.pdf>

**Figure 2.1: Coverage of EIA Legislation in 2000**

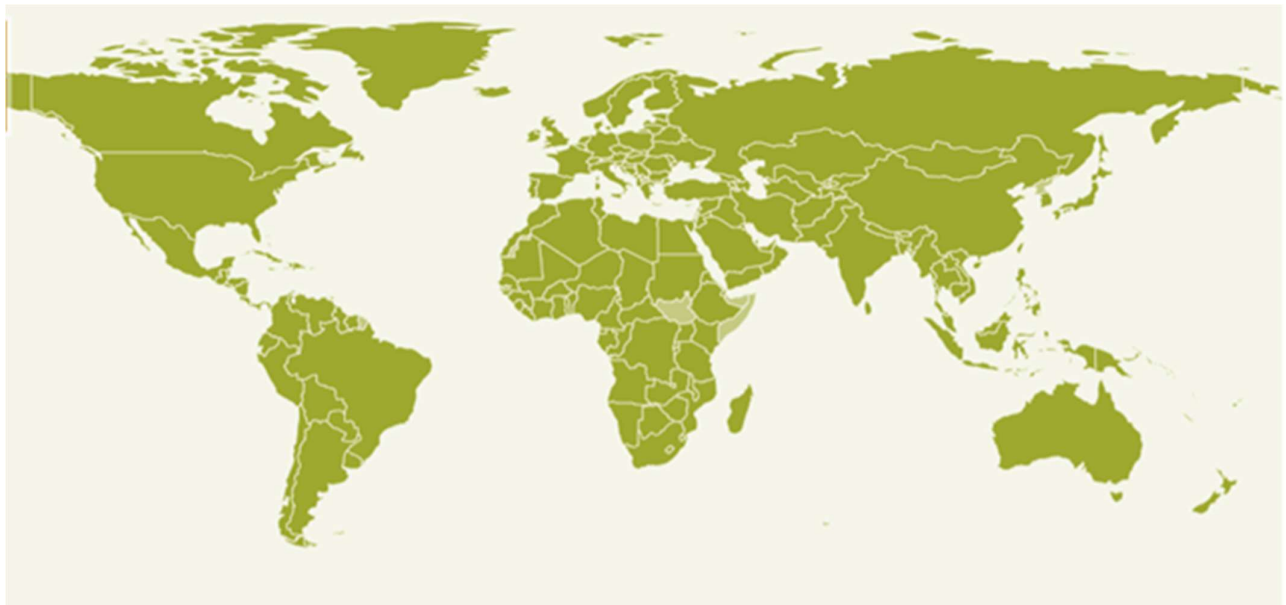
Note: Dark green denotes coverage.



Source: NCER, 2023<sup>91</sup>.

**Figure 2.2: Coverage of EIA Legislation in 2023**

Note: Dark green denotes coverage.



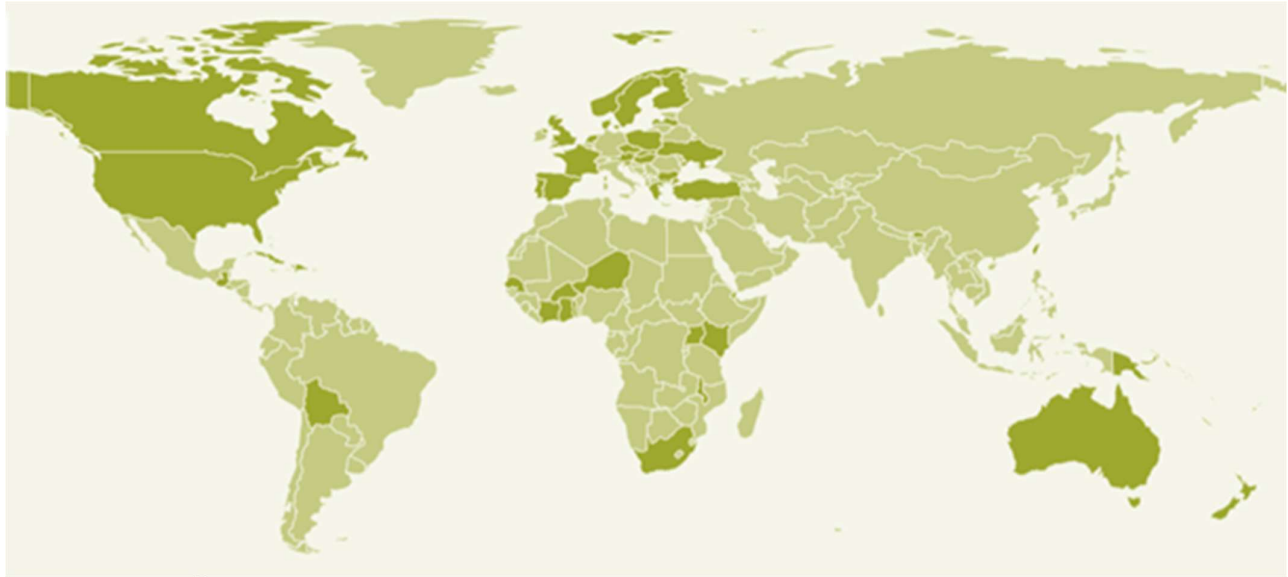
Source: NCER, 2023<sup>92</sup>.

<sup>91</sup> Netherlands Commission for Environmental Assessment (2023) *Topic ESIA and SEA* [online]. Available at: <https://www.eia.nl/en/topics/esia-sea/introduction2>

<sup>92</sup> Ibid.

**Figure 2.3: Coverage of SEA Legislation in 2000**

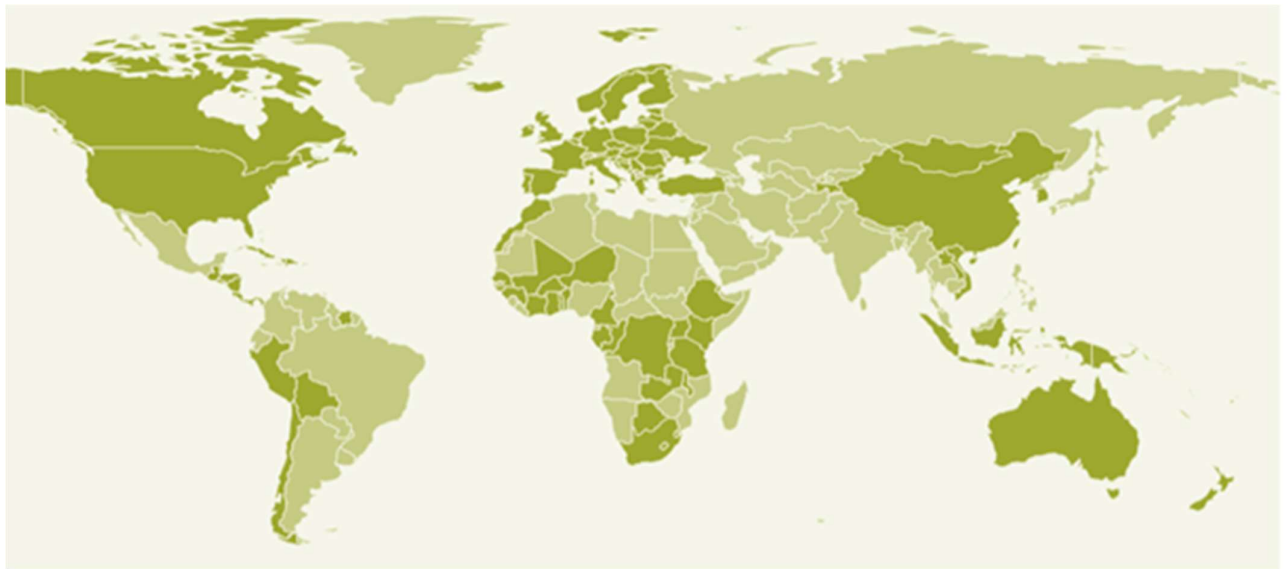
Note: Dark green denotes coverage.



Source: NCER, 2023<sup>93</sup>.

**Figure 2.4: Coverage of SEA Legislation in 2023**

Note: Dark green denotes coverage.



Source: NCER, 2023<sup>94</sup>.

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<sup>93</sup> Ibid.  
<sup>94</sup> Ibid.

## Assessing performance and effectiveness

**2.62** As impact assessment has extended across the world, growing regard has been given to both the **performance** and **effectiveness**. These evaluations are either framed around a particular regime, such as EIA, or around a specific jurisdiction, such as England. Whatever the focus, providing evaluations is notoriously difficult. Specifically, as Sheate and Eales (2016)<sup>95</sup> note, it is often impossible to separate out the effect of using the tool from the effect of many of the other variables affecting decision-making. There is also a plurality of views as to what performance and effectiveness mean, with attitudes potentially varying depending on the position of the stakeholder and the perspective they opt to take. The importance of context – as considered later – is often a key factor in shaping the conclusions.

### Performance

**2.63** In terms of performance, Fischer (2002)<sup>96</sup> refers to criteria that was initially presented by the International Association for Impact Assessment (IAIA) in 1999. These were subsequently endorsed in November 2001. There are 17 separate criteria, with these extending across seven output-focused themes that seek to ensure that:

- SEA is integrated
- SEA is sustainability-led
- SEA is focused
- SEA is accountable
- SEA is participative
- SEA is iterative

### Effectiveness

**2.64** In terms of effectiveness, papers by Cashmore et al. (2004)<sup>97</sup> and van Doren et al. (2012)<sup>98</sup> refer to procedural and substantive effectiveness. Loomis and Dziedzic (2012)<sup>99</sup> also refer to transactive and normative effectiveness. Focusing on procedural effectiveness tends to consider the extent to which rules and regulations are followed by the users of the system. In contrast, substantive effectiveness examines the effects of EIA on the decision-making process and focuses on whether the results of an assessment actually reduce negative environmental impacts. Transactive effectiveness concerns the financial and temporal costs of conducting the EIA and includes the degree to which EIA avoids delays and cost overruns<sup>100</sup>. Normative effectiveness tends to be linked to broader goals, such as minimising trade-offs and promoting participatory decision making.

**2.65** Table 2.2 summarises the various interpretations of effectiveness and in doing so, refers to work of Chanchitpricha (2012)<sup>101</sup>, Pope et al. (2018)<sup>102</sup>, Chanchitpricha and Bond (2018)<sup>103</sup>, and Chanchitpricha et al. (2019)<sup>104</sup>.

**2.66** Procedural effectiveness tells us little about the quality of the assessment process or the extent to which the assessment process influenced decisions, only the extent to which the required steps have been followed. It is also worth making a clear distinction between quality and effectiveness; a good quality environmental assessment may not be an effective environmental assessment, if by effective is meant the degree to which the assessment influences the decision-making process.

### The importance of context

**2.67** Bond et al. (2022)<sup>105</sup> argued that context significantly influences how EIA works, and therefore how effective it is. Context can be understood as a range of mediators, which act

<sup>95</sup> Sheate, W. and Eales, R. (2016) 'Effectiveness of European national SEA systems: How are they making a difference?'. In Sadler, B. and Dusik, J., (Eds.) *European and International Experiences of Strategic Environmental Assessment: Recent Progress and Future Prospects*, London: Routledge

<sup>96</sup> Fischer, T. (2002) 'Strategic environmental assessment performance criteria- the same requirements for every assessment?', *Journal of Environmental Assessment Policy and Management*, 4(1), pp. pp. 83–99.

<sup>97</sup> For example Cashmore, M., Gwilliam, R., Morgan, R., Cobb, D. and Bond, A. (2004) 'The interminable issue of effectiveness: substantive purposes, outcomes and research challenges in the advancement of environmental impact assessment theory'. *Impact Assessment and Project Appraisal*, 22, pp. 295–310.

<sup>98</sup> van Doren, D., Driessen, P.P.J., Schijf B. and Runhaar, H.A.C. (2013) 'Evaluating the substantive effectiveness of SEA: towards a better understanding', *Environmental Impact Assessment Review*, 38 (1), pp. 120–130.

<sup>99</sup> Loomis, J. and Dziedzic, M. (2018) 'Evaluating EIA systems' effectiveness: A state of the art', *Environmental Impact Assessment Review*, 68, pp. 29–37.

<sup>100</sup> Ibid.

<sup>101</sup> Chanchitpricha, C. (2012) 'Effectiveness of Health Impact Assessment (HIA) in Thailand: A Case Study of a Potashmine HIA in Udonthani'. Norwich: University of East Anglia

<sup>102</sup> Pope, J., Bond, A., Cameron, C., Retief, F. and Morrison-Saunders, A. (2018) 'Are current effectiveness criteria fit for purpose? Using a controversial strategic assessment as a test case'. *Environmental Impact Assessment Review*, 70, pp. 34–44.

<sup>103</sup> Chanchitpricha, C. and Bond, A. (2018) 'Investigating the effectiveness of mandatory integration of health impact assessment within environmental impact assessment (EIA): a case study of Thailand', *Impact Assessment and Project Appraisal*, 36:1, pp. 16–31.

<sup>104</sup> Chanchitpricha, C., Morrison-Saunders, A., Bond, A. (2019) 'Investigating the effectiveness of strategic environmental assessment in Thailand'. *Impact Assessment and Project Appraisal*, 37, pp. 356–368.

<sup>105</sup> Bond, A., Pope, J. Morrison-Saunders, A. and Retief, F. F. (2022) 'Exploring the relationship between context and effectiveness in impact assessment', *Environmental Impact Assessment Review*, 97, p7.



as barriers to the way EIA should work to achieve its goals, or as enablers, depending on the situation (for example, training in a new EIA system can enable effective practice, whereas a lack of training acts as a barrier). They identified the range of mediators found to exist from the literature, and used Integral Theory to help to explain the different categories of mediator that exist.

**2.68** Integral Theory accommodates multiple perspectives and therefore helps to make sense of the context by categorising mediators according to whether they affect individuals, or groups (collective), or whether they are more subjective in nature (interior), or objective (exterior – usually related to legal mandates and guidance). The mediators are all placed into one of these four categories in **Table 2.3**.

**2.69** In summary, this diagram shows us that effective EIA is a function not just of the regulations developed, but the backgrounds of the individuals involved in EIA practice, the networks they are embedded in, their training and capacity, and so on. However, a significant component remains the central support for the EIA system through maintaining guidance, making data available, and financially supporting practice and research.

**2.70** This central support can influence cultural context by facilitating a community of practice that results in mediators like the actor network and culture becoming enablers rather than barriers. It suggests ongoing dialogue amongst a community of stakeholders, including Government, is necessary to ensure the mediators are enabling effective practice rather than becoming barriers to it.

Table 2.2: Elements of effectiveness

Aspect of effectiveness	Description	Component / criteria
<b>Procedural</b>	<i>The extent to which the process reflects the institutional and professional standards and procedures.</i>	<ul style="list-style-type: none"> <li>■ Relevant policy framework and procedures</li> <li>■ International collaboration</li> <li>■ Integrating assessment processes into planning</li> <li>■ Engagement of the public and stakeholders</li> <li>■ Clear assessment findings and robust trail of evidence</li> <li>■ Communication of assessment findings to stakeholders</li> <li>■ The timing of assessment follows regulatory direction</li> </ul>
<b>Substantive</b>	<i>The findings of the assessment could lead to changes in process, actions, learning or outcomes.</i>	<ul style="list-style-type: none"> <li>■ Regulatory framework for implementing assessment findings into decision making</li> <li>■ Close collaboration between policy-makers and assessment practitioners</li> <li>■ Early start and parallel development of policy / project / plan with assessment process</li> <li>■ The potential for institutional benefits</li> </ul>
<b>Transactive</b>	<i>Invested resources used efficiently within the assessment process are efficiently considered.</i>	<ul style="list-style-type: none"> <li>■ The assessment is conducted within a reasonable timescale and budget</li> <li>■ Roles are clearly defined</li> <li>■ Availability of appropriate skills and resources</li> </ul>
<b>Legitimacy</b>	<i>The extent to which the assessment process delivers outcomes, which stakeholders consider as fair and acceptable.</i>	<ul style="list-style-type: none"> <li>■ The assessment is conducted with openness, transparency and equity</li> <li>■ Power is appropriately shared</li> <li>■ Embedded knowledge is accurate and drives the assessment process</li> <li>■ Both formal and informal knowledge is incorporated</li> </ul>

Table 2.3: Integral Theory Quadrant for Contextual Elements

	Interior	Exterior
Collective	<p><b>I (consciousness)</b></p> <p>6 Exercise of power 11 Ethics 12 Values</p>	<p><b>It (behaviour)</b></p> <p>8 Individual actor capacity</p>
Individual	<p><b>We (organisational culture)</b></p> <p>1 Nature of actor network 2 Level of openness and democracy 13 Culture 15 Discourses</p>	<p><b>Its (organisational structure)</b></p> <p>3 Political and economic situation 4 Socio-economic situation 5 Institutional structures 7 Government capacity / governance 14 Natural environment 16 Supporting legislation and guidance 20 Availability of data 21 Timing</p>

Source: Bond, A., Pope, J. Morrison-Saunders, A. and Retief, F. (2022) Exploring the relationship between context and effectiveness in impact assessment, *Environmental Impact Assessment Review*, 97, page 7.

**2.71** It is also worth noting that as part of evaluating the performance of the implementation of EU Directives, including for example the SEA Directive, the European Commission considers not just effectiveness (which is defined as the extent to which the Directive’s objectives have been achieved), but a number of other factors. These include efficiency (consideration of the resources required to achieve the objectives); relevance (the extent to which the needs of the EU and its citizens are met); and coherence (how it interacts with other relevant areas of policy).

## Identifying the enablers and barriers to change

**2.72** At a European level, revised Directives are presented against a backdrop of reflection and review.

**2.73** In the context of SEA, evaluations surrounding effective implementation were published in 2009 and 2017<sup>106</sup>, while individual Member States have also prepared their own country-level reports<sup>107</sup> and independent research has also been conducted. Similarly, Commission reports<sup>108</sup> on the application and effectiveness of the EIA Directive were published in 1993, 1997, 2003 and 2009<sup>109</sup>. These evaluations, together with the findings of independent research activity, have led to regulatory changes although the magnitude of this change has often fallen short of what was desired. However, for change to be advanced, there needs to be consensus amongst EU members, which tends to require considerable effort and trade-offs.

**2.74** Nevertheless, in 1997, Directive 97/11/EC led to an increase in the types of projects being covered, together with an increase in the number of projects requiring mandatory EIA. Furthermore, new screening arrangements and minimum information requirements for Environmental Statements were also introduced. In 2003, the EIA regime was strengthened with respect to promoting public involvement (under 2003/35/EC), while projects relating to the transport, capture and storage of carbon dioxide (CO<sub>2</sub>) were added to the eligible project list under 2009/31/EC<sup>110</sup>.

**2.75** Under Directive 2014/52/EU, the requirement for Environmental Statements to be produced by competent experts was introduced, as was the inclusion of steps to assist with the coordination of EIA with other assessment regimes. Other significant changes included changes in screening procedures, the inclusion of demolition works when describing development proposals, and an increased requirement to examine alternatives. There was also some broadening of the range of environmental topics to be addressed, the mandatory incorporation of mitigation and monitoring measures into consents (e.g. planning permissions), and mandatory post-EIA monitoring (of significant effects). Furthermore, EU member states are also expected to host databases containing details of the EIAs they have received.

<sup>106</sup> European Commission (2023) Strategic Environmental Assessment [online]. Available at: [https://environment.ec.europa.eu/law-and-governance/environmental-assessments/strategic-environmental-assessment\\_en](https://environment.ec.europa.eu/law-and-governance/environmental-assessments/strategic-environmental-assessment_en)

<sup>107</sup> Ibid.

<sup>108</sup> European Commission (2023) Environmental Impact Assessment [online]. Available at: [https://environment.ec.europa.eu/law-and-governance/environmental-assessments/environmental-impact-assessment\\_en#review-of-the-eia-directive](https://environment.ec.europa.eu/law-and-governance/environmental-assessments/environmental-impact-assessment_en#review-of-the-eia-directive)

<sup>109</sup> European Commission (2009) Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on the application and effectiveness of the EIA Directive (Directive 85/337/EEC, as amended by Directives 97/11/EC and 2003/35/EC) [online]. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009DC0378&from=EN>

**2.76** In response to these Directives, the UK government has had to update its own regulations accordingly. For example, the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 apply the ‘fixes’ that 2014/52/EU introduced. So, at least in the context of practice across the European Union, and with respect to the EIA regime, reviews of effectiveness have led to regular programmes of change being applied.

**2.77** However, in contrast to EIA, no changes have been made to the SEA Directive 2001/42/EC since it was transposed to the UK in 2004. This lack of activity perhaps explains why the English SEA guidance, that was first published in 2005, remains relevant (although practice and application has evolved).

### Assessing the performance of UK practice

**2.78** Glasson (1999)<sup>111</sup> provided a ten-year review of the EIA regime, while IEMA<sup>112</sup> considered the ‘state’ of the broader sector in 2011. Arts, Runhaar, Fischer *et al.* (2012)<sup>113</sup> provided a comparative review of effectiveness, between the UK and the Netherlands, a year later. More recently, Jha-Thakur and Fischer (2016)<sup>114</sup> have considered the strengths and weaknesses of EIA, as well as the opportunities and threats to the regime, via a 25-year review. Some work has focused upon particular issues or themes, such as IEMA’s 2017 report into proportionality<sup>115</sup>.

**2.79** In terms of the application of SEA / SA to land-use planning, a review was undertaken in 2010<sup>116</sup>. Amongst its many conclusions, the study highlighted how SA / SEA was not being implemented in a particularly efficient way<sup>117</sup>. It also noted how “SA / SEA could be more effective than it is now; however its capacity to exert influence is often limited”<sup>118</sup>. Thirteen recommendations were made, although a change of

government in the same year ultimately impacted upon the implementation of these. Recommendations included a need to encourage assessment at an earlier stage of plan making. Three proposals to encourage the application of best practice were also pitched, including one to encourage a stronger emphasis on the use of environmental limits within assessment.

**2.80** In terms of HRA, the Government announced a review of the Habitats and Wild Birds Directives, as currently implemented in England, in November 2011<sup>119</sup>. The review sought to reduce perceived burdens on business, while maintaining the integrity of the purpose of the Directives. The final report was published in March 2012<sup>120</sup>, and concluded “that the implementation of the Directives is working well, allowing both the development of key infrastructure and ensuring that a high level of environmental protection is maintained”<sup>121</sup>. However, the report made recommendations for improving:

- The complexity of legislation and guidance.
- The complexity of the authorisation process for development.
- The availability and comparability of data.
- The culture and capacity of all organisations involved in the process.

**2.81** More recently, a review of the HRA was initiated in May 2021<sup>122</sup>, with a working group, under the leadership of Lord Benyon, being subsequently set up. Other members included Tony Juniper (Chair of Natural England), Rebecca Pow MP, and Christopher Katkowski QC. Evidence was heard from a range of stakeholders, including competent authorities and statutory advisers; local planning authorities; developers; and

<sup>111</sup> Glasson, J. (1999) ‘The first 10 years of the UK EIA system: strengths, weaknesses, opportunities and threats’, *Planning, Practice and Research*, 14, pp. 63–375.

<sup>112</sup> IEMA (2011) The State of Environmental Impact Assessment in the UK [online]. Available at: [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020016/EN020016-000986-BFC\\_Vol\\_09.18.16\\_Special%20Report%20-The%20State%20of%20Environmental%20Impact%20Assessment%20Practice%20of%20the%20UK.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020016/EN020016-000986-BFC_Vol_09.18.16_Special%20Report%20-The%20State%20of%20Environmental%20Impact%20Assessment%20Practice%20of%20the%20UK.pdf)

<sup>113</sup> Arts, J., Runhaar, H., Fischer, T., Jha-Thakur, U., Laerhoven, F., Driessen, P. and Onyango, V. (2012) ‘Effectiveness of EIA as an instrument for environmental governance: reflecting on 25 years of EIA practice in the Netherlands and the UK’, *Journal of Environmental Assessment Policy and Management*, 14(4).

<sup>114</sup> Jha-Thakur, U. and Fischer, T. (2016) ‘25 years of the UK EIA system: strengths, weaknesses, opportunities and threats’, *Environmental Impact Assessment Review*, 61, pp. 19–26.

<sup>115</sup> IEMA (2017) Delivering Proportionate EIA [online]. Available at: <https://www.iema.net/resources/reading-room/2017/07/18/delivering-proportionate-eia>

<sup>116</sup> Communities and Local Government (2010) Towards a More Efficient and Effective use of Strategic Environmental Assessment

and Sustainability Appraisal in Spatial Planning [online]. Available at: <https://webarchive.nationalarchives.gov.uk/ukgwa/20100519225025m/p/http://www.communities.gov.uk/documents/planningandbuilding/pdf/1513010.pdf>

<sup>117</sup> *Ibid.*, para. 8.2.1

<sup>118</sup> *Ibid.*, para 8.3.1

<sup>119</sup> Department for Environment, Food & Rural Affairs (2012) Report of the Habitats and Wild Birds Directives Implementation Review [online]. Available at: <https://www.gov.uk/government/publications/report-of-the-habitats-and-wild-birds-directives-implementation-review>

<sup>120</sup> HM Government (2012) Report of the Habitats and Wild Birds Directives Implementation Review [online]. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69513/pb13724-habitats-review-report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69513/pb13724-habitats-review-report.pdf)

<sup>121</sup> *Ibid.*, para. 27.

<sup>122</sup> Department for Environment, Food & Rural Affairs (Defra) Environment Secretary speech at Delamere Forest on restoring nature and building back greener [online]. Available at: <https://www.gov.uk/government/speeches/environment-secretary-speech-at-delamere-forest-on-restoring-nature-and-building-back-greener>

non-governmental organisations. Findings focused upon a need to:

- Clarify legal terminology and processes
- Make existing data readily available and user friendly
- Make specific site advice accessible in one place
- Base scientific judgements on a clearer framework of evidence (screening and assessment)
- Encourage an earlier consideration of avoidance or mitigation measures
- Facilitate earlier expert engagement to increase local planning authority confidence in scientific evidence

**2.82** By focusing upon a need to improve current processes, and to explore how a more strategic approach to assessment could be taken, the working group proposed three solutions, namely to:

- Develop a single, new assessment process.
- Create a clearer decision-making framework.
- Encourage the use of strategic approaches to mitigation and compensation.

### Accompanying studies

**2.83** Chapter One noted how the OEP had commissioned two other projects alongside our own, with these helping to provide insight concerning the application of EIA, SEA / SA and HRA across England and Northern Ireland.

**2.84** Although the teams at 39 Essex Chambers and WSP were able to draw from previous assessments of effectiveness, including those mentioned above, the research projects have been able to provide additional insight into how the regimes are perceived to be operating. By engaging with key stakeholders, including practitioners, the projects have also helped to gauge the appetite for reform and to scope-out the type of improvements that could be made to sharpen effectiveness.

**2.85 Appendices A1 and A2** provide a summary of the perceived strengths and perceived weaknesses of each regime. While the methodologies of each study differed, both were generally positive about the roles that the respective regimes were playing. For instance, with respect to EIA, 39 Essex Chambers noted how the regime was delivering environmental protection and was helping to promote a stronger awareness of the environment. This conclusion was also echoed by the team at WSP. For SEA, the regime was felt to have a clear purpose, although it was noted that links

with project-level EIA often needed to be better-developed. HRA was also considered to be effective, with a strong level of protection being offered to protected sites. With respect to future reform, WSP noted that while there were elements of each regime that could be improved, there was no overwhelming desire from stakeholders for any significant reform.

**2.86 Table 2.4** provides a collective summary of the assessment provided by these two companion reports. As the table shows, there are some similarities between the combined findings of this work, and the perceived issues that have been identified by DHLUC through the EOR consultation report (as listed under paragraph 1.7). However, while the EOR consultation document proposes a new system to respond to these points, the WSP and 39 Essex Chambers work identified a general preference to adapt and improve the existing assessment regimes.

**2.87** While Table 2.4 suggests a wide suite of areas where change could be applied, we opted to pursue the same synthesised objectives that WSP concluded their report with, namely:

- **Objective one:** The need for earlier, more integrated, environmental assessment.
- **Objective two:** The need for a greater focus on monitoring, mitigation and enforcement.
- **Objective three:** The need for provision of improved skills, information and capacity.
- **Objective four:** The need to provide more accessible information and greater stakeholder engagement and public participation.
- **Objective five:** The need to consider alternative solutions for delivering environmental betterment over environmental protection.

**2.88** Through **Chapter Three** we provide a summary of our methodology, including an explanation of how and why we selected certain jurisdictions.

**2.89 Chapter Four** returns to the research question, and specifically research objective one, to provide insight concerning the prevalence of 'environmental outcomes' and 'environmental indicators' across the regimes and jurisdictions that we looked at. **Chapter Five** then re-considers the five objectives listed above and discusses whether our review of certain international practices offers potential solutions for improvement.

**Table 2.4: Summary of perceived issues** (as identified through the studies undertaken by WSP and 39 Essex Chambers)

Identified issues by assessment regime		
Environmental Impact Assessment (EIA)	Strategic Environmental Assessment (SEA)	Habitats Regulations Assessment (HRA)
<ul style="list-style-type: none"> <li>■ The delays and costs associated with assessment.</li> <li>■ Resourcing issues and the availability of skill and expertise to both prepare and evaluate assessments.</li> <li>■ Poor guidance and a lack of a central depository for assessment material.</li> <li>■ Legislative complexity and procedural weaknesses.</li> <li>■ An over-emphasis on discretionary judgment.</li> <li>■ Uncertainties surrounding screening and scoping.</li> <li>■ The salami-slicing of major development and the failure to properly consider cumulative effects.</li> <li>■ A failure to properly recognise indirect effects (e.g. greenhouse gas emissions).</li> <li>■ The inadequacy and absence of environmental information and data.</li> <li>■ An excessive amount of information in Environmental Statements / Inaccessibility of documents (in terms of format, size and complexity).</li> <li>■ Restricted opportunities for public and stakeholder engagement.</li> <li>■ The uncertainty about whether assessments impact on decision making.</li> <li>■ Inadequate monitoring and follow-up.</li> </ul>	<ul style="list-style-type: none"> <li>■ The delays and costs associated with assessment.</li> <li>■ Resourcing issues and the availability of skill and expertise to both prepare and evaluate assessments.</li> <li>■ Poor guidance and a lack of a central depository for assessment material.</li> <li>■ Uncertainties surrounding screening and scoping.</li> <li>■ Exhaustive scoping with poor identification of key issues and matters.</li> <li>■ Variable levels of public and stakeholder engagement.</li> <li>■ Alternative policy options are often missed.</li> <li>■ Challenges surrounding the timing and tiering of assessment.</li> <li>■ Variations in administrative and cultural practices.</li> <li>■ Weaknesses in reporting, including the length and complexity of reports.</li> <li>■ The difficulties in assessing cumulative effects.</li> <li>■ The challenge of assessing significance.</li> <li>■ The uncertainty about whether assessments impact on decision making.</li> <li>■ Uncertainty about whether the regime is duplicating other regimes and processes.</li> <li>■ Inadequate monitoring and follow-up.</li> </ul>	<ul style="list-style-type: none"> <li>■ The delays and costs associated with assessment.</li> <li>■ Resourcing issues and the availability of skill and expertise to both prepare and evaluate assessments.</li> <li>■ Poor guidance and a lack of a central depository for assessment material.</li> <li>■ A lack of a desire for courts to intervene in decision making.</li> <li>■ Poor lines and levels of communication between key stakeholders.</li> <li>■ Lack of relevant environmental evidence and data.</li> <li>■ The late application of avoidance and mitigation measures.</li> <li>■ Concerns over the sequencing of decisions between regimes.</li> <li>■ Scope of the HRA regime.</li> <li>■ The uncertainty about whether assessments impact on decision making.</li> <li>■ Inadequate monitoring and follow-up.</li> </ul>

# Chapter 3

## Our approach

### Introduction

**3.1** This chapter outlines how we undertook the research. Since the principal focus of the project was to explore how international practices compare with our own experiences in England and Northern Ireland, the chapter begins by considering past attempts at undertaking comparative assessment. Linked to this, we then consider the importance of context, an important factor that was considered via our consideration of effectiveness.

### Comparative assessment

**3.2** Despite the global coverage of environmental assessment systems, their application across the world differs considerably. For example, with respect to EIA, some EIA systems are in the form of mandatory regulations, acts or statutes, with the relevant regulatory authority requiring the submission of some form of environmental statement in advance of a decision on the project being taken. For some systems, formal regulation is supplemented by guidelines. The status of this can vary, as can length.

**3.3** Variation in EIA can also be generated through how legislation is drafted. For example, eligibility for EIA can sometimes be outlined through definition, such as in the US where the requirement for an assessment is identified for “major federal actions significantly affecting the quality of the human environment”. In other jurisdictions, the need to submit an EIA or not is defined more tightly, for instance, through the listing of project types or thresholds.

**3.4** In terms of SEA, Rehhausen, Hanusch and Fischer (2021)<sup>123</sup> make a distinction between 1) a project Environmental Impact Assessment type, which is an impacts-focused, administrative procedure and 2) a more flexible goals-setting policy-based SEA type. Noble and Nwanekezie (2016)<sup>124</sup> distinguish four types (1) compliance based SEA, (2) EIA-like SEA, (3) strategic futures EIA and (4) strategic transition SEA.

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<sup>123</sup> Rehhausen, A., Hanusch, M. and Fischer, T. (2021) 'Multi-project-based strategic environmental assessment: practice in Germany'. In Fischer, T. and Gonzales, A. (2021) *Handbook on Strategic Environmental Assessment*. Cheltenham: Edward Elgar.

<sup>124</sup> Noble, B., & Nwanekezie, K. (2017) 'Conceptualizing strategic environmental assessment: Principles, approaches and research directions'. *Environmental Impact Assessment Review*, 62, pp. 165–173.

**3.5** While compliance-based SEA and EIA-like SEAs are described by Noble and Nwanekezie (2016)<sup>125</sup> as being “rooted in the traditional paradigms of EIA and project appraisal” (page 4), the strategic based SEA approaches are “rooted in more recent strategic thinking about the role of environmental assessment beyond the scope of traditional impact assessment” (page 5). There is also variation depending on whether SEA is a mandatory requirement or not, and the extent to which different policies, programmes and plans are identified as being necessary for assessment. While the European Commission does have an Impact Assessment system of its own for policy development, following OECD promotion of regulatory impact assessment, the SEA Directive (2001/42/EC) excludes policy.

**3.6** Alongside these broad variations in regime application, the literature also reports differences between the implementation of assessment between different sectors, or plan types. Variation can also occur within a single sector, due to the specific characteristics of the project, location, and project team. Despite these challenges, there have been previous attempts to compare assessment practices and these have often been pursued with a particular goal in mind, for instance, with respect to exploring variations in system governance. There are far fewer examples of the type of exploration we have undertaken here, namely to help address domestic deficiencies by looking to international practice.

**3.7** Despite our specific focus, it is still worth mentioning some of this past work. With respect to EIA, examples include: Fischer, Brown, Devereux, Dühr, Guillemoteau, Nadin, Pilgrim, Rodde, and Seaton (2000)<sup>126</sup> undertook a comparative study that considered practices in New Zealand, Germany, The Netherlands, Sweden, France, Ireland, and the USA (with focus on the north-east tri-state area of New York, New Jersey and Connecticut).

- Wood (2015)<sup>127</sup> *Environmental Impact Assessment: A Comparative Review*. Second Edition. This focused on the jurisdictions of the United States, the UK, the Netherlands, Canada, the Commonwealth of Australia, New Zealand, and South Africa. The comparison

considered different elements of the assessment process, including the application of monitoring and mitigation.

- The UN Environment Programme (2018)<sup>128</sup> provide an overview of the current status of national legislation and institutional arrangements of relevance to EIAs and SEAs across the globe. The study looked at the following steps in particular detail: (1) screening; (2) scoping and impact analysis; (3) review of the EIA/SEA report; (4) decision-making; (5) follow-up and adaptive management and (6) public participation.
- Glasson and Therivel (2019)<sup>129</sup> consider worldwide EIA practice through Chapter 9 that considers assessment regimes across Africa and the Middle East, Asia, Central and South America, Central and Eastern Europe, Oceania, and small island developing states.

**3.8** Other comparative studies have focused on narrower geographies, for instance on a specific global region or between a selection of identified countries. For example, Swangjang<sup>130</sup> (2018) compares practices across South East Asia, while Rebelo, Guerreiro, Rebelo et. al. (2017) compare practices between the European Union, Kenya, Tanzania, Mozambique, South Africa, Angola, and the European Union.<sup>131</sup> Gałaś, Gałaś, Zeleňáková (2015) explore the implementation of EIA across the Visegrad countries.

**3.9** For SEA, example comparative texts include:

- Jones, Baker, Carter, Jay, Short and Wood (2005)<sup>132</sup> provided insight concerning the application of SEA in Canada, Denmark, Germany, Hong Kong, Hungary, Ireland, the Netherlands, New Zealand, Portugal, South Africa, Sweden, the United Kingdom and the United States.
- Fischer (2007)<sup>133</sup> provided a comparative review of eleven established SEA systems, including California, Western Australia, Canada, New Zealand, South Africa, The Netherlands, UK, Italy, Germany and Finland.

<sup>125</sup> Ibid.

<sup>126</sup> Fischer, T.B., Brown, C., Devereux, M., Dühr, S., Guillemoteau, D., Nadin, V., Pilgrim, J., Rodde, X. and Seaton, K. (2000) *A Comparison of Environmental Planning Systems Legislation in Selected Countries*. A background paper for the RCEP Study on environmental planning. Bristol: University of the West of England.

<sup>127</sup> Wood (2015) *Environmental Impact Assessment: A Comparative Review*. Second Edition. London: Routledge.

<sup>128</sup> UN Environment Programme (2018) *Assessing Environmental Impacts - A Global Review of Legislation*

<sup>129</sup> Glasson, J. and Therivel, R. (2019) *Introduction to Environmental Assessment*. Fifth Edition. London: Routledge,

<sup>130</sup> Swangjang, K. (2018) 'Comparative review of EIA in the Association of Southeast Asian Nations'. *Environmental Impact*

*Assessment Review*, 72, pp. 33–42.

<https://doi.org/10.1016/J.EIAR.2018.04.011>

<sup>131</sup> Rebelo, C., Guerreiro, J., Rebelo, C., & Guerreiro, J. (2017).

'Comparative Evaluation of the EIA Systems in Kenya, Tanzania, Mozambique, South Africa, Angola, and the European Union'. *Journal of Environmental Protection*, 8(5), pp. 603–636.

<https://doi.org/10.4236/JEP.2017.85040>

<sup>132</sup> Jones, C., Baker, M., Carter, J., Jay, S., Short, M. and Wood, C. (2005) *Strategic Environmental Assessment and Land Use Planning: An International Evaluation*. London: Earthscan.

<sup>133</sup> Fischer, T. (2007) *The Theory and Practice of Strategic Environmental Assessment*. Abingdon: Earthscan.



**3.10** an edited book on SEA<sup>134</sup> draws from the work of 46 authors, with these representing 18 countries and six continents (Fischer and González, 2021, p425).<sup>135</sup> Collectively the authors discuss evolving SEA practices across 31 (including 13 developing) countries.

**3.11** There is very little comparative literature concerning the systems of either HRA or Ecological Impact Assessment (Ecol IA) but examples include:

- Treweek (1999)<sup>136</sup> provides some international examples as part of a broader consideration of Ecol IA.
- Swangjang (2017)<sup>137</sup> does the same, and gives particular consideration to how Ecol IA links to EIA.

### The importance of context

**3.12** Variability surrounding jurisdiction is just one of a series of contextual factors that commentators have raised to help describe differences in the application of assessment internationally. Other contextual factors might include a country or jurisdiction's :

- Size and physical characteristics.
- Size of population and its spatial distribution.
- Sensitivity, and the types of environmental challenges that need to be embraced.
- Political set-up and its willingness to legislate.
- Legal and governance system, including the presence of a body or agency with environmental responsibilities.
- Scale of investment and associated development pressure.
- History and attitude towards environmental protection.
- Resourcing of relevant assessment regimes, and clarity over roles and responsibilities.
- Resourcing of monitoring, and its willingness to enforce.

**3.13** Consequently, when selecting jurisdictions, or elements of best practice, we were mindful of the need to consistently consider context with respect to England and Northern Ireland.

### Our approach

**3.14** In undertaking this research we undertook six integrated tasks. These are described below.

#### Task 1: The collection and compilation of literature

**3.15** A significant body of literature now exists on environmental assessment, and the specific regimes of EIA, SEA and HRA. This body of material includes peer-reviewed journals, text books, and a variety of grey literature.

**3.16** With respect to peer reviewed journals, searches were made via SCOPUS. Some 39,182 hits were returned when the term 'environmental impact assessment' was searched via an analysis of 'titles, keywords and abstracts' for the last 20 years. However, a scan of these showed a wide variety of hits with a multitude of themes being exposed (with many having a strong physical and scientific focus). A similar search using the term 'strategic environmental assessment' generated 1,759 hits. These results were then narrowed using a wide-range of associated search terms, such as 'effectiveness', 'implementation', 'outcomes' and 'best-practice'. As noted above, the term 'Ecological Impact Assessment' was used as an alternative search term when looking for resources linked to HRA. The reference lists of some of the searched and returned papers helped to find other publications of note, while a list of relevant scholars was also produced to allow for author-focused searches to be conducted. A list of relevant journals was also produced. Key titles include *Impact Assessment and Project Appraisal*, *Environmental Impact Assessment Review*, and *the Journal of Environmental Assessment Policy and Management*.

**3.17** In terms of books, two edited volumes have been particularly helpful with respect to documenting contemporary debates and global application of EIA and SEA:

- Fonseca, A. (ed.) (2022) *Handbook of Environmental Impact Assessment*. Cheltenham: Edward Elgar Publishing.
- Fischer, T. and González, A. (eds.) (2021) *Handbook on Strategic Environmental Assessment*. Cheltenham: Edward Elgar Publishing.

**3.18** A broader suite of grey literature was brought together following targeted internet searches. A range of organisations were responsible for publishing this material, with these extending from the international (such as the Organisation for Economic Co-operation and Development (OECD), the United Nations Development Programme and World Bank) to the national (such as Canada's Impact Assessment Agency).

**3.19** A review was also made of a selection of professional institutes, such as the Institute of Environmental Management

<sup>134</sup> Fischer, T. and Gonzalez, A. (eds) (2021) *Handbook on Strategic Environmental Assessment*. Cheltenham: Edward Elgar.

<sup>135</sup> Fischer, T. and Gonzalez, A. (2021) 'Conclusions: towards a theory of strategic environmental assessment?'. In Fischer, T. and Gonzalez, A. (eds) (2021) *Handbook on Strategic Environmental Assessment*. Cheltenham: Edward Elgar, pp.

<sup>136</sup> Treweek, J. (1999) *Ecological Impact Assessment*, Oxford: Blackwell Science.

<sup>137</sup> Swangjang, K., (2017) *Ecological Impact Assessment: Relationships of Environmental Impact Studies*. London: Lambert Academic Publishing.

and Assessment (IEMA) in the UK and the Environment Institute of Australia and New Zealand. The International Association for Impact Assessment (IAIA) was a particularly helpful reference point, and a review was made of a selection of their publications, best-practice notes (as introduced earlier), and annual award schemes. The practice notes were particularly helpful in drawing out accepted principles concerning certain assessment processes, although they tended not to give examples of where these were already being practised.

**3.20** Alongside publications, a review was also made of recent webinars and training material, together with relevant award schemes that helped to identify examples of innovation or areas, as well as organisations, of note.

#### Task 2: Review and synthesis

**3.21** Identified references, including web-links, were entered into the Mendeley database. Some basic tagging was applied, particularly where specific regimes or jurisdictions were being discussed. All of the material was reviewed, although priority was given to those that had been published over the last five years. Through this review and scrutiny, the complete suite of literature was ordered into themes. The themes, and their constituent references, are listed in **Appendix B**. Particular care was taken to draw out those publications that considered 'effectiveness', 'reform', and use of 'environmental outcomes'. References relating to particular jurisdictions were also grouped together and these are also shown through **Appendix B**. Once short-listing had been completed, and an agreed list of jurisdictions been selected, more targeted searches were conducted. Consequently, fuller reference lists are included in the country profiles included through **Appendix D** (that is provided as a separate volume).

**3.22** Through this process of review, a long-list table was produced to help document those titles that mentioned a specific jurisdiction, and was highlighting either the use of environmental outcomes, reform or elements of best practice. Doing this helped to identify locations of potential interest. Across the jurisdictions, a sizeable body of material was collected on both theory, for instance in terms of how the regime is expected to be implemented by virtue of legislation and guidance- and how it is in reality (i.e. practical application). By following this process, a long-list of potential jurisdictions began to be formulated, with this list extending to about 20 countries. For these, contextual information was collected, with this covering the factors outlined through **Table 3.1**. **Appendix C** provides a summary of this contextual information. Doing this allowed the team to start thinking about how relevant certain practices might be with any application to England and Northern Ireland

**Table 3.1: Contextual factors.**

- Population
- Area
- GDP per capita
- Population density
- CO2 emission estimates (million tons per capita)
- Proportion of population living in urban areas
- Proportion of country area covered by forestry
- Percentage of terrestrial and inland waters protected for its ecology
- Number of threatened species
- Number of protected areas and other effective area-based (ecological) conservation measures
- Date EIA was introduced
- Date SEA was introduced
- Type of government
- Constitution
- Legal system
- Democracy rating
- Governance structure

#### Task 3: Shortlisting

**3.23** We were required by the initial brief to explore practices through 15 different case studies, with these being equally split between each environmental assessment regime (i.e. 5 focusing on EIA, 5 on SEA and 5 on HRA). In selecting these case studies, we initially sought to prioritise on the basis of those jurisdictions where the pursuit of environmental outcomes formed part of an assessment regime, and where the context was similar to that in England and Northern Ireland.

**3.24** Beyond these, we then sought to select jurisdictions on the basis of:

- Those assessment regimes where the pursuit of environmental outcomes was observed, but where the context with England and Northern Ireland differed, and then,
- Those assessment regimes where the context was judged to be similar, but where the pursuit of environmental outcomes was not part of the assessment regime.

**3.25** Prioritising selection under the first of the criteria was ultimately challenged by the lack of reference to ‘environmental outcomes’ across the body of literature, legislation and supporting guidance reviewed. Indeed, as we explain later, reference to environmental outcomes was only observed, to any great extent, in parts of Australia and New Zealand. So while these jurisdictions were prioritised for review, other case studies were selected on the basis of some of the identified practices that had been highlighted at the long-listing stage. Through the analysis of the short-listed jurisdictions, care was taken to verify or extend the detail of the identified practices. By undertaking this scoping it was possible to ascertain whether the practice could be used to address one or more of the deficiencies that had been observed in England and Northern Ireland.

**3.26** Table 3.2 shows the jurisdictions and regimes that were ultimately short-listed for more detailed review. In total, our review has extended across 16 jurisdictions and explored the application of the different regimes through 31 case studies, comprising Environmental Impact Assessment (11), Strategic Environmental Assessment (8), and Ecological Impact Assessment (7). While this coverage is higher than we anticipated given the direction of the brief, it was difficult, at times, to disentangle one regime from another. This was the case for New Zealand, for example, where a single piece of legislation covers all the regimes. Furthermore, there were also incidences where the team considered it useful to extend their analysis to look at another regime within the same jurisdiction on the basis of some of the practices that had been covered. We were therefore able to give the study additional breadth, although the depth of the case studies do vary. This was a consequence of the availability of information, although language issues also generated some challenges for certain cases.

**3.27** In addition to choosing countries, we also had to choose respective regions and states at times. However, as with our selection of countries, we were steered by the literature and some of the practices that had been identified.

**3.28** The short-list was discussed and agreed by the client. It was also discussed with the teams at 39 Essex and WSP to ensure that any interesting practices, as identified through their work, could be explored in greater depth.

**Table 3.2: Shortlisted jurisdictions.**

Note: Green shading denotes selection.

	EIA	SEA	HRA
Australia (Commonwealth)			
Australia (Western Australia)			

	EIA	SEA	HRA
Australia (Victoria)			
Austria			
Belgium (Flanders)			
Canada (Ontario)			
Denmark			
Finland			
Germany			
Hong Kong			
Ireland			
The Netherlands			
New Zealand			
Norway			
South Africa			
USA (California)			

#### Task 4: Profile development

**3.29** We developed profiles for each of the short-listed jurisdictions, with content being dependent on the assessment regime(s) that we had opted to study. Completed profiles can be seen in **Appendix D** (which is provided as a separate volume). Each profile gives information about relevant legislation and guidance, key organisations, and the governance arrangements in place. Details surrounding any type of reform are also provided. The profile sheets then allow for a consideration of both practical and procedural matters, with the section allowing for ‘expectations’ (as outlined through legislation and guidance) to be compared with ‘practices on the ground’ (as exposed through the literature).

**3.30** Each profile concludes with an assessment of the perceived successes and challenges of each regime. This part of the profile also helped to highlight areas of good practices. These practices were then compiled into a list that helped to shape the structure of the workshop forming Task 6, as introduced below. Key references were added to the end of

each profile sheet, with some of these originating from the initial long list table. Hyperlinks to access additional material were also inserted into each profile.

#### Task 5: External engagement

**3.31** Once the profiles had been developed to a comparable level of detail, we engaged with a selection of external experts to help verify and extend our knowledge. Approximately 50 people were contacted through January and February 2023, with these comprising a mix of academics and practitioners. All were invited to respond back anonymously, and about a third took this opportunity up by providing the team with written comments, website links, and relevant literature. This information was used to refine the material presented through each of the profiles.

#### Task 6: Internal workshop

**3.32** An online workshop was held on 1 February 2023. The 90-minute event was attended by 18 people, including both the project and client teams, as well as a selection of senior consultants from across LUC with experience in EIA, SEA and HRA. After discussing the terms of the research, we referred to some of the 'perceived deficiencies' that had been raised about the application of EIA, SEA and HRA by the WSP and 39 Essex teams. Against these themes we identified potential solutions via the international experiences we had identified through our analysis of the short-listed case studies. Attendees were invited to supplement these practices with any examples they were aware of, and to then reflect upon the 'desirability' of applying the identified practices to England and Northern Ireland. As **Figure 3.1** shows, the attendees were invited to place the identified practices along a line of desirability, from those with 'limited appeal' to those with 'strong appeal'. Google's Jamboard was used to support this activity, with some verbal discussion following after the 'stickies' had been placed. The majority of practices that we had identified were considered to have appeal.

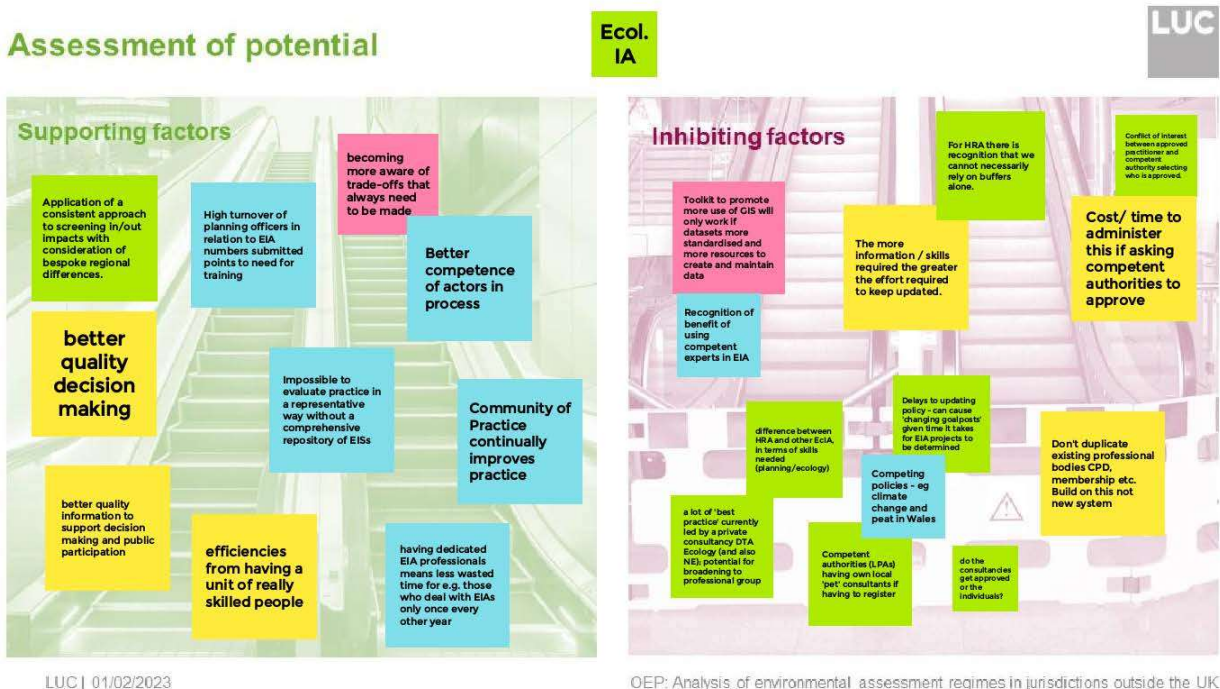
**3.33** The attendees were also asked to think about how the identified practices could be implemented in the context of England and Northern Ireland. Specifically, as **Figure 3.2** shows, the attendees were prompted to identify potential 'enablers' or 'inhibitors' with respect to the practices that had been identified.

Figure 3.1: Using Jamboard to help assess desirability



OEP: Analysis of environmental assessment regimes in jurisdictions outside the UK

Figure 3.2: Using Jamboard to assess potential



OEP: Analysis of environmental assessment regimes in jurisdictions outside the UK

# Chapter 4

## Our findings: Environmental Outcomes

### Introduction

**4.1** The completed profiles presented through **Appendix D** provide overviews of how the selected regimes work. Although there was variation with respect to the amount of information that the team could access, the development of a generally sound baseline was possible. Through the collation of this material, we were able to:

- Explore whether there were any explicit references to the pursuit of 'environmental outcomes' in any of the regimes that we explored (i.e. research objective one);
- Identify whether there were aspects of the international regimes examined that could potentially respond to the perceived deficiencies of EIA, SA/SEA and HRA as operated across England and Northern Ireland (i.e. research objective two).

**4.2** In undertaking this activity, we were also mindful of our third objective, namely to:

- Consider the role of contextual factors in supporting or inhibiting the application of identified international good practice to England and Northern Ireland.

**4.3** Our findings extend over two chapters. This chapter focuses on the first of the two bullets and considers the extent to which environmental outcomes were being mentioned through the regimes being examined. The next chapter, **Chapter 5**, summarises some of the interesting practices that we observed, with some of these having the potential to positively contribute to the five objectives that we outlined through paragraph 2.86.

### Pursuing environmental outcomes

**4.4** We provided a definition of the term 'environmental outcome' through paragraph 1.19. However, from our research, we found that the term is infrequently used, at least in terms of the jurisdictions and regimes that we explored. Indeed, for those that we studied, the term was only being used in two Australian states, namely Western Australia and Victoria. A more frequent use of the phrase was observed with respect to the programme of reform being advanced in New Zealand.

**4.5** While, in the case of the Netherlands, the word 'outcomes' is sometimes used in explanatory material, the

phrase ‘environmental values’ tends to be used more frequently.

**4.6** In a sense, this lack of prevalence was not particularly surprising, and confirmed the lack of coverage that was observed at the short-listing stage. Although we consider the limitations of our research in our concluding section, it is worth caveating that some of the outputs that we examined were subject to translation, meaning that the emphasis given to certain words might have become lost. It is also worth noting that while two examples were found in Australia, a more thorough investigation of the country could reveal other examples in other states. Indeed, such an outcome might be expected given that the Productivity Commission in Australia (2008)<sup>138</sup>, has previously undertaken work to recognise the value, and potential application, of outcomes-based policy.

**4.7** The infrequency with which the term ‘environmental outcomes’ is used might explain the lack of international examples within the supporting notes to the LURB, and within the more recent EOR consultation paper. Consequently, on this basis, the UK seems to be pursuing an assessment regime that is arguably quite unique.

**4.8** Where use of the term ‘environmental outcomes’ was observed, it is helpful to explore the process through which it has been, or is intended to be, introduced. Specifically, for the two Australian examples, the pursuit of environmental outcomes has been pursued without significant legislative reform. Conversely, in the context of New Zealand and the Netherlands, the pursuit of environmental outcomes has been pursued as part of a much larger programme of reform. Indeed, in these two jurisdictions, the respective governments have essentially opted to re-write large swathes of planning and environmental legislation.

### Pursuing environmental outcomes through existing legislation.

**4.9** In contrast to the major reform underway in the Netherlands and New Zealand, the pursuit of environmental outcomes in Western Australia and Victoria seems simpler.

#### Western Australia

**4.10** Western Australia’s Environmental Protection Act 1986 (WA) provides a framework for the environmental assessment of projects (EIA). Section 45A of the legislation provides scope for imposing conditions, with the text identifying different

scenarios for when conditions might be appropriate. These include directions for when a project can begin, or direction concerning the type of protection, abatement or restoration that a project proponent is expected to take on their site or other land. Other allowable areas for conditions relate to the undertaking of practices associated with monitoring and auditing<sup>139</sup>.

**4.11** Although the legislation does not use the word ‘outcome’ directly, a separate document has been prepared more recently to encourage the pursuit of specific outcomes as and when conditions are applied, as allowed by Section 45A. Essentially the document, which was published in October 2021, presents interim guidance for pursuing ‘environmental outcomes and outcomes-based conditions’<sup>140</sup>.

**4.12** The guidance offers a definition of an environmental outcome, which, in the context of EIA, is described by the text as “*the state of the environment at a point in time during implementation or after a proposal has been implemented*”<sup>141</sup>. Subsequent text then explains how any environmental outcome should:

- Reflect a specific and measurable environmental state.
- Have a clear boundary, size, extent, or limit
- Be associated with the achievement of one or more environmental factors.

**4.13** In terms of the third bullet, outcomes are expected to link with the Government of Western Australia’s ‘Statement of Environmental Principles, Factors, Objectives and Aims of EIA’<sup>142</sup>. This was also published by the state’s Environmental Protection Agency in October 2021. Section five of this document presents environmental objectives across five themes, namely: Sea, Land, Water, Air and People. These are shown by **Table 4.1** overleaf.

<sup>138</sup> Productivity Commission. (2008). Promoting Better Environmental Outcomes. Australian Government [online]. Available at: <https://www.pc.gov.au/research/supporting/environmental-outcomes>.

<sup>139</sup> Environmental Protection Act 1986 (WA) [online]. Available at: [https://www.legislation.wa.gov.au/legislation/prod/filestore.nsf/FileURL/mrdoc\\_17587.pdf/\\$FILE/Environmental%20Protection%20Act%201986%20-%20%5B04-00-01%5D.pdf?OpenElement](https://www.legislation.wa.gov.au/legislation/prod/filestore.nsf/FileURL/mrdoc_17587.pdf/$FILE/Environmental%20Protection%20Act%201986%20-%20%5B04-00-01%5D.pdf?OpenElement)

<sup>140</sup> Environmental Protection Authority (2021) *Interim Guidance: Environmental Outcomes and Outcomes-Based Conditions* [online]. Available at:

[https://www.epa.wa.gov.au/sites/default/files/Interim\\_Guidance\\_Environmental\\_outcomes\\_and\\_outcomes\\_based\\_conditions.pdf](https://www.epa.wa.gov.au/sites/default/files/Interim_Guidance_Environmental_outcomes_and_outcomes_based_conditions.pdf)

<sup>141</sup> *Ibid.*, page 2.

<sup>142</sup>

Table 4.1: EPA environmental factors and objectives (Western Australia)

Theme	Factor	Objective
Sea	Benthic communities and habitats	To protect benthic communities and habitats so that biological diversity and ecological integrity are maintained.
	Coastal processes	To maintain the geophysical processes that shape coastal morphology so that the environmental values of the coast are protected.
	Marine environmental quality	To maintain the quality of water, sediment and biota so that environmental values are protected.
	Marine fauna	To protect marine fauna so that biological diversity and ecological integrity are maintained.
Land	Flora and vegetation	To protect flora and vegetation so that biological diversity and ecological integrity are maintained.
	Landforms	To maintain the variety and integrity of distinctive physical landforms so that environmental values are protected.
	Subterranean fauna	To protect subterranean fauna so that biological diversity and ecological integrity are maintained.
	Terrestrial environmental quality	To maintain the quality of land and soils so that environmental values are protected.
	Terrestrial fauna	To protect terrestrial fauna so that biological diversity and ecological integrity are maintained.
Water	Inland waters	To maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected.
Air	Air quality	To maintain air quality and minimise emissions so that environmental values are protected.
	Greenhouse gas emissions	To reduce net greenhouse gas emissions in order to minimise the risk of environmental harm associated with climate change.
People	Social surroundings	To protect social surroundings from significant harm.
	Human health	To protect human health from significant harm.

Source: Environmental Protection Authority (2021) Statement of Environmental Principles, Factors, Objectives and Aims of EIA, Environmental Protection Authority, Government of Western Australia, page 6.



**4.14** Although the pursuit of environmental outcomes, in this example, has been undertaken by publishing guidance on how existing legislation can be better used, a wider programme of reform has been initiated in order to apply a raft of amendments to the Environmental Protection Act 1986 (WA)<sup>143</sup>. These amendments are being delivered in stages and include actions designed to simplify processes; facilitate cost recovery; strengthen enforcement; and encourage more effective monitoring. Although these amendments have not been reviewed in detail, they would be worthy of further study.

**4.15** It is worth noting that the pursuit of environmental outcomes is facilitated by the broader role of the Environmental Protection Authority<sup>144</sup>. Under the EIA system in Western Australia, developers are required to prepare an Environmental Impact Statement (EIS). This is then submitted to the EPA in Western Authority. The EPA undertake their own assessment based on the evidence given to them. The EPA produces a synthesised report that combines their own report with the document provided by the developer, and it is the EPA's report that is the basis for the Minister's decision over whether the project should be approved or not. Consequently, intensive quality control is applied by the government-funded EPA.

#### Victoria, Australia

**4.16** A similar approach of utilising existing legislation has also been used in Victoria with respect to building in environmental outcomes to EIA processes. The relevant legislation in this example is the Environmental Effects Act 1978 (Vic), with Part 10 describing how any assessment undertaken should have regard to any guidelines that the Minister may issue to 'enable the carrying out of the Act'. The Environment Protection Act 2017 (Vic) tightened this requirement by inserting a need for assessors to refer, and adhere, to any published *Environmental Reference Standard (ERS)*. This standard was subsequently published in May 2021<sup>145</sup>. The standard outlines the type of environmental values that the state wants to pursue with respect to ambient air, ambient sound, land, water; ground water, and; surface waters. Each of these values are described, with indicators and objectives being provided alongside. For some of the values, different indicators and objectives are set depending on geographical area. **Tables 4.2 and 4.3** present extracts relating to groundwater.

**4.17** Consequently, the ERS, which is described as a science-based framework, provides an overarching benchmark "*for comparing desired outcomes to the actual state of the environment they enable an understanding of the current condition of the environment and a basis for assessing actual and potential risks to environmental values*"<sup>146</sup>.

**4.18** The Environment Protection Act 2017 (Vic), that came effective from July 2021, also includes a general environmental duty. This applies to all Victorians and states how they must reduce the risk of their activities potentially harming the environment or human health through pollution or waste.

<sup>143</sup> Government of Western Australia (2023) *Amendments to the Environmental Protection Act 1986* [online]. Available at: <https://www.wa.gov.au/service/environment/business-and-community-assistance/amendments-the-environmental-protection-act-1986>

<sup>144</sup> Environmental Protection Authority (2023) *Environmental Protection Authority* [online]. Available at: <https://www.dwer.wa.gov.au/environmental-protection-authority>

<sup>145</sup> Environmental Protection Agency Victoria (2022) *The Environment Reference Standard* [online]. Available at: <https://www.epa.vic.gov.au/about-epa/laws/compliance-and-directions/environment-reference-standard>

<sup>146</sup> *Ibid*, page 3.

Table 4.2: Extract showing environmental values associated with water.

Column 1 Environmental value	Column 2 Description of environmental value
Water dependent ecosystems and species	<p>Water quality that is suitable to protect the integrity and biodiversity of water dependent ecosystems. This integrity and biodiversity includes –</p> <ul style="list-style-type: none"> <li>● the integrity of riparian vegetation as it contributes to the health of water dependent ecosystems and bank stability;</li> <li>● groundwater quality that does not adversely affect surface water ecosystems;</li> <li>● groundwater quality that does not adversely affect natural ecosystems that require access to groundwater to meet all or some of their water requirements on a permanent or intermittent basis to maintain their communities of organisms, ecological processes and ecosystem services. This includes wetlands, rivers and streams reliant on groundwater baseflow, some terrestrial vegetation and some estuarine and near-shore marine systems, stygofauna and troglofauna;</li> <li>● maintenance of fish passage.</li> </ul>

Source : Victoria Government Gazette (2021) Environmental Reference Standard, No. S245, page 18.

Table 4.3: Extract of indicators and objectives for groundwater

Column 1 Environmental value	Column 2 Indicators	Column 3 Objectives
Water dependent ecosystems and species (in surface waters)	For groundwater that discharges to surface water, the indicators are the indicators applicable to the relevant surface water as specified in Division 3 of Part 5 of this ERS	<p>The level that ensures the groundwater does not affect receiving waters to the extent that the level of any indicator in the receiving waters:</p> <p>(a) exceeds the level of that indicator (if specified as an upper limit); or</p> <p>(b) is less than the level of that indicator (if specified as a lower limit),</p> <p>specified for surface water in Division 3 of Part 5 of this ERS.</p>

Source : Victoria Government Gazette (2021) Environmental Reference Standard, No. S245, page 20.

### Pursuing environmental outcomes through the development of new legislation

**4.19** The two Australian examples show how environmental outcomes has been progressed by largely using existing legislation. In contrast, the examples we present now, in relation to the Netherlands and New Zealand, show how major legislative reform can also have a role in delivering change,

including the pursuit of 'environmental outcomes'. Although this term is explicitly used in the reform being advanced in New Zealand, the words 'outcomes' and 'values' seem to be used interchangeably in the Netherlands. We consider both reform packages in turn, and start with the Netherlands given that's reform is further progressed.

## The Netherlands

**4.20** Work on a new Environment and Planning Act began in 2011, with the former Ministry for Infrastructure and Environment submitting a draft Bill in June 2014. This was passed by the Dutch Senate in 2016, with an expected implementation date of 2019. This was subsequently extended to January 2021 as a consequence of the COVID-19 pandemic. Although this date was then pushed back to the summer of 2023, the latest start date is for January 2024. The Act, which is known as the Omgevingswetbegan (OW), has been introduced to both streamline and simplify the current suite of legislation relating to planning and the environment. Indeed, at the time of the announced postponement in April 2020, it was explained that the proposed legislation would replace over 26 acts, 60 orders in council, and 75 ministerial regulations<sup>147</sup>. The government promises that the replacement system will be simpler, with the legislation comprising a single Act, four Royal Decrees, and one ministerial regulation. Ultimately, the legislation seeks to modernise, harmonise and simplify current rules on land use planning, environmental protection, nature conservation, the construction of buildings, the protection of cultural heritage, water management, urban and rural redevelopment, the development of major public and private works and mining and earth removal.

**4.21** The four decrees comprise:

- The **Environment Decree of the Netherlands**<sup>148</sup>. The decree outlines the role for Environment Plans and the spatial scale at which these will operate across. Chapter 11 covers Environmental Impact Assessment. Chapter 11a covers plans and programmes and 11.2 deals with EIA at the project scale.
- The **Environmental Quality Decree of the Netherlands**<sup>149</sup>. Chapter 2 concerns itself with environmental values.
- The **Environmental Activities Decree of the Netherlands**<sup>150</sup>. Particularly significant is Chapter 3 that lists projects that are deemed to be harmful.

## ■ The Environment Buildings Decree of the Netherlands<sup>151</sup>

**4.22** The legislative bill comprises six key instruments<sup>152</sup> that provide for:

- The **production of environmental visions**. These are intended to present a coherent and strategic plan about a territory's living environment, as well as all developments within an area<sup>153</sup>. This plan focuses on the entire physical living environment. Visions at different scales need to be produced, with the expectation that the national government, as well as individual provinces and municipalities, produce one for their respective areas.
- The **development of specific programmes**, with policies and measures being included to help support the pursuit towards a defined environmental vision. Interventions included can help to deliver specific targets or values relating to the physical environment. Policies and measures can also be included to help maintain a value or target once it has been achieved.
- The **development of decentralised regulations**, namely the municipality's environmental plan, the water board's regulation and the province's environmental regulation, in which the decentralised authority comprehensively lays down the general rules and obligations for obtaining permits.
- **General government regulations** for activities within the physical environment.
- **Environmental permitting**, which an initiator can use to obtain permission for the entirety of the activities that it wishes to carry out, via an application to a single office.
- The **provisioning of project decisions**, a generic arrangement for decision-making in relation to projects with a public interest according to the 'faster and better' approach.

<sup>147</sup> Greenberg Traurig (2020) Implementation of the Dutch Environment and Planning Act (Omgevingswet) Postponed Due to Pandemic [online]. Available at: <https://www.gtlaw.com/en/insights/2020/4/implementation-of-the-dutch-environment-and-planning-act-omgevingswet-postponed-due-to-pandemic>

<sup>148</sup> The Environment Decree of the Netherlands (2020). Consolidated version [online] Available at: <https://iplo.nl/publish/pages/195438/the-environment-decree-ob-2020.pdf>

<sup>149</sup> The Environmental Quality Decree of the Netherlands (2020). Consolidated version [online]. Available at: <https://iplo.nl/publish/pages/195439/the-environmental-quality-decree-bkl-2020.pdf>

<sup>150</sup> The Environmental Activities Decree of the Netherlands (2020) Consolidated version [online]. Available at:

<https://iplo.nl/publish/pages/191487/the-environmental-activities-decree-bal-2020.pdf>

<sup>151</sup> The Environment Buildings Decree of the Netherlands (2020), Consolidated version [online] Available at: <https://iplo.nl/publish/pages/195436/the-environment-buildings-decree-bbl-2020.pdf>

<sup>152</sup> Ministry of Infrastructure and Water (2016) *Translation of the Environment and Planning Act Explanatory Memorandum*, page 4 [online]. Available at: <https://www.government.nl/binaries/government/documenten/reports/2017/02/28/environment-and-planning-act-%E2%80%93-explanatory-memorandum/EnglishtranslationExplanatorMemorandumEnvironmentAct.pdf>

<sup>153</sup> <https://iplo.nl/regelgeving/instrumenten/samenhang-instrumenten/6-kerninstrumenten/>

**4.23** In terms of programmes, it is worth noting that some programmes are mandatory, while others can be produced voluntarily. Mandatory programmes vary by scale. For example, the national government is required to produce, amongst other things, a National Marine Strategy and a National Water Plan. Similarly, a province, also has requirements, such as producing a regional water programme. A local authority is required to produce a sound action plan, and a water authority, a water management programme.

**4.24** In terms of how an environmental value should be defined, the explanatory memorandum to the Act presents the following:

*“A benchmark for the state or quality of the physical environment or a part thereof, or the permissible burden caused by activities or by the concentration or deposition of substances in the physical environment of a part thereof, expressed in measurable or calculable units or in other objective terms”<sup>154</sup>.*

**4.25** Subsequent text in the memorandum explains the different ways in which a value can be pitched<sup>155</sup>:

**Item-specific environmental values**, such as the safety requirements that apply to a primary flood defence. The environmental value (the 'safety standard' in the Water Act) is currently expressed in the form of the average probability that the high-water level will be exceeded in any given year, which the water-control structures must be designed to withstand, or the annual average probability of a flood in the area protected by the water-control structure.

**Environmental values can apply to the entire country or to a specific area.** In that case, the environmental value is expressed in measurable units (quantities), such as a maximum concentration of substances in parts of the physical environment (water, soil or air) or, in the case of odour, maximum quantities of odour units per m<sup>3</sup>. The values can be focused on a particular type of area that fulfil a particular function that must be protected. These could include ground water protection zones, with a view to water extraction, or a nature reserve that fulfils specific functions or characteristics.

**Environmental values formulated in objective qualitative terms for objects or areas, in cases in which recording measurable units is not so easy,**

**but clear measures can actually be applied.** This could take the form of an object-specific description of the qualities that a natural habitat must fulfil so that it is able to function as a biotope for a specific species<sup>156</sup>.

**4.26** The interplay of different programmes, rules and regulations, together with the environmental values embedded within them, inevitably mean that different parcels of land will have differing levels of constraint and opportunity applied across them. The apparent flexibility of the system also allows for these priorities to be added and removed at relative short notice<sup>157</sup>.

**4.27** A series of digital tools help to mobilise the provisions of the Environment and Planning Act. These are enabled by an accompanying Digital System Environment Act. The role of a so-called *Environmental Counter* is particularly significant as this allows the general public, and other users, to understand the type of rules that apply at any one location<sup>158</sup>. In a sense, the Environmental Counter scans relevant environmental visions, regulations, plans and programmes and selects those elements that are relevant to the particular locality. It also allows users to apply for permits and provides an opportunity for applicants to track their submission and request consultations with the municipality.

**4.28** To support the permitting process, the Environmental Counter includes a Permit Checker that poses a series of questions to the applicant about the project they are seeking to bring forward. These pre-populated questions are derived from the rules and regulations that have been fed into the system. For instance, if a provided rule states that a driveway must not exceed 4 metres in width, the permit checker asks the applicant how wide their drive will be. Subsequent direction is based upon the reply provided. The same rules and regulations can also help to identify the *custom rules* relating to a particular project, namely the type of undertakings that are considered necessary for a project to deliver the type of environmental values expected<sup>159</sup>. To support this, a functional database, hosted by Power BI, has been developed that allows users to make their selection based upon the

<sup>154</sup> Ministry of Infrastructure and Water (2016) *Translation of the Environment and Planning Act Explanatory Memorandum*, page 103 [online]. Available at: <https://www.government.nl/binaries/government/documenten/reports/2017/02/28/environment-and-planning-act-%E2%80%93-explanatory-memorandum/EnglishtranslationExplanatorMemorandumEnvironmentAct.pdf>

<sup>155</sup> Ibid, page 20.

<sup>156</sup> Ibid page 20.

<sup>157</sup> Ministry of Infrastructure and Water (2013) *Simpler and Better* [online]. Available at: [https://aandeslagmetdeomgevingswet.nl/publish/pages/181612/simple\\_r\\_and\\_better.pdf](https://aandeslagmetdeomgevingswet.nl/publish/pages/181612/simple_r_and_better.pdf)

<sup>158</sup> Omgevingsloket (2023) *Environmental Counter* [online]. Available at: <https://dmo.omgevingswet.overheid.nl/home>

<sup>159</sup> Informatiepunt Leefomgeving (2023) *Introduction: Applicable Rules* [online]. Available at: <https://iplo.nl/digitaal-stelsel/toepasbare-regels-maken-aanleveren/introductie>

province in which their project is situated, as well as on the nature of the project itself<sup>160</sup>.

**4.29** The Environmental Counter continues to be developed and tested with a wide range of additional items expected to be added. These include the future ability to understand localised information about water and air quality and to spatially report issues (such as potential noise pollution) directly through the interface of the counter.

**4.30** While the formal commencement of the new system has been subject to delays, the Dutch government is actively preparing for its commencement. Indeed, there is a dedicated implementation track to accompany the Environment and Planning Act which consists of an Implementation Act, an Implementation Decree and an Implementation Regulation<sup>161</sup>. This has helped to introduce a wide suite of measures that seek to explain certain parts of the new system to different user groups. For example there is:

- A suite of web-pages containing explanatory information for different user groups, such as big companies; small and medium sized companies; consultancy firms; software suppliers; and planning officers.
- A beta-version of the Environmental Counter that includes different scenarios and activities for users to engage with<sup>162</sup>. There is also a suite of supporting 'how-to' videos.
- A glossary of key terms<sup>163</sup>.
- A 'News in Perspective' web-page, included on the main Environment and Planning Act site, that provides: an opportunity for experts to talk about different parts of the legislation<sup>164</sup>.
- A comprehensive events calendar that provides an extensive range of seminars and workshops about different aspects of the legislation<sup>165</sup>.

<sup>160</sup> Accessible via this link:

<https://app.powerbi.com/view?r=eyJrJoiYml4NzZkM2U0MGVmMi00MzM1LTkyODYtMzgzYzAzM2U1ODY1IiwidCI6IjZiMzNkMzMxLTMwMDYtNDQ0YS05MWNmLTkwN2U2MjYzYjk5YyIsImMiOiJh9>

<sup>161</sup> Informatiepunt Leefomgeving (2023) *Implementation Track of the Environmental Act* [online]. Available at: <https://iplo.nl/regelgeving/omgevingswet/totstandkoming/hoofdlijnen-invoeringsbesluit/>

<sup>162</sup> Informatiepunt Leefomgeving (2023) *Practice with the Environment Counter* [online]. Available at: [https://aandeslagmetdeomgevingswet.nl/oefenen/oefenen-omgevingsloket/?\\_ga=2.226189721.2085635885.1679483225-1181842649.1675205304&\\_gl=1\\*1287aku\\*\\_ga\\*MTE4MTg0MjY0OS4](https://aandeslagmetdeomgevingswet.nl/oefenen/oefenen-omgevingsloket/?_ga=2.226189721.2085635885.1679483225-1181842649.1675205304&_gl=1*1287aku*_ga*MTE4MTg0MjY0OS4)

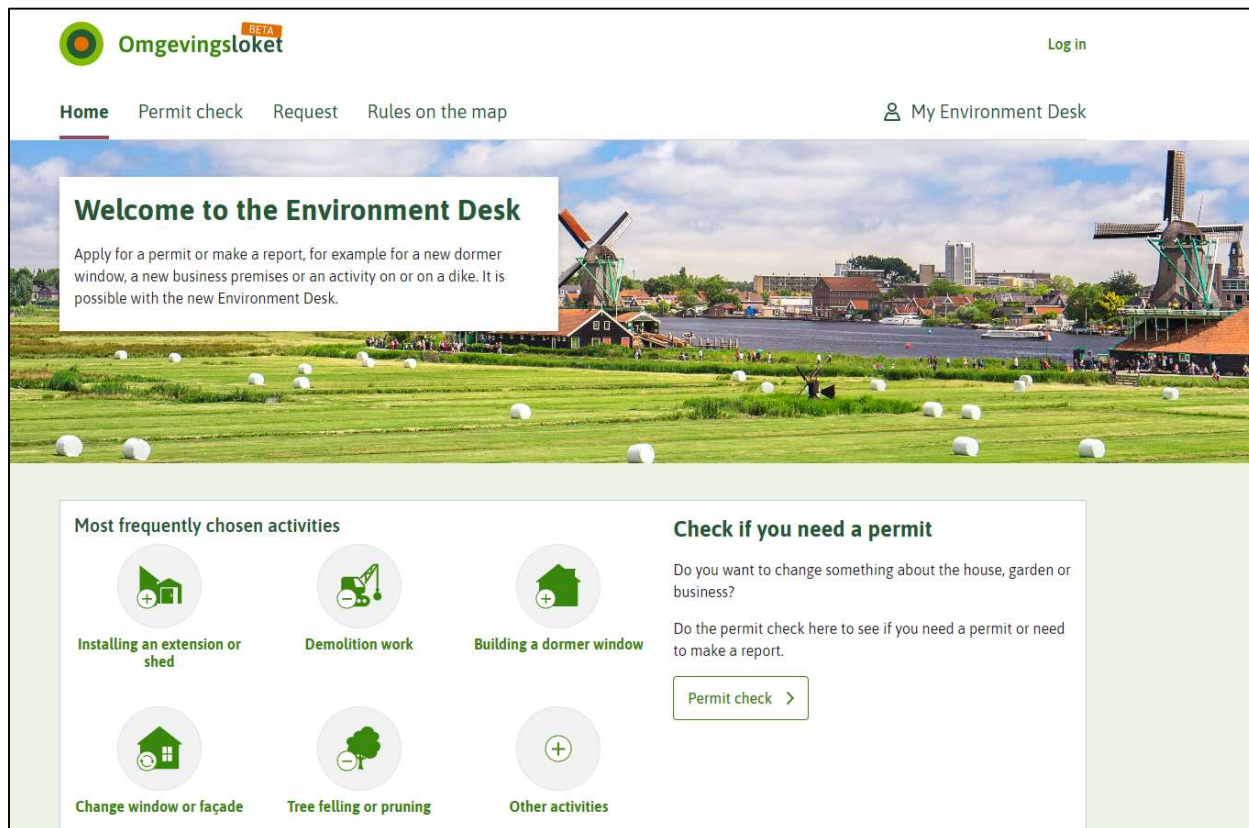
[xNjc1MjA1MzA0\\*\\_ga\\_MNGT91YQGE\\*MTY3OTU1MzAzNi40LjEuMTY3OTU1NTE1NTE1My4wLjAuMA..](https://aandeslagmetdeomgevingswet.nl/bijeenkomsten/evenementen-agenda/?_ga=2.191398185.2085635885.1679483225-1181842649.1675205304&_gl=1*e9mke2*_ga*MTE4MTg0MjY0OS4xNjc1MjA1MzA0*_ga_MNGT91YQGE*MTY3OTU1MzAzNi40LjEuMTY3OTU1NTE1My4wLjAuMA..)

<sup>163</sup> Informatiepunt Leefomgeving (2023) *Glossary of Key Terms* [online]. Available at: <https://iplo.nl/regelgeving/begrippenlijst-regelgeving/begrippenlijst?Bgrldt=188754>

<sup>164</sup> Informatiepunt Leefomgeving (2023) *News in Perspective* [online]. Available at: <https://iplo.nl/overzicht-nieuws-perspectief/>

<sup>165</sup> Informatiepunt Leefomgeving (2023) *Events calendar* [online]. Available at: [https://aandeslagmetdeomgevingswet.nl/bijeenkomsten/evenementen-agenda/?\\_ga=2.191398185.2085635885.1679483225-1181842649.1675205304&\\_gl=1\\*e9mke2\\*\\_ga\\*MTE4MTg0MjY0OS4xNjc1MjA1MzA0\\*\\_ga\\_MNGT91YQGE\\*MTY3OTU1MzAzNi40LjEuMTY3OTU1NTE1My4wLjAuMA..](https://aandeslagmetdeomgevingswet.nl/bijeenkomsten/evenementen-agenda/?_ga=2.191398185.2085635885.1679483225-1181842649.1675205304&_gl=1*e9mke2*_ga*MTE4MTg0MjY0OS4xNjc1MjA1MzA0*_ga_MNGT91YQGE*MTY3OTU1MzAzNi40LjEuMTY3OTU1NTE1My4wLjAuMA..)

Figure 4.1: The Environmental Counter<sup>166</sup>



## New Zealand

**4.31** As noted above, New Zealand is currently embarking on a major programme of legislative reform that seeks to replace the existing Resource Management Act (RMA) 1991<sup>167</sup>.

**4.32** A comprehensive review of the RMA began in 2019 when the New Zealand government appointed an expert panel led by Hon. Tony Randerson KC. The arising report, that was published in July 2020<sup>168</sup>, made 140 separate recommendations. In February 2021 the Government

announced that it would repeal the RMA, and three replacement pieces of legislation have been announced. These comprise the:

- Natural and Built Environment Bill (NBEB)<sup>169170</sup>
- Spatial Planning Bill (SPB)<sup>171</sup>
- Climate Adaptation Bill (CAB).

**4.33** Taken together the legislation seeks to:

<sup>166</sup> <https://dmo.omgevingswet.overheid.nl/home>

<sup>167</sup> Resource Management Act 1991 [online]. Available at: <https://legislation.govt.nz/act/public/1991/0069/latest/DLM230265.html>

<sup>168</sup> Ministry for the Environment (2020) New Directions for Resource Management in New Zealand [online]. Available at: <https://environment.govt.nz/publications/new-directions-for-resource-management-in-new-zealand/>

<sup>169</sup> Natural and Built Environment Bill [online]. Available at: [https://www.parliament.nz/en/pb/sc/make-a-submission/document/53SCEN\\_SCF\\_BILL\\_129831/natural-and-built-environment-bill#:~:text=The%20Natural%20and%20Built%20Environment%20Bill%20%28NBE%20Bill%29,that%20would%20replace%20existing%20pieces%20of%20national%20direction](https://www.parliament.nz/en/pb/sc/make-a-submission/document/53SCEN_SCF_BILL_129831/natural-and-built-environment-bill#:~:text=The%20Natural%20and%20Built%20Environment%20Bill%20%28NBE%20Bill%29,that%20would%20replace%20existing%20pieces%20of%20national%20direction)

<sup>170</sup> Ministry for the Environment (2023) Resource management reform: The Natural and Built Environment Act [online]. Available at: <https://environment.govt.nz/publications/resource-management-reform-the-natural-and-built-environment-act/#:~:text=Resource%20management%20Share%20A%20brief%20introduction%20to%20the.governing%20land%20use%20and%20environmental%20regulation%20in%20Aotearoa>

<sup>171</sup> Spatial Planning Bill [online]. Available at: <https://www.legislation.govt.nz/bill/government/0187/latest/whole.html>

- Move from an effects-based system to an outcomes-based one that avoids harmful cumulative effects.
- Reduce costs for people, including infrastructure providers, home builders and owners, and developers.
- Provide more effective and consistent national direction.
- Encourage a move to more regionalised, integrated strategic planning.
- Substantially reduce the number of local government resource management plans.
- Simplify and standardise processes.
- Reduce the need for consenting while ensuring environmental safeguards are still in place<sup>172</sup>.

**4.34** Both the NBEB and SPB were introduced to Parliament in November 2022 and are currently at the Committee Stage with representations currently being sought from the sector. The CAB is expected to follow in 2023.

**4.35** The NBEB is the principal vehicle for replacing the RMA and includes a number of requirements. One of these relates to a need to establish a National Planning Framework (NPF). This is intended to provide policy direction on matters of significance, set environmental limits and targets, as well as providing direction for resolving conflict. The NPF will replace an existing suite of national policy statements, national environmental standards, national planning standards and regulations.

**4.36** The NPF will inform the production of Regional Spatial Strategies (RSS) that each of New Zealand's 16 regions are obliged to produce under the SPB. Newly established Regional Planning Committees (RPC) will be responsible for their production. Each RSS is expected to provide long-term, high level, strategic direction for the integrated planning of a region. Each region will also need to develop a Natural and Built Environment (NBE) plan. These plans are expected to help achieve the goals of each RSS, and deliver the goals of the NPF. Essentially, they are intended to be combined plans that holistically consider both resource allocation and land use matters for a region.

**4.37** As section 3 of the Bill states, the intention of the NBEB is:

**a) to enable the use, development, and protection of the environment in a way that:**

1. supports the well-being of present generations without compromising the well-being of future generations; and
2. promotes outcomes for the benefit of the environment; and
3. complies with environmental limits and their associated targets; and
4. manages adverse effects; and

**(b) recognise and uphold te Oranga o te Taiao.**

**4.38** A key feature of the new legislation is the pursuit of environmental outcomes. Clause 5 states the NPF, and all other plans, should provide for a range of system outcomes that the legislation duly lists. These are wide-ranging and encompass social, economic and environmental outcomes. While **Figure 4.2** presents these in full, example outcomes include those that seek to:

- Protect, and if needs be, restore, the ecological integrity of air, water, and soils.
- Reduce greenhouse gas emissions.
- Ensure the ample supply of land for development, to avoid inflated urban land prices.
- Provide housing choice and affordability.

**4.39** Sub-part 2 relates to environmental limits and targets and states they are necessary to prevent the ecological integrity of the natural environment from degrading from the state it was in at the commencement of the Bill; and to protect human health<sup>173</sup>. Further to this, Clause 38 (1) states limits **must** be set indigenous biodiversity; coastal water; estuaries; freshwater; and soil. Clause 38 (2) also states limits **may** be set for any other aspect of the natural environment in accordance with the purpose of setting environmental limits<sup>174</sup>.

**4.40** The form for limits is presented through Clause 40, with 40 (1) describing how they must be expressed “*as relating to the ecological integrity of the natural environment or to human health*”. Clause 40 (4) explains how a limit can:

- either be qualitative or quantitative;
- be set at different levels for different management units, and;

<sup>172</sup><sup>172</sup> Ministry for the Environment (2022) *Our Future Resource Management System: Overview* [online]. Available at : <https://environment.govt.nz/publications/our-future-resource-management-system-overview/>

<sup>173</sup> Natural and Built Environment Bill, Subpart 2—Environmental limits and targets [online]. Available at:

<https://www.legislation.govt.nz/bill/government/2022/0186/latest/LMS783196.html>

<sup>174</sup> Natural and Built Environment Bill, Environmental limits [online]. Available at:

<https://www.legislation.govt.nz/bill/government/2022/0186/latest/LMS783193.html>

- be set in a way that integrates more than one of the listed aspects of the natural environment<sup>175</sup>.

**4.41** Clause 47 relates to targets and identifies how their purpose is to assist in “*improving the state of the natural and built environment*”<sup>176</sup>. Clause 57 of the Bill states how the National Planning Framework must include content that provides direction:

- for each system outcome; and
- for the resolution of conflicts about environmental matters, including those between or among the system outcomes<sup>177</sup>.

**4.42** Beyond the use of environment outcomes, limits and targets, the NBEB also includes a suite of new civil enforcement tools. These include the:

- Prohibition of insurance to pay for fines.
- Ability for consent authorities to consider compliance history when processing consent applications.
- Ability for regulators to apply to have a consent revoked.
- Ability for regulators to recover the actual and reasonable costs associated with permitted activity monitoring and investigations of non-compliance.
- Increase in financial penalties:
- Requirement for all councils to have an up-to-date compliance, monitoring, and enforcement strategy.

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<sup>175</sup> Natural and Built Environment Bill, Form of environmental limits [online]. Available at: <https://www.legislation.govt.nz/bill/government/2022/0186/latest/LMS783195.html>

<sup>176</sup> Natural and Built Environment Bill, Environmental limits [online]. Available at:

<https://www.legislation.govt.nz/bill/government/2022/0186/latest/LMS739196.html>

<sup>177</sup> Natural and Built Environment Bill, section 57 [online]. Available at: <https://www.legislation.govt.nz/bill/government/2022/0186/latest/LMS783197.html>



Figure 4.2: Proposed system outcomes of the New Zealand Natural and Built Environment Bill

To assist in achieving the purpose of this Act, the national planning framework and all plans must provide for the following system outcomes:

- (a) the protection or, if degraded, restoration, of—
  - (i) the ecological integrity, mana, and mauri of—
    - (A) air, water, and soils; and
    - (B) the coastal environment, wetlands, estuaries, and lakes and rivers and their margins; and
    - (C) indigenous biodiversity;
  - (ii) outstanding natural features and outstanding natural landscapes;
  - (iii) the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins;
- (b) in relation to climate change and natural hazards, achieving—
  - (i) the reduction of greenhouse gas emissions;
  - (ii) the removal of greenhouse gases from the atmosphere;
  - (iii) the reduction of risks arising from, and better resilience of the environment to, natural hazards and the effects of climate change;
- (c) well functioning urban and rural areas that are responsive to the diverse and changing needs of people and communities in a way that promotes—
  - (i) the use and development of land for a variety of activities, including for housing, business use, and primary production; and
  - (ii) the ample supply of land for development, to avoid inflated urban land prices; and
  - (ii) housing choice and affordability; and
  - (ii) an adaptable and resilient urban form with good accessibility for people and communities to social, economic, and cultural opportunities; and
- (d) the availability of highly productive land for land-based primary production;
- (e) the recognition of, and making provision for, the relationship of iwi and hapū and the exercise of their kawa, tikanga (including kaitiakitanga), and mātauranga in relation to their ancestral lands, water, sites, wāhi tapu, wāhi tūpuna, and other taonga;
- (f) the protection of protected customary rights and recognition of any relevant statutory acknowledgement;
- (g) the conservation of cultural heritage;
- (h) enhanced public access to and along the coastal marine area, lakes, and rivers;
- (i) the ongoing and timely provision of infrastructure services to support the well-being of people and communities.

**4.43** Both the NBEB and the CAB are expected to receive Royal Assent. Transition pathways have been developed to support the implementation of the legislation, with a staged approach being taken to ensure that the relevant stakeholders receive the right support at the right times<sup>178</sup>. The Ministry for the Environment is currently seeking expressions of interest from regions in order to begin some of the preparatory work

that will be required. Specifically, the involvement of three regions is being sought in order that they can begin to take steps for establishing their regional planning committee, and to develop their RSS and their NBE plans.

**4.44** Last year, New Zealand's budget allocated \$179 million that can be used to transition to the new system over the next four years<sup>179</sup>. As part of the transition, a programme of digital

<sup>178</sup> Ministry for the Environment (2023) *Transitioning to our future resource management system* [online]. Available at: <https://environment.govt.nz/what-government-is-doing/areas-of-work/rma/resource-management-system-reform/transitioning-to-our-future-resource-management-system/>

<sup>179</sup> Ministry for the Environment (2022) RM Reform Update - July 2022 [online]. Available at: <https://environment.govt.nz/news/rm-reform-update-july/#:~:text=Last%20month%E2%80%99s%20Budget%20provided%20>

enablement has progressed, while the New Zealand Institute of Economic Research is currently undertaking a stocktake of resource management workforce skills and capability to identify gaps and future needs.

## Summary

**4.45** Although reference to environmental outcomes is limited to only a few regimes, it is noteworthy that their occurrence is associated with regimes that have, or are associated, with being reformed. The reforms being delivered in New Zealand and the Netherlands are ambitious, and it is interesting that both are reforming assessment practices alongside strategies for refreshing their respective planning systems. There are some differences in language and terminology but the basic intentions seem similar. There are also parallels with the type of reform being proposed for the UK, at least in terms of the use of outcomes, limits and targets. However, there seems to be variation within the type of themes that outcomes can seemingly cover. For example, in New Zealand, the outcomes seem to extend across a mix of environmental, social and economic domains. In contrast, the EOR consultation paper<sup>180</sup> for England, presents outcomes over a more limited range that are closely aligned with the environment in a physical sense.

**4.46** It is noteworthy that the proposed reform in New Zealand and the Netherlands has built-in a significant period of transition. While in the case of the Netherlands, a pause in implementation was caused by the COVID-19 pandemic, both governments seem to be aware of the significant pressure that major legislative reform will bring about. Not only are the elements of the package being sequenced, thought also seems to be applied to the skills and capabilities that the new system will require.

**4.47** In considering the examples we give above, it is important to recognise some important contextual factors. For example, the Dutch system is accompanied by significant investment in big data management, recognising that the simplification of EIA processes relies on the ease of availability of existing data, and that many delays are caused by a lack of understanding of the licensing regime. Similarly, in the context of New Zealand, steps to implement the system are supported by substantial funds to deal with the necessary capacity development. Finally, in Western Australia, the Environmental Protection Authority maintains quality control by producing the environmental assessment document that is given to the Minister making the decision, an additional step of synthesising knowledge from the developer-funded EIA. The examples we provide therefore point to outcomes-based systems that require ongoing maintenance and quality control.

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[20%24179%20million%20over%20four.and%20NBA%20plans%2C%20and%20the%20National%20M%2C4%81ori%20entity.](#)

<sup>180</sup> Department for Levelling Up, Housing and Communities (2023) *Environmental Outcomes Reports: a New Approach to Environmental*

*Assessment* [online]. Available at: <https://www.gov.uk/government/consultations/environmental-outcomes-reports-a-new-approach-to-environmental-assessment>

# Chapter 5

## Identified practices

### Introduction

**5.1** The previous chapter provided a response to the first research objective in that it reported back on the use of the term 'environmental outcomes'. Our second research objective was positioned around the potential for the selected regimes and jurisdictions to present potential solutions to the five objectives that we had identified through paragraph 2.86, namely:

- To provide for earlier, more integrated, environmental assessment.
- To give greater focus on monitoring, mitigation and enforcement
- To provide for improved skills, information and capacity.
- To provide more accessible information and greater stakeholder engagement and public participation
- To consider alternative solutions for delivering environmental betterment over environmental protection

**5.2** With this list of objectives in our mind, we began looking for international practices that could potentially offer a solution. Our initial assessment of potential was relatively quick. Specifically, rather than considering whether the practice could offer scope or not at the point of identification, all of the practices were added onto a separate long-list to allow for assessment at a later stage.

**5.3** This chapter essentially presents an expanded version of our long-list. In total, 54 separate practices have been identified and these are shown by **Figure 5.1**. While each of the practices are aligned to one of the five objectives, it is acknowledged that some of the practices could contribute to more than one. For example, while the assessment workforce would directly benefit from any training designed to encourage and facilitate stakeholder engagement, the successful application of the arising skills would hopefully lead to more stakeholders becoming involved and encourage earlier, and more iterative forms of assessment.

**5.4** While we are pleased with the practices that we have identified, and feel that our approach was suitably comprehensive, we acknowledge that there are probably more practices that could have made the list. Indeed, others reviewing the jurisdiction summaries that we include in

**Appendix D** could potentially identify other practices of interest.

**5.5** For each of the five objectives, we set out and describe the practices we have identified. We also provide some examples where the practice has been observed, although these examples are not intended to be exhaustive. In other words, the practice may be found in other jurisdictions beyond the ones that we showcase. The text provides a high-level evaluation of the potential desirability for pursuing the identified practice in England and Northern Ireland. Specifically, if a pitch to use the identified practice was to be made to government, we begin to set out the type of arguments that could be used to advocate its application. Our assessment of desirability is arguably quite subjective, but it does allow us to prioritise the practices to an extent. The assessment is informed by the experiences of the research team, and the type of practices that are lauded through the literature.

**5.6** For those practices that had been identified by the time of the internal workshop (as discussed above through paragraph 3.32), additional views on desirability were obtained by the attending delegates. Essentially, by using Google's Jamboard, the delegates were asked to slide multiple 'stickies', that contained a basic description of the practice, along a scale of desirability. It should also be noted that while the attendees were invited to present additional examples, no further international practices were flagged.

**5.7** As you will see, we also comment on the potential deliverability of each practice, namely the kind of challenges that parties could face, if attempts to deliver the practice were to be pursued in England and Northern Ireland. The evaluations we provide are inevitably quite simple, and again draw from the experience of the research team, as well as the feedback that was received via the workshop. Specifically, through the workshop, delegates were prompted to identify potential 'enablers' and potential 'inhibitors' to the practices that had been identified, again by using virtual 'stickies'.

**5.8** Collectively, the chapter provides some positive ideas for how international practice can be used to enhance domestic experiences. Similarly, it also identifies practices that are unlikely to be either desirable or deliverable. Clearly, further investigation would be needed to advise on the potential of each celebrated practice, but we believe that the measures, as a collective, provide scope for delivering wide-ranging improvement to the operation of the three existing regimes.

**5.9** While we consider each of the practices in the context of their suitability for England and Northern Ireland, we have tried to avoid commenting on their respective 'effectiveness' in terms of how they operate within their associated jurisdictions. As we noted earlier, effectiveness can often be dependent on

the nature of the observer, meaning that effective practice, as identified by an environmental consultant, could be quite different to the effective practice that a developer chooses to highlight. We have sought to use the literature, and our list of identified experts, to help verify and cross-check our findings. In some ways, our review of the literature has helped, as have the exchanges with our identified external experts. Nevertheless, it is accepted that a universal pitch to present the identified practices as 'sector-leading' could be open to debate.

**5.10** A further challenge also arose from the fact that some of the practices that had been identified through the literature, no longer seemed to exist or were being actioned as described. For example, in Hong Kong, the use of 3D, computerised models had been previously lauded as a mechanism for helping to visualise a project and to explain its environmental impacts. However, the expert who we consulted with, suggested that this practice was now uncommon. Consequently, while we have opted to list the practice as something of interest, we have inserted a caveat alongside to highlight potential delivery challenges.

**5.11** While it was necessary for us to understand the application of each regime in a legislative and practical sense, the identified practices do not relate to specific differences in how specific elements of law have been drafted or defined. This would be a particularly demanding task given the number of jurisdictions selected, the range of assessment regimes being considered, and the complexity of much of the legislation. Again, this more detailed review would need to be the subject of a separate study although should this be necessary, it is recommended that focus be given to a defined element of an assessment regime (such as how alternatives are defined).

**5.12** Although the five objectives listed above were presented as being applicable to each regime, we offer a view as to the potential applicability of each identified practice to SEA, EIA and HRA respectively. However, given the nature of the practices we have identified, we also believe that there is general applicability across the regimes.

Figure 5.1: Summary of identified practices per objective

<p>The need for earlier, more integrated, environmental assessment</p>	<ul style="list-style-type: none"> <li>■ Using an independent body to help provide timely and focused advice.</li> <li>■ Exploring strategies for cost recovery through assessment activity.</li> <li>■ Providing clearer guidance with respect to screening procedures.</li> <li>■ Using tools to help give greater certainty to screening decisions.</li> <li>■ Exploring organisational structure with respect to the management of assessment regimes.</li> <li>■ Exploring the potential use for 'landscape-scale' strategic agreements with respect to strategic sites.</li> <li>■ Introducing requirements for the formal review of assessment outputs.</li> <li>■ Requiring the submission of screening requests to an independent body.</li> </ul>	<ul style="list-style-type: none"> <li>■ Providing tools to support effective project management.</li> <li>■ Providing contact information for key personnel.</li> <li>■ Appointing panels of experts to ensure there is an accessible pool of skill and expertise.</li> <li>■ Requiring mandatory scoping.</li> <li>■ Hosting an online portal to assist with the exchange of assessment correspondence.</li> <li>■ Providing greater prescription with respect to the undertaking of assessments.</li> <li>■ Providing regional / sub-regional teams to act as the first point of contact for assessment activities.</li> </ul>
<p>The need for a greater focus on monitoring, mitigation and enforcement</p>	<ul style="list-style-type: none"> <li>■ Appointing independent staff to monitor and enforce the application of, and adherence with, mitigation and conditions.</li> <li>■ Publicly releasing monitoring and environmental audit results.</li> <li>■ Imposing a requirement to prepare an 'Implementation Schedule', to help cross-tabulate an environmental issue with a defined mitigatory action.</li> <li>■ Administering a publicly accessible conditions proforma to document how and when conditions have been discharged.</li> </ul>	<ul style="list-style-type: none"> <li>■ Administering a publicly accessible complaints log to help raise concerns about the implementation of a project, for instance where mitigation is not being applied as expected.</li> <li>■ Developing statutory third-party standing rights, enabling eligible third parties to seek civil remedies for contravening environmental legislation.</li> <li>■ Providing scope for stakeholders, including the general public, to be directly involved in monitoring and mitigation activities.</li> </ul>
<p>The need for provision of improved skills, information and capacity</p>	<ul style="list-style-type: none"> <li>■ Mandatory practitioner registration for impact assessment staff</li> <li>■ Legislating to prioritise the advancement of research, education and training</li> <li>■ Providing an extended range of training and support</li> <li>■ Setting requirements with respect to the qualifications and level of experience that assessors require</li> <li>■ Providing detailed guidance on the operation of assessment regimes</li> <li>■ Taking the opportunity to promote careers in planning, environmental management and assessment.</li> </ul>	<ul style="list-style-type: none"> <li>■ Giving competent authorities the power to authorise the appointment of impact assessors.</li> <li>■ Establishing national or regional centres of excellence to help deliver critical mass, and greater visibility, to assessment-related research.</li> <li>■ Making links between assessment practitioners and the local research communities.</li> <li>■ Promoting the sharing of knowledge and experience through the development of communities of practice.</li> </ul>

<p>The need to provide more accessible information and greater stakeholder engagement and public participation</p>	<ul style="list-style-type: none"> <li>■ Providing clearly sign-posted portals containing details of live and recently completed assessments and providing opportunities for active casework management.</li> <li>■ Providing interactive guides, videos and online support to support the use of online tools and portals.</li> <li>■ Providing enhanced access to environmental data.</li> <li>■ Providing resources to explore and test the application of digital assessments.</li> <li>■ Providing opportunities for impact assessments to be discussed and scrutinised in public.</li> <li>■ Issuing direction concerning the length and format of assessment outputs.</li> <li>■ Providing a searchable library of completed assessments.</li> <li>■ Encouraging up-take in the use of Geographic Information Systems.</li> <li>■ Providing digital tools to help cross-scrutinise assessment reports from one project to another to help assess cumulative impacts.</li> <li>■ Providing a glossary of technical terms and a list of frequently used acronyms.</li> </ul>	<ul style="list-style-type: none"> <li>■ Providing financial support for enabling the involvement of local groups.</li> <li>■ Adopting a Round Table Participative Model to fully engage stakeholders in assessment practices.</li> <li>■ Using technology and science to facilitate the collection of data.</li> <li>■ Providing a document synthesising and explaining key data sets.</li> <li>■ Providing innovation with respect to how environmental impacts are visualised, e.g. through the use of 3D modelling.</li> <li>■ Issuing and promoting public statements that offer a brief summary of the key messages arising from an assessment.</li> <li>■ Providing scope for stakeholders to become engaged with ongoing project development through the use of Stakeholder Liaison Groups.</li> <li>■ Allocating resource for the undertaking of assessment-related research.</li> </ul>
<p>The need to consider alternative solutions for delivering environmental betterment over environmental protection.</p>	<ul style="list-style-type: none"> <li>■ Developing a public Environmental Offsets Register.</li> <li>■ Providing guidance on environmental off-setting.</li> </ul>	<ul style="list-style-type: none"> <li>■ Legislating for environmental off-setting.</li> </ul>

## The need for earlier, more integrated, environmental assessment

**5.13** The WSP report<sup>181</sup> notes how the three assessment regimes are at their most effective when they are applied at the earliest stage of the plan-making and project development cycle. Doing so enables potential impacts to be communicated to relevant parts of the project team and will allow for positive impacts to be safeguarded and enhanced, and for negative impacts to be addressed through changes to scheme design and the application of appropriate mitigation. Earlier engagement can therefore help to generate stronger environmental outcomes and lead to more sustainable projects and plans. Similarly, early application can help to promote greater understanding of what is being proposed, and facilitate greater understanding of the plan or project amongst the public and other stakeholder groups (including the statutory consultees).

**5.14** Earlier engagement can also help to promote greater integration between the different assessment regimes. For instance, the early application of SA to identify the most sustainable policies and most sustainable locations, can provide significant benefit at the project scale by virtue of the fact that the most unsustainable options should have been removed. Consequently, rather than the assessments taking

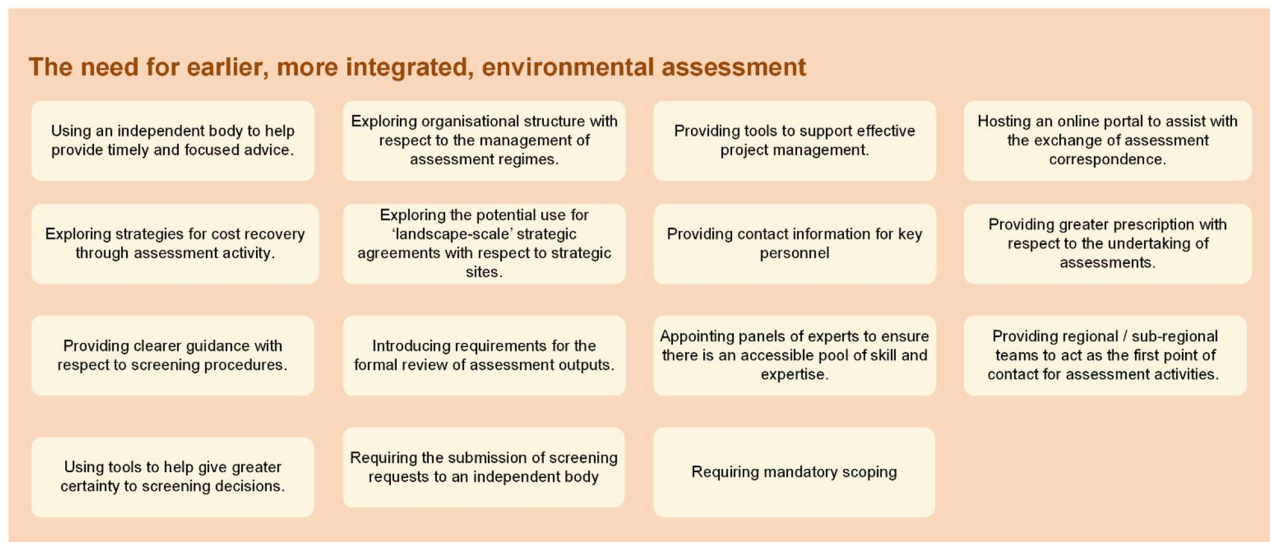
place simultaneously in time, maximum benefit is often accrued when the assessment tools are the tiered (or sequenced) with respect to their application.

**5.15** The WSP report also notes how some of the perceived short-comings of each regime are often a consequence of the tools being applied too late in the process. For example, it is perhaps inevitable that engagement, or perceived value, is judged to be poor when an assessment tool is applied late in the process or when key decisions have already been made.

**5.16** Where early engagement does occur, the WSP report notes how this is often a consequence of the prompts set out in non-statutory guidance, or from the enlightened actions of the key parties or organisations involved. Formally mandating the early use of SEA, EIA and HRA was therefore considered important.

**5.17** Against this context, our review of international practice sought to identify practices that could support a transition towards earlier, more integrated, assessment. These are shown in **Figure 5.2**. They are also shown through **Table 5.1** that provides an assessment of their desirability and their potential deliverability. We will now outline the practices that we identified and offer some explanation to the evaluations provided.

Figure 5.2: Identified practices for potentially supporting earlier, more integrated, environmental assessment.



<sup>181</sup> WSP (2023) *Analysis of the Environmental Assessment Regimes: England and Northern Ireland*.

Table 5.1: An evaluation of identified practices, linked to the achievement of earlier, more integrated assessment.

Identified practices	Potential desirability		Potential delivery challenges		Potential applicability to regime...		
	High	Low	Low	High	EIA	SEA	HRA
<b>The need for earlier, more integrated, environmental assessment</b>							
Using an independent body to help provide timely and focused advice	✓			✓	✓	✓	✓
Exploring strategies for cost recovery through assessment activity	✓		✓		✓	✓	✓
Providing clearer guidance with respect to screening procedures	✓			✓	✓	✓	✓
Using tools to help give greater certainty to screening decisions		✓		✓	✓	✓	✓
Exploring organisational structure with respect to the management of assessment regimes	✓			✓	✓	✓	✓
Exploring the potential use for 'landscape-scale' strategic agreements with respect to strategic sites		✓	✓		✓	✓	✓
Introducing requirements for the formal review of assessment outputs	✓		✓		✓	✓	✓
Requiring the submission of screening requests to an independent body		✓		✓	✓	✓	✓
Providing tools to support effective project management	✓		✓		✓	✓	✓
Providing contact information for key personnel	✓		✓		✓	✓	✓
Appointing panels of experts to ensure there is an accessible pool of skill and expertise	✓			✓	✓	✓	✓
Requiring mandatory scoping		✓		✓	✓	✓	✓
Hosting an online portal to assist with the exchange of assessment correspondence	✓			✓	✓	✓	✓
Providing greater prescription with respect to the undertaking of assessments	✓			✓	✓	✓	✓
Providing regional / sub-regional teams to act as the first point of contact for assessment activities		✓		✓	✓	✓	✓

**5.18 Identified practice: Using an independent body to help provide timely and focused advice.**

**5.19** In the Netherlands, the National Commission on Environmental Assessment (NCEA)<sup>182</sup> provides advice to project proponents on either a voluntary or mandatory basis. The Commission advises on assessment scope, as well as assess the robustness of final assessment reports. The commission prides itself on providing independent and transparent advice; the Commission ensures it has no involvement with the initiator, the initiative or the decision maker.

**5.20** The Commission advises 'the competent authority': the authority for which the environmental assessment report has

been prepared and must make a planning decision based on that report. Who the competent authority is in each case, depends on the kind of decision to be taken. For example, in the case of an SEA for a local land-use plan, the competent authority is the municipal council. But in the case of an SEA for a provincial structure vision, the competent authority is the States Deputed (provincial authority).

**5.21** A competent authority can request an advisory report from the NCEA at various points during the EA process. Specifically, feedback can be sought on scoping, any draft assessment, the final assessment, and any supplementary material.

<sup>182</sup> National Commission on Environmental Assessment [online] *Advice on EIA and SEA* [online]. Available at:

<https://www.commissiener.nl/english/our-services/advise-on-eia-and-sea>



**5.22** Further information is available in **Appendix D** (pages 140 to 142).

**Potential desirability for pursuing in England and Northern Ireland**

**5.23** Assessment activity across England and Northern Ireland involves a variety of organisations. However, there are often challenges concerning the availability of relevant and experienced staff to feedback on assessment. Providing an independent body to provide feedback when required therefore has attraction. A centralised team could also allow for knowledge and experiences to be shared.

**Potential delivery challenges**

**5.24** Any intervention that can help to provide timely and focused advice would be desired. However, potential costs would be high and it is questionable whether sufficient capacity exists to staff such a body. Indeed, recruiting specialists into an independent body could potentially place pressure on the existing pool of assessment staff.

**5.25** There would also be a need to carefully define the projects or plans requiring independent support given the large amount of assessment activity.

Using an independent body to help provide timely and focused advice.						
Examples: National Commission on Environmental Assessment (NCEA)						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Exploring strategies for cost recovery through assessment activity.**

**5.26** New Zealand has kept the operational costs of its Environmental Protection Authority under review to identify where costs can be recovered through the charging of advice<sup>183</sup>. The Canadian Impact Assessments Act also

<sup>183</sup> Ministry for the Environment (2015) Cost Recovery Practices [online]. Available at: <https://environment.govt.nz/publications/environmental-protection-authority-cost-recovery-practices/>

<sup>184</sup> Impact Assessment Agency of Canada (2023) Cost Recovery [online]. Available at: <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/cost-recovery-guide-for-impact-assessments.html>

includes provision for cost recovery for impact assessments appraised by Review Panels<sup>184</sup>. The National Commission on Environmental Assessment (NCEA), that operates in the Netherlands, charges for professional advice<sup>185</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.27** While wide-ranging, the value of some plans and projects will be high. Those with the highest value are likely to be the most complex which could require the sustained provision of technical advice. Although there are elements of charging, the extent and burden of this as applied is unknown and would be worthy of investigation.

**Potential delivery challenges**

**5.28** There is already some cost-recovery being practised and extending this to properly resource the assessment sector has appeal (particularly given other budgetary pressures). However, any additional costs would need to be reasonable. The imposition of charges inevitably raises expectations so equal care would need to be directed to ensure appropriate resourcing.

**5.29** DLUHC has recently published consultation on proposals to increase the level of planning fees in England<sup>186</sup>.

Exploring strategies for cost recovery through assessment activity.						
Examples: New Zealand, Canada and the Netherlands.						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Providing clearer guidance with respect to screening procedures.**

**5.30** Screening on whether an assessment is required or not can sometimes lead to delays and raise accusations over increased costs. We note how Ireland has recently prepared a suite of comprehensive guidance to support SEA activities,

<sup>185</sup> National Commission on Environmental Assessment (2023) Rates [online]. Available at: <https://www.commissiener.nl/documenten/00000629.pdf>

<sup>186</sup> Department for Levelling Up, Housing and Communities [DLUHC] (2023) Increasing Planning Fees and Performance: Technical Consultation [online]. Available at: <https://www.gov.uk/government/consultations/increasing-planning-fees-and-performance-technical-consultation>

including screening<sup>187</sup>. Flow-charts and examples seek to help decision making.

**Potential desirability for pursuing in England and Northern Ireland**

**5.31** A range of guidance exists to support the assessment regimes and some of this relates to initial screening. However, other regimes seem to offer more detailed guidance, providing finer detail with respect to particular scenarios.

**Potential delivery challenges**

**5.32** Some guidance in England and Northern Ireland already exists, while there is range of guidance available internationally that could be used to develop clearer guidelines. Such guidance would need to be properly scrutinised to ensure proper-buy in from relevant groups and individuals.

Providing clearer guidance with respect to screening procedures.						
Examples: Ireland						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Using tools to help give greater certainty to screening decisions.**

**5.33** In South Africa there is a web-based screening tool for EIA<sup>188</sup>. The site provides an opportunity for a project proponent to submit an application for environmental authorisation in relation to EIA. The software allows for an assessment of site sensitivity to be made (**Figure 5.3**).

**Potential desirability for pursuing in England and Northern Ireland**

**5.34** Screening is an important stage in the assessment process for all regimes, with relevant legislation, and supporting guidance, providing direction as to whether an assessment is required for a project or plan. However, no

project or plan or location is the same meaning that uncertainties concerning assessment need will arise. There is therefore validity with respect to considering whether there is scope for some form of tool to promote automation.

**Potential delivery challenges**

**5.35** While a push towards greater automation has attraction, it is questionable whether any tool can realistically factor in the specific details of a site or project. A poorly conceived or inaccurately applied tool could lead to a significant – and unnecessary- level of assessment activity. If screening is liberally applied, and the requirement to submit an assessment is missed, there is a risk for environmental damage. The cost for developing a fully-tested tool is likely to be high.

Using tools to help give greater certainty to screening decisions.						
Examples: South Africa						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓		✓	✓	✓	✓

**Identified practice: Exploring organisational structure with respect to the management of assessment regimes.**

**5.36** At a federal level in Australia, the Department of Climate Change, Energy, the Environment and Water was established in July 2022 to help provide a more holistic consideration of environmental matters<sup>189</sup>. In the Netherlands, the Ministry of Infrastructure and Water Management was created in July 2019 with the remit to promote more joined-up policy making<sup>190</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.37** In England, there are a number of government departments who have a responsibility with respect to the protection and management of the environment, including the Department for Food, Environment and Rural Affairs (Defra);

<sup>187</sup> Environmental Protection Agency (2021) *SEA Screening Good Practice* [online]. Available at: <https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/sea-screening-good-practice-2021.php>

<sup>188</sup> Department of Forestry, Fisheries and the Environment (2021) *Welcome to the National Screening Tool* [online]. Available at: <https://screening.environment.gov.za/screeningtool/#/pages/welcome>

<sup>189</sup> Department of Climate Change, Energy, the Environment and Water (2023) *Welcome to the Department* [online]. Available at: <https://www.dcceew.gov.au/about/news/welcome-to-dcceew>

<sup>190</sup> Ministry of Infrastructure and Water Management (2023) *Organisation* [online]. Available at: <https://www.government.nl/ministries/ministry-of-infrastructure-and-water-management>

the Department for Levelling Up, Housing and Communities (DHLUC); the Department for Energy Security and Net Zero (DESNZ); and the Department for Transport (DfT). There are also a number of contributory agencies and bodies, such as Natural England, the Environment Agency and the Planning Inspectorate. Many of these organisations have a remit with respect to the framing and application of different assessment regimes.

**5.38** Organisational structure seems simpler in other jurisdictions so there is potential for existing arrangements to be reviewed and potentially streamlined.

**Potential delivery challenges**

**5.39** The cost and timeliness of assessing organisational structures may not be significant but there could be political resistance. The recent announcement surrounding the creation of the new English government department- Energy and Net Zero- was somewhat unexpected and shows that reorganisation can happen if a desire and an appropriate case is shown.

Exploring organisational structure with respect to the management of assessment regimes.						
Examples: Australia and the Netherlands						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Exploring the potential use for 'landscape-scale' strategic agreements with respect to strategic sites.**

**5.40** Under the Australian Environment Protection and Biodiversity Conservation Act 1999 (Cwth), landscape-scale strategic agreements are undertaken between the government and a defined partner<sup>191</sup>. These agreements can define what land should be protected and where activity will be allowed<sup>192</sup>. They also allow for environmental outcomes to be defined. An

approved agreement can provide up-front approval for a project, without the need for further permissions.

**Potential desirability for pursuing in England and Northern Ireland**

**5.41** Such a tool is considered innovative. Although the application of SEA / SA typically helps to scope in / scope out potential sites in the context of identified constraints, the described practice in Australia runs over shorter-timescales.

**Potential delivery challenges**

**5.42** Greater detail is needed with respect to what such a system could offer. It will also be important to scope in the context of existing practice.

Exploring the potential use for 'landscape-scale' strategic agreements with respect to strategic sites.						
Examples: Australia						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓	✓		✓	✓	✓

**Identified practice: Introducing requirements for the formal review of assessment outputs.**

**5.43** There are formal requirements for the review of draft Environmental Impact Statements in the US and South Africa<sup>193</sup>. For instance, in the US, the Environmental Protection Agency is responsible for receiving and reviewing environmental impact statements (EISs) prepared by the Federal agencies<sup>194</sup>.

**Potential desirability for pursuing in England and Northern Ireland.**

**5.44** Providing further hooks for review will help to encourage greater engagement and can potentially help to improve the quality of assessment outputs.

<sup>191</sup> Environment Protection and Biodiversity Conservation Act 1999 [online]. Available at: <https://www.legislation.gov.au/Details/C2014C00506>

<sup>192</sup> Department of Climate Change, Energy, the Environment and Water (2023) *Strategic assessments of an endorsed policy, plan or program* [online]. Available at:

<https://www.dcceew.gov.au/environment/epbc/approvals/strategic-assessments#:~:text=Strategic%20assessments%20are%20landscap>

[scale%20assessments%20defined%20under%20the.or%20places.%20We%20call%20these%20things%20%27protected%20matters%27](https://www.epa.gov/nepa/national-environmental-policy-act-review-process)

<sup>193</sup> South African Government (2010) *New Environmental Impact Assessment (EIA) regulations come into effect today* [online].

Available at: <https://www.gov.za/new-environmental-impact-assessment-eia-regulations-come-effect-today>

<sup>194</sup> US Environmental Protection Agency (2023) *National Environmental Policy Act Review Process* [online]. Available at: <https://www.epa.gov/nepa/national-environmental-policy-act-review-process>

**Potential delivery challenges**

**5.45** The intentions and potential advantages of such an intervention are clear but the draw on available resource would be high. A lack of available resource could potentially lead to delay and frustration.

Introducing requirements for the formal review of assessment outputs.						
Examples: The US, South Africa						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Requiring the submission of screening requests to an independent body**

**5.46** In Western Australia, EIA screening requests are made to the state's Environmental Protection Agency<sup>195</sup>. This helps to ensure consistency with respect to the provision of advice.

**Potential desirability for pursuing in England and Northern Ireland**

**5.47** Screening procedures vary with the specific assessment regime but in the context of EIA, the competent authority to make the relevant decision will be the local planning authority. The number of screening requests per authority varies, meaning that some authorities will be more familiar with process than others. Inexperienced teams could potentially over-screen to help manage and lower risk.

**Potential delivery challenges**

**5.48** The intentions of such a proposal are clear but the draw on available resource would be high. A lack of available resource could potentially lead to delay and frustration. The use of tools might be more efficient.

Requiring the submission of screening requests to an independent body.						
Examples: Western Australia						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

High	Low	Low	High	EIA	SEA	HRA
	✓		✓	✓	✓	✓

**Identified practice: Providing tools to support effective project management.**

**5.49** Assessment regimes are process-heavy, with a multitude of different stages and outputs. Keeping track of these can sometimes be problematic, especially where the timescales of a project can shift. In Ireland, the Office of the Planning Regulator gives access to a free 'plan making calculator' that automatically generates an indicative timeline with dates- on the basis of the information provided<sup>196</sup>. This can be distributed to everyone who is involved with a project or plan (See **Figure 5.4**).

**Potential desirability for pursuing in England and Northern Ireland**

**5.50** The assessment regimes are processed-based. Effective project-management is therefore needed to ensure milestones are met and the ability of having an accessible tool to generate potential milestones has attraction.

**Potential delivery challenges**

**5.51** Desirability would therefore be high, while cost and timing will be dependent on the complexity of the tool. While the tool seems to work for the stages of plan making, the workstreams of a typical assessment can be complicated and it is potentially questionable as to the extent to which a standardised tool can potentially cope with multiple possibilities.

Providing tools to support effective project management.						
Examples: Ireland						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Providing contact information for key personnel**

<sup>195</sup> Government of Western Australia (2023) The EIA Process [online]. Available at: <https://www.epa.wa.gov.au/eia-process>

<sup>196</sup> Office of the Planning Regulator (2023) Plan making Calculator [online]. Available at: <https://www.opr.ie/plan-making-calculator/>

**5.52** The Irish Environmental Protection Agency offers an up to date list of names- and contact details- for staff with a responsibility for SEA across each government department<sup>197</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.53** Engaging with stakeholders, including the statutory consultees, is an important part of the assessment process. Not knowing who to contact generates frustration, as well as potential delays.

**Potential delivery challenges**

**5.54** Developing a list or database of key people would be useful but keeping it up to date could be a challenge. It would be a potentially low-cost intervention however and could potentially highlight gaps in resource or coverage.

Providing contact information for key personnel.						
Examples: Ireland						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Appointing panels of experts to ensure there is an accessible pool of skill and expertise.**

**5.55** Technical Reference Groups have been used in Victoria, Australia to ensure project or plan proposers have access to appropriate knowledge and skills<sup>198</sup>. In Hong Kong, EIA project proponents can request that an Environmental Study Management Group (ESMG) be formed<sup>199</sup>, comprising of environmental protection officers, project team representatives and environmental consultants. In the Netherlands, the National Commission on Environmental Assessment (NCEA) sets up working groups of experts to support its review work<sup>200</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.56** The ability for plan or project proposers – and their consultants- to access specialist expertise in a timely fashion has been identified as being problematic. Specifically, the inability to access staff, and to receive feedback on such things as proposed methodology, can potentially introduce delay and add to costs. A lack of continuity with respect to project contacts can generate similar impacts. Contact with inexperienced staff, or staff without appropriate technical knowledge, may lead to the provision of inaccurate or overly cautious advice.

**Potential delivery challenges**

**5.57** The intentions of such a proposal are clear but the draw on available resource would be high. A lack of available resource could potentially lead to delay and frustration. Furthermore what type of project or plan would fall within the confines of any such requirement.

Appointing panels of experts to ensure there is an accessible pool of skill and expertise.						
Examples: Victoria, Australia; Hong Kong						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Requiring mandatory scoping**

**5.58** This is required through the application of EIA in South Africa and seeks to ensure that all matters of significance are identified at the outset<sup>201</sup>. There is also greater potential with respect to issuing consistent advice.

<sup>197</sup> Environmental Protection Agency (2021) *SEA Contacts* [online]. Available at: <https://www.epa.ie/our-services/monitoring--assessment/assessment/strategic-environmental-assessment/sea-contacts-/#:~:text=The%20EPA%20SEA%20Team%20contacts%20are%3A%20Tadhg%20%27Mahony%2C,Castle%20Estate%2C%20Co.%20Wexford.%20Tel%3A%20053%20917%200791>

<sup>198</sup> Victoria State Government (2023) *Environment Assessment* [online]. Available at: <https://www.planning.vic.gov.au/environment-assessment/what-is-the-ees-process-in-victoria>

<sup>199</sup> Environmental Protection Department (2013) *The Role and Operation of Environmental Study Management Group* [online]. Available at: <https://www.epd.gov.hk/eia/hb/materials/GN2.pdf>

<sup>200</sup> Netherlands Commission for Environmental Assessment (2023) *The NCEA* [online]. Available at: <https://www.eia.nl/en/about-us/why-the-ncea#:~:text=The%20NCEA%20can%20call%20upon%20a%20pool%20of,activities%20for%20which%20an%20environmental%20assessment%20is%20required.>

<sup>201</sup> South African Government (2010) *New Environmental Impact Assessment (EIA) regulations* [online]. Available at:

**Potential desirability for pursuing in England and Northern Ireland**

**5.59** Efficient scoping ensures that only key matters of importance are investigated and addressed. Focusing in this way helps to save cost and time and allows for the more efficient allocation of resources. Currently there is no mandatory requirement for scoping under the EIA regulations, although many applicants will choose to consult as appropriate. There is also an obligation, upon the statutory consultees, to provide relevant environmental data when requested to do so through the 2017 EIA regulations in England. Furthermore, the 2017 regulations also state that where a scoping opinion has been sought, and has been duly provided, the arising Environmental Statement must be in conformity.

**Potential delivery challenges**

**5.60** The intentions of such a proposal are clear but the draw on available resource would be high. A lack of available resource could potentially lead to delay and frustration. The use of tools might be more efficient. Prioritisation would also be needed given the significant amount of assessment activity.

Requiring mandatory scoping.						
Examples: South Africa						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓		✓	✓	✓	✓

**Identified practice: Hosting an online portal to assist with the exchange of assessment correspondence.**

**5.61** The Irish EPA hosts a system known as EDEN that facilitates the exchange of correspondence between key parties<sup>202</sup>. It also provides a database for the advice it has provided in relation to SEAs<sup>203</sup>. The EIA Portal is provided by the Irish Department of Department of Housing, Local

Government and Heritage and provides details for those planning applications that are accompanied by an Environmental Impact Assessment Report (EIAR)<sup>204</sup>. The portal is designed as an access point for viewing detailed scheme information to help encourage and facilitate public and stakeholder engagement.

**5.62** Also in Ireland, but with a greater focus towards planning, the Office of the Planning Regulator provides an online facility that promotes live consultations<sup>205</sup>. Scottish Government- the SEA Gateway<sup>206</sup>. There is also a similar portal in Ireland for EIAs<sup>207</sup>. The Scottish SEA portal allows for the formal exchange of correspondence between the authority responsible for preparing public plans, programmes or strategies and the consultation authorities (Scottish Environment Protection Agency, Scottish Natural Heritage and Historic Environment Scotland).

**Potential desirability for pursuing in England and Northern Ireland**

**5.63** All of the assessment regimes are based on the exchange of digital correspondence but there are variations in how this material is stored, shared and made publicly available. Although the Planning Inspectorate in England supports a central portal for recording information flows on Nationally Significant Infrastructure Projects<sup>208</sup>, the majority of information is stored across individual local authority websites. There might therefore be potential for an element of centralisation.

**Potential delivery challenges**

Hosting an online portal to assist with the exchange of assessment correspondence.						
Examples: Ireland						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

<https://www.gov.za/new-environmental-impact-assessment-eia-regulations-come-effect-today>

<sup>202</sup> Environmental Protection Agency (2023) EDEN [online]. Available at: <https://www.edenireland.ie/>

<sup>203</sup> Environmental Protection Agency (2023) SEA Submissions [online]. Available at: <https://www.epa.ie/publications/corporate/submissions--position-papers/>

<sup>204</sup> Irish EIA Portal (2023) [online]. Available at: <https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1>

<sup>205</sup> Office of the Planning Register (2023) Live Consultations [online]. Available at: <https://www.opr.ie/evaluation-of-statutory-plans/>

<sup>206</sup> Scottish Government (2023) SEA Gateway and Database [online]. Available at: <https://www.strategicenvironmentalassessment.gov.scot/>

<sup>207</sup> <https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1>

<sup>208</sup> Planning Inspectorate (2023) National Infrastructure Planning [online]. Available at:

<https://infrastructure.planninginspectorate.gov.uk/>

**Identified practice: Providing greater prescription with respect to the undertaking of assessments.**

**5.64** The Environmental Protection Team in Hong provides prescriptive guidance as to how certain types of assessment should be undertaken. The EPD website<sup>209</sup> contains guidance on five topics: Air, EA and Planning, Noise, Waste, and Water. While parts are now dated, Hong Kong’s EIA Training Manual still gives detailed information on each stage of the process<sup>210</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.65** Assessments will vary depending on the nature of the selected project or plan, and the location to which it relates. While there is already guidance to promote good practice in assessment activity, it is questionable whether more prescriptive guidance is possible.

**Potential delivery challenges**

**5.66** While such guidance would certainly help to provide greater regularity, and potentially save time and costs, there will be limits as to how prescriptive the guidance could be given the bespoke nature of both a site and a project. There would be merit in outlining some basic elements of assessment, potentially drawing from existing best-practice.

Providing greater prescription with respect to the undertaking of assessments.						
Examples: Hong Kong						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Providing regional / sub-regional teams to act as the first point of contact for assessment activities.**

**5.67** The ELY Centres of Finland act as ‘One Stop Shops’ for EIA advice and scrutiny. There are 15 centres in total, with the network being managed by the Ministry of Employment and the Economy<sup>211</sup>. However, the centres also help with the operation of other government departments, including the Ministry of the Environment. By being embedded in each

region, the centres are considered to have good levels of regional and local knowledge.

**Potential desirability for pursuing in England and Northern Ireland**

**5.68** Having clearly defined contacts and communication channels help to reduce project costs and delays. Having regionally centred hubs could also allow for matters or concerns of a more strategic nature being considered more efficiently. The assessment regimes involve a multiple of stakeholders and governance structures vary.

**Potential delivery challenges**

**5.69** The idea has attraction but since regional structures in England have been abolished set-up costs would high. There might also be some confusion and discrepancy with the structure and spatial coverage of other bodies (such as Natural England).

Providing regional / sub-regional teams to act as the first point of contact for assessment activities.						
Examples: Finland						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓		✓	✓	✓	✓

<sup>209</sup> <https://www.epd.gov.hk/epd/english/top.html>

<sup>210</sup> Environmental Protection Department (2005) *Training Manual for the EIA Mechanism* [online]. Available at: [https://www.epd.gov.hk/eia/eiao\\_support/english/whatsnew/wn\\_manual.html](https://www.epd.gov.hk/eia/eiao_support/english/whatsnew/wn_manual.html)

<sup>211</sup>

Centre for Economic Development, Transport and the Environment (2023) *ELY Centres* [online]. Available at: <https://www.ely-keskus.fi/en-US/web/ely-en>

Figure 5.3: The Screening Tool of South Africa

**forestry, fisheries & the environment**  
Department: Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

**NATIONAL WEB BASED ENVIRONMENTAL SCREENING TOOL**

### Welcome to the National Screening Tool

The National Web based Environmental Screening Tool is a geographically based web-enabled application which allows a proponent intending to submit an application for environmental authorisation in terms of the Environmental Impact Assessment (EIA) Regulations 2014, as amended to screen their proposed site for any environmental sensitivity.

The Screening Tool also provides site specific EIA process and review information, for example, the Screening Tool may identify if an industrial development zone, minimum information requirement, Environmental Management Framework or bio-regional plan applies to a specific area.

Some of these documents can then be accessed through the Screening Tool via links, for consideration during screening.

Further to this, the Screening Tool identifies related exclusions and/ or specific requirements including specialist studies applicable to the proposed site and/or development, based on the national sector classification and the environmental sensitivity of the site.

Finally, the Screening Tool allows for the generating of a Screening Report referred to in Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as amended whereby a Screening Report is required to accompany any application for Environmental Authorisation and as such the tool has been developed in a manner that is user friendly and no specific software or specialised GIS skills are required to operate this system.

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Figure 5.4: Project management software

English

**OPR** Office of the Planning Regulator

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### Your Development Plan Review Timeline

No.	Step	Date	Statutory Deadline
1	Public consultation on the pre-draft development plan (issues paper) starts	24-March-2023	N/A
2	Pre-draft development plan consultation close date	19-May-2023	Minimum
3	Chief executive's report on pre-draft development plan public consultation	14-July-2023	Maximum
4	Directions from elected members to chief executive	22-September-2023	Maximum
5	Draft development plan issued to members for consideration	15-December-2023	Maximum

Pre-Draft



## The need for a greater focus on monitoring, mitigation and enforcement

**5.70** Each of the three assessment regimes are *ex-ante* in the sense that the assessment regimes seek to estimate, make assumptions, and apply predictions concerning the type and magnitude of potentially arising impacts. Identified impacts, following the mitigation hierarchy, are ideally avoided, but where this is not possible, they should be reduced, mitigated and compensated, following this sequential order. Actions to mitigate or compensate potential impacts will often happen once a decision to approve a plan or project has been made, with the hook to deliver being embedded via a myriad of conditions and agreements.

**5.71** The WSP<sup>212</sup> report notes how the actioning of conditions is often poorly monitored, generating a risk that the proposed compensation or mitigation is avoided, or poorly executed. Equally, while mitigatory action may have been undertaken as intended, the effects or impacts it gives rise to may be different to what was intended.

**5.72** Non-compliance is noted by the WSP report to commonplace, a point that is often accentuated by poor levels of enforcement and follow-up. A range of reasons are given to explain for this, but a lack of resource across local planning authorities and the statutory consultees is cited as a significant issue. The WSP report notes how monitoring and enforcement is often led by the project or plan proposer, a situation that can give rise to concerns surrounding both transparency and objectivity.

**5.73** With respect to solutions, the WSP report states how monitoring should become a standard condition on any assessment. A preference was also stated with respect to the use of neutral and independent third parties to undertake monitoring activities. In addition, more stringent enforcement practices are advocated in cases of failure to provide a genuine deterrent against non-compliance. The WSP report also highlights the role for developers and plan or project proponents to help fund monitoring measures.

**5.74** **Figure 5.5** identifies the practices that have been identified to support a greater focus on monitoring, mitigation and enforcement. They are also shown through **Table 5.2** that provides an assessment of their desirability and their potential deliverability. We will now outline the practices that we identified and offer some explanation to the evaluations provided.

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<sup>212</sup> WSP (2023) *Analysis of the Environmental Assessment Regimes: England and Northern Ireland*.

Figure 5.5: Identified practices to promote a greater focus on monitoring, mitigation and enforcement.



Table 5.2: An evaluation of identified practices associated with the promotion of monitoring, mitigation and enforcement.

Identified practices	Potential desirability		Potential delivery challenges		Potential applicability to regime...		
	High	Low	Low	High	EIA	SEA	HRA
<b>The need for a greater focus on monitoring, mitigation and enforcement</b>							
Appointing independent staff to monitor and enforce the application of, and adherence with, mitigation and conditions	✓			✓	✓	✓	✓
Publicly releasing monitoring and environmental audit results	✓		✓		✓	✓	✓
Imposing a requirement to prepare an 'Implementation Schedule', to help cross-tabulate an environmental issue with a defined mitigatory action	✓		✓		✓	✓	✓
Administering a publicly accessible conditions proforma to document how and when conditions have been discharged	✓		✓		✓	✓	✓
Administering a publicly accessible complaints log to help raise concerns about the implementation of a project, for instance where mitigation is not being applied as expected	✓		✓		✓	✓	✓
Developing statutory third-party standing rights, enabling eligible third parties to seek civil remedies for contravening environmental legislation		✓		✓	✓	✓	✓
Providing scope for stakeholders, including the general public, to be directly involved in monitoring and mitigation activities	✓		✓		✓	✓	✓

**Identified practice: Appointing independent staff to monitor and enforce the application of, and adherence with, mitigation and conditions.**

5.75 Hong Kong uses Independent Environmental Checkers<sup>213</sup>. South Africa uses Environmental Control Officers. In Hong Kong, Independent Environmental Checkers

(IEC) are often appointed on certain projects to support monitoring and auditing activities. While such an appointment may be made voluntarily, an appointment may also be made in response to the insertion of a specific permit condition that states how mitigation measures need to be checked, and duly certified, by qualified personnel. A condition may also be imposed requiring that this certified person submit periodic

<sup>213</sup> ANEWR (2023) Independent Environmental Checker [online]. Available at: <https://anewr.com/environmental-consultants/independent-audit-iec-checker-eia/>

reports on the implementation status of mitigation measures. These types of undertaking are legitimised via the EIA Ordinance.

**5.76** In South Africa, Environmental Control Officers are employed both mandatorily and voluntarily at various construction projects across South Africa<sup>214</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.77** Currently monitoring is undertaken by the relevant consenting agency, in collaboration with relevant consultees. However, resources are stretched meaning that scrutiny levels can vary.

**Potential delivery challenges**

**5.78** The use of independent professionals has attraction but there are clearly questions around resource. Clearly there are questions about whether there are sufficiently staff around. There would be similar questions about who would pay for their services. If funded by a project or plan proponent, questions surrounding independence would inevitably arise. The sheer amount of assessment activity requiring such scrutiny would lead to significant cost so an element of selection would inevitably be required should the practice be progressed. Again, this practice would be challenging for long-term projects or plans.

Appointing independent staff to monitor and enforce the application of, and adherence with, mitigation and conditions.						
Examples: Hong Kong and South Africa						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Publicly releasing monitoring and environmental audit results.**

**5.79** In Hong Kong, project proponents are required to provide details of their monitoring work through the EIA Ordinance alongside details of their permit and EIA<sup>215</sup>. Hong Kong's Environmental Protection Department also hosts a

single portal to help promote accountability and facilitate openness<sup>216</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.80** Monitoring practices across the three regimes is patchy and non-compliance is an identified issue. Much of the monitoring is led by the plan or project proponent meaning that conflicts of interest are potentially high. Transparency and accountability are often poor, with monitoring and audit data being often hard to find. Giving this data greater visibility can potentially help to enhance the credibility of assessment practices. Giving greater access to this type of data will also help to highlight potential areas of concern with respect to implementation, for instance where mitigation is not being followed as instructed.

**Potential delivery challenges**

**5.81** The desirability of doing this is high since it will support monitoring practices and generally help to enhance the credibility of the assessment regimes. To be effective there will need to requirements for collecting such data, while it will be necessary to ensure that roles and responsibilities are clearly defined. The location at where these results are published will require thought; there is potential for them to be hidden amongst other items of assessment material. This practice would be challenging for long-term projects or plans.

Publicly releasing monitoring and environmental audit results.						
Examples: Hong Kong						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Imposing a requirement to prepare an 'Implementation Schedule', to help cross-tabulate an environmental issue with a defined mitigatory action.**

**5.82** Permits in Hong Kong typically include a requirement for an implementation schedule to be prepared as part of a

<sup>214</sup> ENVASS (2019) Environmental Control Officers [online]. Available at: <https://www.envass.co.za/environmental-control-officers/>

<sup>215</sup> Environmental Protection Department (2023) EIA Ordinance [online]. Available at: <https://www.epd.gov.hk/eia/english/register/aep/latest.html>

<sup>216</sup> Environmental Protection Department (2023) Environmental Protection Interactive Centre [online]. Available at : <https://epic.epd.gov.hk/EFORMUPD/main/epic/home-apps?execution=e2s1>

broader Environmental Management and Auditing Manual. Such an implementation schedule needs to be prepared and signed by the project proponent<sup>217</sup>. The schedule allow for the cross-referencing of an EIA issue (such as potential noise pollution) with the identification of a specific EM&R action (which is referenced). For each, the proponent is prompted to describe the action, to give details surrounding its location, and to outline the person/team responsible for applying it (Figure 5.6).

**Potential desirability for pursuing in England and Northern Ireland**

**5.83** Details of this nature will typically be embedded within plan or application material but providing this information in a clear, standalone document will help the tracking of actions.

**Potential delivery challenges**

**5.84** This practice is a simple way for helping to ensure effective delivery and compliance. These schedules typically exist, although format and method of production vary. To be effective the documents would need to be visible which could be a challenge given the amount of material likely to be in place. Consideration to the creation of an appropriate depository is likely to be necessary.

Imposing a requirement to prepare an 'Implementation Schedule', to help cross-tabulate an environmental issue with a defined mitigatory action.						
Examples: Hong Kong						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Administering a publicly accessible conditions proforma to document how and when conditions have been discharged.**

**5.85** Permits in Hong Kong require such proformas as part of a project's Environmental Management and Auditing Manual that needs to be publicly available<sup>218</sup>. Such a proforma outlines the requirements (and status) of the conditions and restrictions outlined by a permit. Again the proforma needs to

<sup>217</sup> As an example, see: [https://www.epd.gov.hk/eia/register/report/eiareport/eia\\_1802010/EM%26A/Appendix/EM&A%20Appendix%20A.pdf](https://www.epd.gov.hk/eia/register/report/eiareport/eia_1802010/EM%26A/Appendix/EM&A%20Appendix%20A.pdf)

<sup>218</sup> Environmental Protection Department (2023) *Proforma for Construction Phase* [online]. Available at: <https://www.epd.gov.hk/eia/hb/materials/images/AppendixD1.pdf>

be signed by the proponent's Environmental Team Manager and verified by an independent Environment Checker (as mentioned above).

**Potential desirability for pursuing in England and Northern Ireland**

**5.86** Giving greater exposure to conditions would also help to promote engagement and assist with the monitoring of a project.

**Potential delivery challenges**

**5.87** This practice is likely to exist but visibility, and accountability, will vary. To be effective, stakeholders will need to be engaged and suitably clear about what the plan or project is expected to deliver.

Imposing a requirement to prepare and maintain a conditions template.						
Examples:						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Administering a publicly accessible complaints log to help raise concerns about the implementation of a project, for instance where mitigation is not being applied as expected.**

**5.88** Permits in Hong require the compilation, and maintenance, of a complaints log as part of a project's Environmental Management and Auditing Programme<sup>219</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.89** Practices will vary with respect to the handling of complaints but providing such a list could potentially help with monitoring and give credibility to public and stakeholder engagement. Any such log would have greater applicability to projects rather than plans.

<sup>219</sup> Environmental Protection Department (2023) *Proforma for Construction Phase* [online]. Available at: <https://www.epd.gov.hk/eia/hb/materials/images/AppendixD1.pdf>

**Potential delivery challenges**

**5.90** Again this practice is likely to exist but visibility, and accountability, will vary. To be effective, stakeholders will need to be engaged and suitably clear about what the plan or project is expected to deliver.

Administering a publicly accessible complaints log to help raise concerns about the implementation of a project, for instance where mitigation is not being applied as expected.						
Examples: Hong Kong						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Developing statutory third-party standing rights, enabling eligible third parties to seek civil remedies for contravening environmental legislation.**

**5.91** In Victoria (Australia) the Environment Protection Amendment Act 2018 (Vic) amends the 2017 Environment Act (Vic) and allows for an ‘eligible person’ to apply to court for the purposes of seeking a civil remedy to addressing an identified breach. An eligible person includes anyone who is affected by the contravention or observed non-compliance<sup>220</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.92** There are various provisions for judicial review but there is potential to explore how these compare with practices elsewhere. The legislation that is operational in Victoria seeks to deliver greater accountability, which is a core ambition for the assessment regimes that are operational in England and Northern Ireland.

**Potential delivery challenges**

**5.93** This is a complex area and further comparative work would need to be under taken to explore practices. Enforcement is clearly important but if poorly applied, the identified practice could sustain unresolved areas of debate. Costs would potentially be high.

Developing statutory third-party standing rights, enabling eligible third parties to seek civil remedies for contravening environmental legislation.						
Examples: Victoria, Australia						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓		✓	✓	✓	✓

**Identified practice: Providing scope for stakeholders, including the general public, to be directly involved in monitoring and mitigation activities.**

**5.94** In Canada, there is an example of an Independent Monitoring Agency that allows for local people to become directly involved with project implementation. Specifically, the agency is monitoring the activities of the Arctic Canadian Diamond Company with respect to the Ekati Diamond Mine<sup>221</sup> (Figure 5.7).

**Potential desirability for pursuing in England and Northern Ireland**

**5.95** Engaging stakeholders and the general public in assessment activity is an important goal but this is often only promoted or achieved in the early stages of an assessment. Encouraging engagement post-consent will help to maintain this engagement through the latter stages of a project.

**Potential delivery challenges**

**5.96** To be successful, stakeholders will need to be engaged and commit to acting objectively. Practices of this nature are likely to occur already. If so, they could be investigated as to their use and implementation. Maintaining engagement into the longer-term could be problematic for longer term plans and projects.

<sup>220</sup> Allens and Linklaters 200

<sup>221</sup> Independent Environmental Monitoring Agency (2023) *A Public Watchdog for Arctic Canadian Diamond Company Ltd’s Ekati Diamond Mine* [online]. Available at: <https://monitoringagency.net/>

Providing scope for stakeholders, including the general public, to be directly involved in monitoring and mitigation activities.						
Examples: Canada						
<b>Potential desirability</b>		<b>Potential delivery challenges</b>		<b>Potential applicability to regime...</b>		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

Figure 5.6: An example of an implementation schedule

**Project Implementation Schedule**

**Note:** Chapters 1 to 3 of the EIA report present the background information of the Project, identified designated project, concurrent projects, objectives and scope for various environmental aspects. Chapters 4 to 11 of the EIA report present the EIA findings and mitigation measures are described below with cross-reference to the EIA report. Chapters 12, 13 & 14 summarize the environmental monitoring requirements, environmental outcomes and conclusion.

EIA Ref.	EM&A Log Ref	Environmental Protection Measures	Objectives of the Recommended Measures & Main Concerns to address	Location of the measures	Implementation Agent	Implementation Stage <sup>(1)</sup>				Relevant Legislation & Guidelines	
						D	C	O	Dec		
<i>Construction Dust Impact</i>											
S4.7.2 to S4.7.5	D1	Mitigation measures in form of regular watering under a good site practice should be adopted. Watering once per hour on exposed workites and haul road is proposed to achieve dust removal efficiency of 91.7%. While the above watering frequencies are to be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent intensity of no less than 1.75 L/m <sup>2</sup> to achieve the respective dust removal efficiencies.	Minimize dust impact at the nearby sensitive receivers	All sites	construction	Contractor	√				<ul style="list-style-type: none"> <li>• APCO</li> <li>• To control the dust impact to meet HKAQO and TM-EIAO</li> </ul>
S4.7.6	D2	The Contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation.	Minimize dust impact at the nearby sensitive receivers	All sites	construction	Contractor	√				<ul style="list-style-type: none"> <li>• APCO</li> <li>• To control the dust impact to meet HKAQO and TM-EIAO</li> </ul>
S4.7.6	D3	Following dust suppression measures should also be incorporated by the Contractor to control the dust nuisance throughout the construction phase: <ul style="list-style-type: none"> <li>• Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading;</li> <li>• Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;</li> <li>• A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones;</li> <li>• The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle;</li> </ul>	Minimize dust impact at the nearby sensitive receivers	All sites	construction	Contractor	√				<ul style="list-style-type: none"> <li>• APCO</li> <li>• To control the dust impact to meet HKAQO and TM-EIAO</li> </ul>

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Figure 5.7: Independent Environmental Monitoring Agency

### The need for provision of improved skills, information and capacity.

**5.97** The WSP report<sup>222</sup> outlines the importance of having assessment regimes that take proportionate and risk-based decisions, that can draw from the application of sound knowledge and judgement. However, the WSP report highlights the challenges of delivering this given the size, skills and capacity of the existing assessment workforce. A need to grow each of these elements is advanced, with particular priority being given to extending the level of resource and expertise of the competent authorities and statutory consultees.

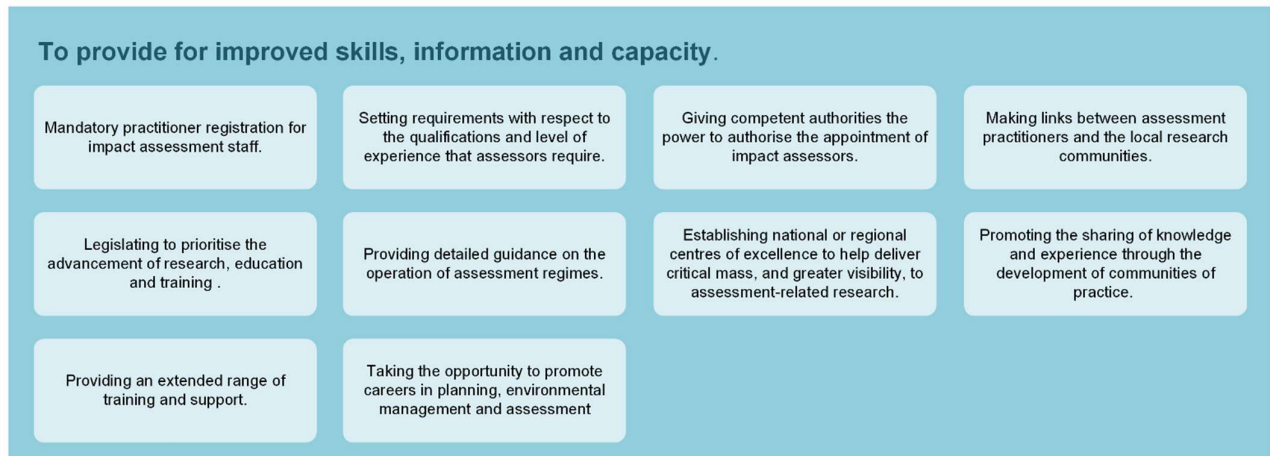
**5.98** According to the WSP report, current shortcomings are leading to system delays, disproportionate reporting and assessment, and poor decision making. A selection of potential remedies are suggested, including the use of

national and regional centres of excellence, enhanced training provision, and the release of improved guidance.

**5.99** Should more ambitious legislative reform be pursued, the WSP report identifies the importance of developing a coherent, well-funded, and sufficiently evidenced skills strategy should the government opt for a more ambitious programme of reform. Appropriate capacity building is identified as being essential to ensure the assessment workforce is sufficiently prepared to engage with any new demands placed upon them.

**5.100** Figure 5.8 provides an overview of the practices that have been identified. They are also shown through Table 5.3 that provides an assessment of their desirability and their potential deliverability. We will now outline the practices that we identified and offer some explanation to the evaluations provided.

Figure 5.8: Identified practices relating to the improvement of skills, information and capacity.



<sup>222</sup> WSP (2023) *Analysis of the Environmental Assessment Regimes: England and Northern Ireland*.



Table 5.3: Evaluation of practices intended to improve skills, information and capacity

Identified practices	Potential desirability		Potential delivery challenges		Potential applicability to regime...		
	High	Low	Low	High	EIA	SEA	HRA
The need for provision of improved skills, information and capacity							
Mandatory practitioner registration for impact assessment staff		✓		✓	✓	✓	✓
Legislating to prioritise the advancement of research, education and training		✓	✓		✓	✓	✓
Providing an extended range of training and support	✓		✓		✓	✓	✓
Setting requirements with respect to the qualifications and level of experience that assessors require		✓		✓	✓	✓	✓
Providing detailed guidance on the operation of assessment regimes	✓		✓		✓	✓	✓
Taking the opportunity to promote careers in planning, environmental management and assessment.	✓		✓		✓	✓	✓
Giving competent authorities the power to authorise the appointment of impact assessors		✓		✓	✓	✓	✓
Establishing national or regional centres of excellence to help deliver critical mass, and greater visibility, to assessment-related research	✓		✓		✓	✓	✓
Making links between assessment practitioners and the local research communities	✓			✓	✓	✓	✓
Promoting the sharing of knowledge and experience through the development of communities of practice	✓		✓		✓	✓	✓

**Identified practice: Mandatory practitioner registration for impact assessment staff.**

**5.101** There is a practitioner-led registration scheme operational in South Africa. This came into effect from August 2022 and requires practitioners to register in order to investigate and assess baseline conditions, and prepare EIA reports and documents. Those assessing, evaluating and considering EIA reports and documents to make a decision also need to be registered<sup>223</sup>.

**5.102** In Belgium (Flanders), consultants who are responsible for developing one or more sections of an EIA are required to be registered by the region as an approved expert practitioner<sup>224</sup>. To be approved, applicants need to satisfy a number of conditions, such as having obtained at least a master's or equivalent degree, and having at least 3 years' practical experience in collaborating on the drawing up of environmental impact reports. Applicants also need to have successfully completed a training course of 60 hours. An annual fee is also payable.

**Potential desirability for pursuing in England and Northern Ireland**

**5.103** The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 identify the need for Environmental Statements to be prepared by competent persons although this is not required- at least in legislative terms- in the other assessment regimes. IEMA operate a pathway for becoming a Registered Environmental Practitioner<sup>225</sup>. IEMA also operate an EIA Quality Mark scheme. There are no such requirements with respect to SEA and HRA.

**Potential delivery challenges**

**5.104** Introducing some form of mandatory registration scheme could potentially help to increase the quality of assessment outputs but clearly there are multiple variables to this agenda. The assessment sector is large and diverse with many difference specialisms so it would be challenging to embrace them all. There is also limited ability to police whether work has been undertaken by a registered practitioner. Although such a scheme would contribute to the achievement of some desired outcomes, there are likely to be more cost effective

measures. Engagement with the current suite of professional bodies is already strong, with the institutes being active.

Mandatory practitioner registration for impact assessment staff.						
Examples: South Africa and Flanders (Belgium)						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓		✓	✓	✓	✓

**Identified practice: Legislating to prioritise the advancement of research, education and training.**

**5.105** Under Section 31Q of the Planning and Development Act 2000, there is a statutory duty for Ireland's Office of the Planning Regulator to promote research and training. Accordingly, it delivers education and training programmes for both elected members and staff of local authorities and regional assemblies<sup>226</sup>. The material includes an introduction to planning, with a specific document relating to 'Environmental Assessments and Planning in Ireland'<sup>227</sup>. There are also videos about EIA<sup>228</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.106** This is not a feature of current legislation but it is acknowledged that the interplay of research, education and training and will help to develop high quality assessments.

**Potential delivery challenges**

**5.107** Building these needs into legislation is useful and provides continuity but other possible routes are available, particularly where no major legislative reform is being achieved. Spending priorities can be equally advanced through the strategies and actions plans of key government departments.

Legislating to prioritise the advancement of research, education and training.
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<sup>223</sup> Department of Environmental Affairs and Development Planning (2022) Requirement to be a Registered Environmental Assessment Practitioner (EAP) Comes into Effect [online]. Available at: <https://www.westerncape.gov.za/eadp/news/requirement-be-registered-environmental-assessment-practitioner-eap-comes-effect>  
<sup>224</sup> Vlaanderen (2023) Recognition as EIA Expert [online]. Available at: <https://www.vlaanderen.be/en/recognition-as-eia-expert>  
<sup>225</sup> IEMA (2023) Practitioner Membership & Registered Environmental Practitioner [online] Available at:

<https://www.iema.net/membership/membership-levels/practitioner/registered-environmental-practitioner>  
<sup>226</sup> Office of the Planning Regulator (2023) What We Do [online] Available at: <https://www.opr.ie/about/>  
<sup>227</sup> Office of the Planning Regulator (2023) EIA and Planning [online]. Available at : <https://www.opr.ie/wp-content/uploads/2022/10/Planning-Leaflet-11-Environmental-Assessments-and-Planning-in-Ireland.pdf>  
<sup>228</sup> See <https://www.youtube.com/watch?v=ejKVFUztxBY&t=5s>

Examples: Ireland						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓	✓		✓	✓	✓

**Identified practice: Providing an extended range of training and support.**

**5.108**The provision of extensive training is provided in a number of the regimes by a range of stakeholders. These include professional bodies, such as via the South Africa Environmental Assessment Practitioners Association<sup>229</sup> and via the New Zealand Association for Impact Assessment<sup>230</sup>. In Canada, the Impact Assessment Agency of Canada (IAAC) develops and delivers training opportunities<sup>231</sup> adapted to various audiences. All of the training is provided free of charge. There is also a specific e-learning course<sup>232</sup>, available in French and English, that provides an overview of the Impact Assessment Act 2019 (**Figure 5.9**). The IAAC also runs regular webinars and is developing instructor-led training tailored to different stakeholder groups. In California, in the US, the Governor’s Office of Planning and Research gives access to a series of recorded webinars<sup>233</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.109**The professional bodies offer a relatively broad suite of courses but these are typically chargeable (albeit with discounts for members). There is potential to extend provision to cater for all levels of experience, from beginner to advanced. Free or subsidised opportunities would be well-received given current financial constraints, particularly in the public sector.

**Potential delivery challenges**

**5.110**A range of guidance exists although some of this is chargeable and linked to the membership of particular professional institutes. Defining core competencies, and an appropriate suite of knowledge, skills and behaviours, would be help to contextualise professional development and provide

more logical sequences in which knowledge can be accessed. Although the professional institutes offer broad spatial coverage, regional variations are observed. Developing or strengthening regional or national centres of excellence could help to offer greater consistency. Training material from other jurisdictions could be used to supplement the domestic offer to help manage costs.

Examples: South Africa, New Zealand, Canada and the US						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Setting requirements with respect to the qualifications and level of experience that assessors require.**

**5.111**As part of the registration scheme in Flanders, assessors are required to hold masters-level qualifications and possess relevant experience. They are also required to complete mandatory training of 60 hours<sup>234</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.112**Consultants and assessors will be appointed on the basis of their stated knowledge, education and experience but there are no such measures, relating to learning hours, in England and Northern Ireland.

**Potential delivery challenges**

**5.113**This point of observed practice has laudable goals but could be expensive to administer and would potentially duplicate existing measures surrounding professional body membership. The breadth of the assessment sector could also prove challenging in terms of outlining a preferred suite of qualifications. The practice could help to elevate professional expectations but could also be seen as a barrier to entry that could accentuate capacity issues.

<sup>229</sup> Environmental Assessment Practitioners of South Africa (2023) CPD [online]. Available at: <https://eapasa.org/site/>

<sup>230</sup> New Zealand Association for Impact Assessment (2023) Resources [online]. Available at: <https://www.nzaia.org.nz/resources.html>

<sup>231</sup> Impact Assessment Agency of Canada (2023) Training on Impact Assessment [online]. Available at: <https://iaac-aeic.gc.ca/014/index-eng.aspx>

<sup>232</sup> Impact Assessment Agency of Canada (2023) E-Learning Course [online]. Available at: [https://elearning.iaac-aeic.gc.ca/mod00/mod00\\_00\\_01-en.html](https://elearning.iaac-aeic.gc.ca/mod00/mod00_00_01-en.html)

<sup>233</sup> Governor’s Office of Planning and Research (2023) Getting Started with CEQA [online]. Available at: <https://opr.ca.gov/ceqa/getting-started/>

<sup>234</sup> Vlaanderen (2023) Recognition as EIA expert [online]. Available at: <https://www.vlaanderen.be/en/recognition-as-eia-expert>

Setting requirements with respect to the qualifications and level of experience that assessors require.						
Examples: Flanders, Belgium						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓		✓	✓	✓	✓

**Identified practice: Providing detailed guidance on the operation of assessment regimes.**

**5.114**The Ministry of Infrastructure and Water, in the Netherlands, provides a detailed EIA Procedure Manual<sup>235</sup> and Practical Guide<sup>236</sup>. Both are aimed towards a practitioner audience. New Zealand’s Quality Planning site explains all aspects of planning and makes the links to environmental assessment (**Figure 5.10**)

**Potential desirability for pursuing in England and Northern Ireland**

**5.115**Guidance can have an important role to play in describing process, clarifying terminology, and assisting with the interpretation of legislation. Although there are various types of guidance available to support the assessment regimes, the status of some of it is unclear. Specifically, it is important to reflect on whether it represents the latest position, whether it is suitably robust.

**5.116**Equally, there is also variation between guides designed to support the application of statutory systems, and between material that presents key ideas or practices more theoretically. Some of the guidance has become dated and needs refreshing while some items are hard to find. Much of the guidance also has no statutory weighting, such as that provided by IEMA. Some of guidance is only available to affiliated members or is hidden behind restricted firewalls. There is therefore potential for government-issued guidance to be expanded and to be targeted to particular user groups.

**Potential delivery challenges**

**5.117**In contrast to the practices described above, this could help to achieve similar goals surrounding quality and consistency but in a more cost-efficient way. There is potential

for additional guidance in places while there is potential scope to re-examine the balance between statutory and non-statutory guidance. There is also the potential to make guidance more engaging and user friendly, while preserving necessary accessibility requirements.

Providing detailed guidance on the operation of assessment regimes.						
Examples: The Netherlands						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Taking the opportunity to promote careers in planning, environmental management and assessment.**

**5.118**The Office of the Planning Regulator provides career advice alongside details of how planning is practised<sup>237</sup>. The website gives advice on how to become a planner, a list of the courses available at different universities, and a summary of where a graduate can work. There are also videos from those working in the sector. While the majority of the material relates to the broader planning sector, links are made to assessment practices.

**Potential desirability for pursuing in England and Northern Ireland**

**5.119**In addition to ensuring that assessment staff are suitably knowledgeable and skilled, there is also a need to ensure that the assessment sector is suitably staffed with an appropriate number of staff. Currently recruitment into the sector is promoted by universities and the respective professional bodies but there is scope for other groups and organisations to assist, including government agencies and departments.

**Potential delivery challenges**

**5.120**It is important to promote careers into the environment and planning sectors through as many channels as possible. Providing links on other websites associated with

<sup>235</sup> Ministry of Infrastructure and Water (2023) EIA Procedure Guide [online]. Available at: <https://www.infomil.nl/onderwerpen/integrale/mer/procedurehandleiding/>

<sup>236</sup> Ministry of Infrastructure and Water (2023) EIA Practice Guide [online]. Available at: <https://www.infomil.nl/onderwerpen/integrale/mer/praktijkhandreiking/>

<sup>237</sup> Office of the Planning Regulator (2023) Becoming a Planner [online]. Available at: <https://www.opr.ie/becoming-a-planner/>

environmental assessment could help to address broader capacity issues.

Taking the opportunity to promote careers in planning, environmental management and assessment.						
Examples: Ireland						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Giving competent authorities the power to authorise the appointment of impact assessors.**

**5.121**In South Africa, assessment staff need to be approved by the competent authority before they can be formally appointed<sup>238</sup>.

#### Potential desirability for pursuing in England and Northern Ireland

**5.122**There are no such expectations in England and Northern Ireland, although the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 do stipulate that Environmental Statements need to be prepared by competent staff. Consultants will typically need to demonstrate their knowledge and experience in advance of being appointed by clients, although people undertaking the work may differ from those who were initially identified.

#### Potential delivery challenges

**5.123**This practice is another route for promoting greater quality in assessment. While the intentions of such a practice are recognised, the scale of current assessment activity would place significant pressure on relevant competent authorities. It is unlikely they would have the capacity to respond in a timely fashion, potentially leading to delays and additional costs. Individual professional accreditation, alongside schemes such as IEMA's Quality Mark, would seem to represent a more cost effective response.

Giving competent authorities the power to authorise the appointment of impact assessors.
Examples: South Africa

Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓		✓	✓	✓	✓

**Identified practice: Establishing national or regional centres of excellence to help deliver critical mass, and greater visibility, to assessment-related research.**

**5.124**The Danish Centre for Environmental Assessment<sup>239</sup> has 18 team members, with the group comprising professors, associate professors, research fellows and PhD candidates. The centre contributes to the delivery of masters and bachelor-level academic programmes.

**5.125**The centre also delivers professional short-courses to a range of audiences. While some courses offer general introductions, certain courses are more specific and focus on such things as screening, assessing alternatives, and monitoring. Some courses are chargeable while others are free to access.

#### Potential desirability for pursuing in England and Northern Ireland

**5.126**A number of people across England and Northern Ireland, as well as the broader UK, are engaged in research linked to environmental assessment. The Environmental Assessment and Management Research Centre (at the University of Liverpool) and the School of Environmental Sciences (at the University of East Anglia) are notable examples. However, there is significant potential to grow these existing centres and to provide others elsewhere in the country. These centres can then become centres for research, teaching and professional development. Not only can they become national beacons, there is also significant potential for them to become international centres of excellences.

#### Potential delivery challenges

**5.127**As noted above, there are already centres of excellence in place but there is potential to strengthen their role and to introduce others to help extend their geographical spread. A mapping exercise to identify key academic commentators, and their affiliated institution, could be a useful start. Funding and process could be provided by UK Research and Innovation (UKRI). For example, UKRI has recently launched a scheme

<sup>238</sup> Environmental Assessment Practitioners Association (2023) Registration [online]. Available at: <https://eapasa.org/site/process/>

<sup>239</sup> The Danish Centre for Environmental Assessment (2023) About the Centre [online]. Available at:

<https://www.en.plan.aau.dk/research/the-danish-centre-for-environmental-assessment>

to designate a new centre of excellence for climate change and health in the UK.

Establishing national or regional centres of excellence to help deliver critical mass, and greater visibility, to assessment-related research.						
Examples: Denmark						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Making links between assessment practitioners and the local research communities.**

**5.128**In Flanders, engagement with environmental researchers is encouraged through the FRIS Research Portal<sup>240</sup> that lists regional researchers and their outputs. The environmental research database UFORDAT, provided by German Federal Environment Agency (UBA)- contains descriptions of environmentally relevant research and development projects from German-speaking countries (Germany, Austria, Switzerland)<sup>241</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.129**This study identifies some wide-ranging research strands that would benefit from being investigated. Building links between practitioners and the research community can potentially allow for these needs to be fulfilled.

**Potential delivery challenges**

**5.130**There is an active research community associated with environmental assessment. Some of these papers are collaboratively produced by academics and practitioners, a type of relationship that could be supported some more by establishing the type of links envisaged through this identified practice. The professional institutes, as well as bodies such as the IAIA, also play an important role in dissemination. The cost of making these links would be relatively low but impact could be significant.

Making links between assessment practitioners and the local research communities.						
Examples: Flanders and Germany						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Promoting the sharing of knowledge and experience through the development of communities of practice.**

**5.131**In Ireland, there is a National Reference Group<sup>242</sup> that brings a variety of stakeholders together to discuss pressing assessment matters.

**Potential desirability for pursuing in England and Northern Ireland**

**5.132**The professional bodies provide varying channels for communication and collaboration. The International Association for Impact Assessment (IAIA) also provide a suite of opportunities for networking and knowledge exchange. However, paid membership is typically required to secure access. There is potential to create a free to access and multidisciplinary support network specific to England and Northern Ireland.

**Potential delivery challenges**

**5.133**The professional bodies, as well as individual assessment organisations (such as the statutory consultees and consultancies), provide opportunities for knowledge sharing. The Local Government Association (LGA) also runs online specialist groups, at least in England. In addition to reviewing current provision, there would also be potential to give groups more structure, for instance by tasking them with specific activities.

Promoting the sharing of knowledge and experience through the development of communities of practice.						
Examples: Ireland						

<sup>240</sup> Flanders (2023) *FRIS Research Portal* [online]. Available at: <https://researchportal.be/en>

<sup>241</sup> Umwelt Bundesamt (2023) *Umweltforschungsdatenbank UFORDAT* [online]. Available at: <https://www.umweltbundesamt.de/themen/nachhaltigkeit-strategien->

[internationales/information-als-instrument/umweltforschungsdatenbank-ufordat](https://www.internationales/information-als-instrument/umweltforschungsdatenbank-ufordat)

<sup>242</sup> Office of the Planning Regulator (2023) *National Planning Knowledge Group* [online]. Available at: <https://www.opr.ie/research/>

Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

Figure 5.9: E-Learning Course in Canada

The screenshot shows the 'Impact Assessment Act' e-learning course interface. At the top, there is a navigation bar with 'Home', 'Help', 'Resources', 'Glossary', 'Menu', and 'Quit'. A 'Previous' button is highlighted in yellow, and a 'Next' button is visible. Below the navigation bar, a banner reads 'Welcome to the Overview of the Impact Assessment Act online training course'. The main content area includes a list of modules on the left, a central text block, and two informational boxes on the right. The first box, titled 'Who is this course for?', explains the target audience. The second box, titled 'Video Introduction', includes a thumbnail for a video titled 'Discover the Impact Assessment Agency of Canada'.

**Impact Assessment Act**

Home Help Resources Glossary Menu Quit

Previous 1 of 3 Next

Select the Next button to continue.

### Welcome to the *Overview of the Impact Assessment Act* online training course

The intent of the e-Learning course *Overview of the Impact Assessment Act* is to improve awareness and provide a common knowledge and base of skills in impact assessments.

This course contains 6 modules and a final quiz. Each module is designed to flow from one to the next, each building on material of the previous module. Use the Next button in the bottom right of the page to progress sequentially.

Select each heading to review the descriptions for each module.

- Module 1: Overview of the *Impact Assessment Act*
- Module 2: Impact Assessment Process, Phase 1 – Planning
- Module 3: Impact Assessment Process, Phase 2 – Impact Statement
- Module 4: Impact Assessment Process, Phase 3 – Impact Assessment
- Module 5: Impact Assessment Process, Phase 4 – Decision-making

This module will provide you with an overview of the *Impact Assessment Act* (IAA).

#### Who is this course for?

The e-Learning course *Overview of the Impact Assessment Act* will be offered to the federal government, Indigenous peoples, proponents, consultants, and the public involved or interested in federal impact assessments.

#### Video Introduction

Select the image below to view the Discover the Impact Assessment Agency of Canada video.

Discover the Impact Assessment Agency of Canada

Figure 5.10: Quality Planning

The screenshot shows the 'Quality Planning' website interface. The main header is 'Quality Planning' with the tagline 'The Quality Planning Resource'. A navigation menu includes 'PLAN MAKING', 'CONSENTING', 'MONITORING', 'ENFORCEMENT', and 'RELATED LAWS'. A search bar is located on the right. The main content area features a large image of a mountain landscape with a river. A green box highlights the text 'Monitoring Steps'. A 'READ MORE' button is visible. A sidebar on the right lists various stages of the consent process, including 'PRE-APPLICATION', 'RECEIPT OF AN APPLICATION', 'ASSESSING APPLICATION AND ENVIRONMENTAL EFFECTS', 'REQUESTING FURTHER INFORMATION', 'TO NOTIFY OR NOT', 'NOTIFIED AND LIMITED NOTIFIED RESOURCE CONSENT APPLICATIONS', 'NON NOTIFIED RESOURCE CONSENTS', 'RECOMMENDING THE DURATION AND LAPSE PERIOD', and 'MAKING A DECISION'.

# Quality Planning

The Quality Planning Resource

PLAN MAKING CONSENTING MONITORING ENFORCEMENT RELATED LAWS

SEARCH...

## Monitoring Steps

READ MORE

- CONSENT STEPS
- CONSENT SUPPORT
- PRE-APPLICATION
- RECEIPT OF AN APPLICATION
- ASSESSING APPLICATION AND ENVIRONMENTAL EFFECTS
- REQUESTING FURTHER INFORMATION
- TO NOTIFY OR NOT
- NOTIFIED AND LIMITED NOTIFIED RESOURCE CONSENT APPLICATIONS
- NON NOTIFIED RESOURCE CONSENTS
- RECOMMENDING THE DURATION AND LAPSE PERIOD
- MAKING A DECISION

https://qualityplanning.org.nz/consenting/consenting

12°C Light rain ENG 2



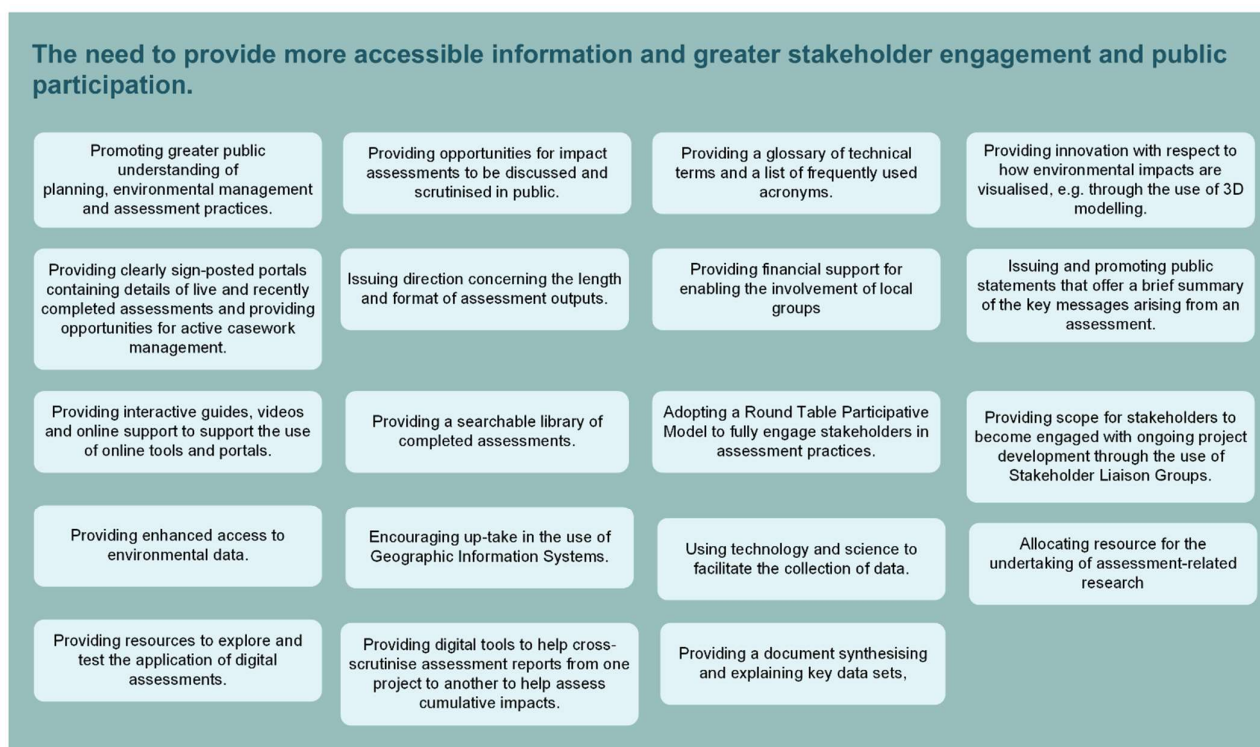
### The need to provide more accessible information and greater stakeholder engagement and public participation.

**5.134**The WSP report<sup>243</sup> notes how stakeholder engagement and public participation are core elements of SEA, EIA and HRA. It also notes how the three regimes also help to implement the requirements of the Aarhus Convention on 'Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters'<sup>244</sup>. The report describes a mixed picture with respect to the extent to which stakeholders become involved. Beyond a push towards the inclusion of more opportunities for engagement, the WSP reports identifies the need for earlier engagement, and the

better and more accessible provision of information. A need is also highlighted with respect to developing fresh approaches for resolving conflict and responding to potentially arising grievances.

**5.135**Figure 5.11 identifies the practices that have been identified to provide more accessible information and provide greater levels of stakeholder engagement and public participation. They are also shown through **Table 5.4** that provides an assessment of their desirability and their potential deliverability. As with previous objectives, we will now outline the practices that we identified and offer some explanation to the evaluations provided.

Figure 5.11: Identified practices to support the provision of more accessible information and greater stakeholder engagement and public participation.



<sup>243</sup> WSP (2023) *Analysis of the Environmental Assessment Regimes: England and Northern Ireland*.

<sup>244</sup> United Nations Economic Commission for Europe (1998) UNECE Convention on Access to Information, Public Participation in Decision-

making and Access to Justice in Environmental Matters (Aarhus Convention) [online]. Available at: <https://unece.org/environment-policy/public-participation/aarhus-convention/text>

**Table 5.4: Evaluation of the practices for providing more accessible information and greater stakeholder engagement and public participation.**

Identified practices	Potential desirability		Potential delivery challenges		Potential applicability to regime...		
	High	Low	Low	High	EIA	SEA	HRA
<b>The need to provide more accessible information and greater stakeholder engagement and public participation</b>							
Providing clearly sign-posted portals containing details of live and recently completed assessments and providing opportunities for active casework management	✓			✓	✓	✓	✓
Providing interactive guides, videos and online support to support the use of online tools and portals	✓		✓		✓	✓	✓
Providing enhanced access to environmental data	✓		✓		✓	✓	✓
Providing resources to explore and test the application of digital assessments	✓		✓		✓	✓	✓
Providing opportunities for impact assessments to be discussed and scrutinised in public		✓		✓	✓	✓	✓
Issuing direction concerning the length and format of assessment outputs		✓	✓		✓	✓	✓
Providing a searchable library of completed assessments		✓		✓	✓	✓	✓
Encouraging up-take in the use of Geographic Information Systems	✓		✓		✓	✓	✓
Providing digital tools to help cross-scrutinise assessment reports from one project to another to help assess cumulative impacts.	✓			✓	✓	✓	✓
Providing a glossary of technical terms and a list of frequently used acronyms	✓		✓		✓	✓	✓
Providing financial support for enabling the involvement of local groups		✓		✓	✓	✓	✓
Adopting a Round Table Participative Model to fully engage stakeholders in assessment practices		✓		✓	✓	✓	✓
Using technology and science to facilitate the collection of data.	✓			✓	✓	✓	✓
Providing a document synthesising and explaining key data sets	✓		✓		✓	✓	✓
Providing innovation with respect to how environmental impacts are visualised, e.g. through the use of 3D modelling	✓			✓	✓	✓	✓
Issuing and promoting public statements that offer a brief summary of the key messages arising from an assessment	✓		✓		✓	✓	✓
Providing scope for stakeholders to become engaged with ongoing project development through the use of Stakeholder Liaison Groups.	✓		✓		✓	✓	✓
Allocating resource for the undertaking of assessment-related research	✓		✓		✓	✓	✓

**Identified practice: Providing clearly sign-posted portals containing details of live and recently completed assessments and providing opportunities for active casework management.**

5.136 There is a portal in Victoria, Australia that provides information in a single location<sup>245</sup> (Figure 5.12). Although this is focused towards the state’s planning activity, it also makes links to assessment practices too. Environment Online, in Western Australia, provides automated case management, and an integrated data management system<sup>246</sup>. Its dashboard allows users to submit applications, to track their status, and provides an opportunity for users to view comments and access correspondence. In the USA, there is a website dedicated to the National Environmental Policy Act. While this includes information for a professional audience, it also includes a ‘Get Involved’ tab with information designed to encourage engagement<sup>247</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

5.137 Currently, details of live assessments and associated consultations are held on the individual websites of consenting authorities, rather than via a single depository. Although the Planning Inspectorate operate such a resource for Nationally Significant Infrastructure Projects, there could be an opportunity to create similar sites for other types of projects or assessments. Allowing project or plan proponents to see historic strands of guidance or advice will help to raise expectations and ensure common pitfalls are avoided through future schemes. Being able to access details of schemes close by will allow for mitigation strategies to be understood and for site-specific advice to be pre-empted.

**Potential delivery challenges**

5.138 Such a resource could double-up by providing the type of public guidance suggested above. Examples of such portals exist so further research could be undertaken to explore costs, not only with respect to initial site development but also in terms of ongoing management. If such a portal is able to easily ‘grab’ details from other sites then costs could be low. Costs would be high if monitoring, and the compilation of data, needs to be completed manually.

Providing clearly sign-posted portals containing details of live and recently completed assessments and providing opportunities for active casework management.

Examples: Victoria, Western Australia, the US						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Providing interactive guides, videos and online support to support the use of online tools and portals.**

5.139 Western Australia has developed some wide-ranging material, pitched to different audiences, to encourage engagement with Environment Online<sup>248</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

5.140 Websites typically give access to assessment material but are often provided with poor accompanying guidance. While online tools provide an opportunity for increased engagement, systems needs to be properly explained.

**Potential delivery challenges**

5.141 Desirability would be high in that a suite of different material would help to encourage engagement from a large suite of stakeholders. Bite-size videos would be particularly helpful. A variety of resources already exist and these could be brought together in a single place. The need for some bespoke elements would come at a cost, and there would also be a challenge of keeping material up to date.

Providing interactive guides, videos and online support to support the use of online tools and portals.						
Examples: Western Australia						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

<sup>245</sup> Victoria State Government (2023) VicPlan [online]. Available at: <https://mapshare.vic.gov.au/vicplan/>

<sup>246</sup> Western Australia (2023) Environment Online [online]. Available at: <https://environmentonline.dwer.wa.gov.au/interactive-map/>

<sup>247</sup> National Environmental Policy Act (2023) Welcome [online]. Available at: <https://ceq.doe.gov/#>

<sup>248</sup> Western Australia (2023) Guidance and Help Materials [online]. Available at: <https://environmentonline.dwer.wa.gov.au/knowledgebase/>

**Identified practice: Providing enhanced access to environmental data.**

**5.142** SYKE's Metadata Portal in Finland allows users to access a broad suite of data<sup>249</sup>. It includes descriptions of spatial datasets, earth observation products, data systems, research data, data related to environmental reporting as well as web map services and other interfaces and web map applications produced and maintained by Finnish Environmental Administration. The portal also includes information provided by other data producers. Similarly, the STATatlas in Austria allows site users to search for area data via a simple, yet visually engaging, map interface<sup>250</sup> (Figure 5.13). In Flanders, an online Environmental Checker allows applicants to research specific sites and to identify designations of note<sup>251</sup>. The Danish Environmental Portal is co-owned by national, regional and municipal government authorities<sup>252</sup>.

**5.143** Potential desirability for pursuing in England and Northern Ireland

**5.144** It is recognised that access to data is an important element for effective assessments. Data relating to the environment is readily available, for instance, via Defra's 'environmental statistics' page<sup>253</sup>. However, the extent to which this data is publicly visible remains questionable. Promoting greater access to data can potentially support greater engagement with assessment tools.

**Potential delivery challenges**

**5.145** There is already a suite of open source data available and the sophistication of tools to give access is growing. There is potential for a resource to better showcase links and to advise on different data-sets can be used. In addition to being desired, this resource could also be relatively easy to deliver.

Providing enhanced access to environmental data.		
Examples: Finland, Denmark, Flanders		
Potential desirability	Potential delivery challenges	Potential applicability to regime...

High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Providing resources to explore and test the application of digital assessments.**

**5.146** The DREAMS project<sup>254</sup> in Denmark has received money from a national innovation fund to explore practices surrounding digital assessment. The programme has buy-in from a range of stakeholders.

**Potential desirability for pursuing in England and Northern Ireland**

**5.147** There has been some innovative practice involving digital reporting but there is a desire, as shown through the government's digital planning agenda, to extend the possibilities. All assessments will have a digital presence, but many outputs are still formatted traditionally.

**Potential delivery challenges**

**5.148** Many of the key partners who are involved with assessment are innovating at the scale of their own organisation, and in some cases, is being developed to help promote business distinctiveness. However, there is potential for the pooling of ideas, with research partners taking a supportive role.

Providing resources to explore and test the application of digital assessments.						
Examples: Denmark						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Providing opportunities for impact assessments to be discussed and scrutinised in public.**

**5.149** The Canadian Impact Assessment Act 2019 allows for the Minister to refer an impact assessment to a review panel

<sup>249</sup> Finnish Environment Institute (2023) SYKE's Metadata Portal [online]. Available at: <https://www.syke.fi/en-US/Services>

<sup>250</sup> Statistik Austria (2023) Statatlas [online]. Available at: <https://www.statistik.at/atlas/>

<sup>251</sup> Vlaanderen (2023) Omgevingsloket.be [online]. Available at: <https://omgevingsloketpubliek.omgeving.vlaanderen.be/?omgeving>

<sup>252</sup> Danmarks Miljøportal (2023) Danmarks Miljøportal [online]. Available at: <https://miljoportal.dk/english/>

<sup>253</sup> Defra (2023) Statistics at Defra [online]. Available at: <https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/statistics>

<sup>254</sup> DREAMS Project (2023) Dreams [online]. Available at: <https://dreamsproject.dk/>

where he or she considers it would be in the public interest to do so<sup>255</sup>.

### Potential desirability for pursuing in England and Northern Ireland

**5.150** The outputs of an assessment are often tested, for example via a Local Plan examination that will test the robustness of a range of matters, including the underlying SA/SEA. Extending this scrutiny to other scenarios could have potential.

### Potential delivery challenges

Providing opportunities for impact assessments to be discussed and scrutinised in public.						
Examples: Canada						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓		✓	✓	✓	✓

### Identified practice: Issuing direction concerning the length and format of assessment outputs.

**5.151** In the state of California, page limits are prescribed through legislation. Page limits are specified in the NEPA Council on Environmental Quality Regulations, 40CFR 1502. Simple EAs are directed to be approximately 10-15 pages and be completed in 3 months or less; complex EAs should be complete in 75 pages or less<sup>[1]</sup> (excluding appendices), and be undertaken within 180 days.

**5.152** Similarly, §1502.7 deals with the page limits of EIAs and states how the text of final EISs shall normally be less than 150 pages and, for proposals of unusual scope or complexity, shall normally be less than 300 pages<sup>256</sup>.

### Potential desirability for pursuing in England and Northern Ireland

**5.153** The need to prepare succinct and suitably relevant assessments is recognised good practice but the length and

complexity of documents is a regular area of concern. There is limited guidance to outline expectations.

### Potential delivery challenges

**5.154** It is unclear whether the identified practice of using page limits is effective. There is also a risk that material is placed in detailed appendices. Since the nature of assessments will inevitably vary, placing constraint on length could lead, in places, to matters being considered in only limited depth. The desirability of imposing word or page limits is therefore considered low, but the issuing of guidance about effective writing practice would be helpful. Costs surrounding this would likely to be low.

Issuing direction concerning the length and format of assessment outputs.						
Examples: United States						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓	✓		✓	✓	✓

### Identified practice: Providing a searchable library of completed assessments.

**5.155** In Austria, *strategischeumweltpruefung* hosts a collection of recently completed SEA projects<sup>257</sup>. The US Environmental Protection Agency hosts a Environmental Impact Statement (EIS) Database that provides information about EISs prepared by federal agencies, as well as EPA's comments concerning the EISs. The database<sup>258</sup> records all EISs received by the EPA since 1987; all EPA comment letters on EISs since 2001; and PDF versions of EISs received by the EPA since October 2012.

### Potential desirability for pursuing in England and Northern Ireland

**5.156** Assessment documents are stored in a variety of locations. This material will vary in its status and will include both draft and final reports. Although documents will tend to be stored on the website of either a proponent, assessor or

<sup>255</sup> Impact Assessment Agency of Canada (2023) *The Impact Assessment Process: Timelines and Outputs* [online]. Available at: <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/the-impact-assessment-process-timelines-and-outputs.html>

<sup>256</sup> Gov.info (2023) *NEPA Council on Environmental Quality Regulations* [online]. Available at: <https://www.govinfo.gov/content/pkg/CFR-2012-title40-vol34/pdf/CFR-2012-title40-vol34-sec1502-7.pdf>

<sup>257</sup> Umweltbundesamt (2023) *Strategische Umweltprüfung* [online]. Available at: <https://www.umweltbundesamt.at/umwelthemen/uvpsup/sup>

<sup>258</sup> United States EPA (2023) *Environmental Impact Statement (EIS) Database* [online]. Available at: <https://cdxapps.epa.gov/cdx-enepa-ll/public/action/eis/search>

decision maker but there is scope to provide a single depository of material. Drawing out good-practice examples would be potentially helpful.

**Potential delivery challenges**

**5.157** There would be questions about how many assessments would need to be made available and for what purpose. Would the database help to showcase good practice or provide a mechanism to support monitoring. There would be a lot of material to bring together and the scale of this could be off-putting to certain audiences such as the public. In addition to high set-up costs (at least for a comprehensive response), further time and money would be required for monitoring.

Providing a searchable library of completed assessments.						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓		✓	✓	✓	✓

**Identified practice: Encouraging up-take in the use of Geographic Information Systems.**

**5.158** In Ireland, a manual has been issued to encourage the use of GIS in SEA assessment<sup>259</sup>. Also, in Ireland, the Environmental Protection Agency has a WebGIS Search Tool for accessing SEA<sup>260</sup>s. There is also an Appropriate Assessment GeoTool to help select a location, specify a search area and gather available information for each European Site present<sup>261</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.159** GIS is an important and active element of assessment, although there are uncertainties surrounding its active use and adoption across the methodologies and between the various stakeholders involved.

**Potential delivery challenges**

**5.160** GIS is already used to support and inform the three assessment regimes and clearly there is potential for GIS analysis to provide more informed thinking as systems

become more sophisticated. Specific ways of encouraging uptake would need to be scoped but some kind of guide may not be too significant with respect to cost.

Encouraging up-take in the use of Geographic Information Systems.						
Examples: Ireland						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Providing digital tools to help cross-scrutinise assessment reports from one project to another to help assess cumulative impacts.**

**5.161** The CAUSA project in Denmark is seeking to synthesise the results, and arising actions, from thousands of EA reports and relevant research projects via a public platform<sup>262</sup>. CAUSA will provide users with an overview of how similar activities in a specific geography were assessed, and provide information about impacts and associated mitigation measures.

**Potential desirability for pursuing in England and Northern Ireland**

**5.162** The need to consider cumulative impact is an important element of the existing assessment regimes operating in England and Northern Ireland. The extent to which similar tools are used domestically is unknown.

**Potential delivery challenges**

**5.163** There is significant potential for the digital sharing of project attributes, as well as mitigation features, to support endeavours for assessing cumulative impact. The case for taking action is clear but the prevalence of existing tools is unknown. Developing and testing advanced tools would potentially be costly.

<sup>259</sup> Irish Environmental Protection Agency (2023) *GISEA Manual - Improving the Evidence Base in SEA* [online]. Available at: <https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/gisea-manual---improving-the-evidence-base-in-sea.php>

<sup>260</sup> Irish Environmental Protection Agency (2023) *WebGIS Search Tool* [online] <https://gis.epa.ie/EPAMaps/>

<sup>261</sup> Irish Environmental Protection Agency (2023) *GeoTool* [online]. Available at: <https://gis.epa.ie/EPAMaps/AAGeoTool>

<sup>262</sup> Dreams Project (2023) CAUSA Project [online]. Available at: <https://dreamsproject.dk/>

Providing digital tools to help cross-scrutinise assessment reports from one project to another to help assess cumulative impacts.						
Examples: Denmark						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Providing a glossary of technical terms and a list of frequently used acronyms.**

**5.164**The Irish EPA provides tools to help encourage engagement, such as a list of commonly acronyms and an extensive glossary<sup>263</sup>. The Impact Assessment Agency of Canada offers a similar glossary<sup>264</sup>. The Dutch government offers a glossary to support its reform programme<sup>265</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.165**Confusing and off-putting terminology can discourage engagement and generate confusion. Although assessment documents will tend to provide a glossary of terms, there is potential for a central list to be provided. The Planning Portal offers a similar list for planning terms, at least in England.

**Potential delivery challenges**

**5.166**As with above, this type of unpacking already exists and would come at a lower cost to prepare than the resources described above.

Providing a glossary of technical terms and a list of frequently used acronyms.						
Examples:						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Providing financial support for enabling the involvement of local groups**

**5.167**Canada operates a Participant Funding Programme that provides an opportunity for local groups (who might be affected by the proposal, have expert knowledge about the affected area or have insight about potential impacts) to be reimbursed for their engagement activity<sup>266</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.168**Engagement with stakeholders and the general public can be difficult to initiate. There are often wide-ranging reasons for this but financial cost is often one. Providing financial assistance can potentially enable residents and other groups to become active.

**Potential delivery challenges**

**5.169**The rationale for such a practice is clear but there would be challenges over how the money is distributed since an element of allocation would be needed. Auditing would represent challenge while costs would be high, particularly for extended assessments. Payment may not necessarily over-turn the other barriers surrounding engagement.

Providing financial support for enabling the involvement of local groups						
Examples: Canada						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
	✓		✓	✓	✓	✓

**Identified practice: Adopting a Round Table Participative Model to fully engage stakeholders in assessment practices.**

<sup>263</sup> Office of the Planning Regulator (2023) *Glossary* [online]. Available at: <https://www.opr.ie/technical-glossary/>

<sup>264</sup> Impact Agency of Canada (2023) *Glossary of Key Terms* [online]. Available at: <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/glossary-of-terms.html>

<sup>265</sup> Leefomgeving (2023) *Glossary* [online]. Available at: <https://iplo.nl/regelgeving/begrippenlijst-regelgeving/begrippenlijst/?Bgrldt=188754>

<sup>266</sup> Impact Assessment Agency of Canada (2023) *Participant Funding Program* [online]. Available at: <https://www.canada.ca/en/impact-assessment-agency/services/public-participation/funding-programs/participant-funding-program.html>

**5.170** This approach has been effectively used in Austria with respect to Viennese waste management, although it was some time since it was initiated<sup>267</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.171** Providing early opportunities for engagement can be beneficial to both the process and outputs of the assessment regimes. While methods to facilitate this engagement vary, adopting the type of round-table model used in Austria could help to promote continuity and sustain engagement.

**Potential delivery challenges**

**5.172** This particular practice had only been sparingly used. While there might be potential to extend the methodology to certain plans or projects, the challenge to deliver would be high. The desire to encourage greater engagement is valid however.

Adopting a Round Table Participative Model to fully engage stakeholders in assessment practices.						
Examples: Austria						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Using technology and science to facilitate the collection of data.**

**5.173** In Australia, Tern has received significant investment from the government to use innovative tools for the collection and analysis of environmental data (for example, by using DNA sequencing to help identify species) and adopting technical modelling to assist with the assessment of cumulative effects<sup>268</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.174** The collection and synthesise of environmental data is a key part of the assessment process and any measure to support access is likely to be beneficial. A range of similar resources are also available in England and Northern but

there is potential to benchmark and assess against international comparators.

**Potential delivery challenges**

**5.175** The observed practice was certainly innovative but the application of DNA sequencing across England and Northern Ireland is unknown. This could be investigated, together with the use of other forms of technology (such as drones and hand-held data collection tools). Costs and broader deliverability challenges would vary depending on the level of innovation but the respective parts of the sector could allow for some of the costs to be taken on.

Using technology and science to facilitate the collection of data.						
Examples: Australia						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Providing a document synthesising and explaining key data sets.**

**5.176** The Irish EPA has produced an inventory of key environmental data sets. The inventory comprises an Excel spreadsheet with hyperlinks to available data<sup>269</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.177** The use of wide-ranging, and up to date data, is an important element for assessment activity. Data sources will be listed in assessment outputs, while resources like the Office for National Statistics, together with Open Data Northern Ireland and data.gov.uk, allow for relevant data to be found and used. However, a simple list of data sources relevant to a typical assessment would be useful, if such a resource does not currently exist.

**Potential delivery challenges**

**5.178** Overarching guidance may already exist, and individual data sets will also come with explanations concerning use. Creating a resource could be relatively easy to produce, but

<sup>267</sup> Arbter, K. (2019) SEA in Austria and the participative SEA Round Table model, *Impact Assessment and Project Appraisal*, 37:3-4, 188-198, DOI: 10.1080/14615517.2018.1562690

<sup>268</sup> TERN (2021) Next-gen DNA Sequencing for Improved Environmental Impact Assessments [online]. Available at: <https://www.tern.org.au/news-sequencing-pilbara-plants/>

<sup>269</sup> Irish Environmental Protection Agency (2023) Open Data Portal [online]. Available at: <https://data.epa.ie/about/>



care (and cost) would need to be applied to ensure that the details remain up to date.

Providing a document synthesising and explaining key data sets.						
Examples:						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Providing innovation with respect to how environmental impacts are visualised, e.g. through the use of 3D modelling.**

**5.179**The Environmental Protection Department in Hong Kong experimented with the use of 3D modelling about 10 years ago, although this practice has now stopped<sup>270</sup>.

**Potential desirability for pursuing in England and Northern Ireland**

**5.180**Securing successful engagement often requires the use of a series of different tools, with some being more appealing to some groups than others. Using 3D tools can potentially allow for projects and plans to be examined more thoroughly through a format that can potentially elevate interest.

**Potential delivery challenges**

Providing innovation with respect to how environmental impacts are visualised, e.g. through the use of 3D modelling.						
Examples: Hong Kong						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Issuing and promoting public statements that offer a brief summary of the key messages arising from an assessment.**

**5.181**Environment and Climate Change Canada publishes a public statement that summarises the assessment undertaken<sup>271</sup>. These statements, which tend to be less than 500 words, are published online in one defined location.

**Potential desirability for pursuing in England and Northern Ireland**

**5.182**Feeding back on assessment processes helps to sustain buy-in and promote greater confidence in assessment methodologies. Providing a succinct and simply phrased statement can potentially support such an objective.

**Potential delivery challenges**

**5.183**This practice was considered to be a simple way of communicating about assessment practice and the succinctness of the final product had attraction. Such a statement would help to provide closure and would be a low cost activity. Such a statement could be provided locally, for instance where other assessment material is stored, or a via a single depository.

Issuing and promoting public statements that offer a brief summary of the key messages arising from an assessment.						
Examples:						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Providing scope for stakeholders to become engaged with ongoing project development through the use of Stakeholder Liaison Groups.**

**5.184**Liaison groups are encouraged by Hong Kong's Environmental Protection Department and are often required as a condition of permitting<sup>272</sup>. For example, the Hong Kong Offshore LNG has such a group.

<sup>270</sup> Environmental Protection Department [nd] *Examples of Electronic Visualizations of the Major Findings and Elements of the EIA Reports* [online]. Available at: <https://www.epd.gov.hk/eia/3d/index.html>  
<sup>271</sup> E.g. Impact Assessment Agency of Canada (2023) *Government of Canada Approves Lynn Lake Gold Project* [online]. Available at:

<https://iaac-aeic.gc.ca/050/evaluations/document/146836?culture=en-CA>  
<sup>272</sup> Hong Kong Environmental Protection Department (2023) *Partnership* [online]. Available at: <https://www.epd.gov.hk/epd/misc/ehk03/eng/partner/index.html>

**Potential desirability for pursuing in England and Northern Ireland**

**5.185**This practice is another way of securing the type of engagement discussed above. Such groups are already in use but there is potential to expand their application.

**Potential delivery challenges**

**5.186**This is a variation on the practice above and is already used in different contexts in England and Northern Ireland. It might not be applicable to all assessments, but would be desirable for those covering certain plans or projects. Promoting their voluntary use could support effective practice. Costs would be dependent on frequency and the number of stakeholders involved.

Providing scope for stakeholders to become engaged with ongoing project development through the use of Stakeholder Liaison Groups.						
Examples: Austria						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

Allocating resource for the undertaking of assessment-related research.						
Examples: Ireland						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Allocating resource for the undertaking of assessment-related research**

**5.187**In Ireland, under Section 31Q of the Planning and Development Act, the Office of the Planning Regulator (OPR) has a statutory remit to conduct research. A National Planning Knowledge Group brings together a wide-range of stakeholders to identify research strands

**Potential desirability for pursuing in England and Northern Ireland**

**5.188**Funding for research comes through a variety of channels and there is already an established and active group of scholars engaged in assessment-related research. However, should large-scale reform be advanced, there would be a need for further research activity to further explore some of the issues and findings arising from this study.

**Potential delivery challenges**

**5.189**There are clearly many items and matters that would warrant research and providing more formal commitments to ensure this would be welcome. Potential costs would be variable and could be achieved by re-defining existing funding streams.

Figure 5.12: Vic Plan

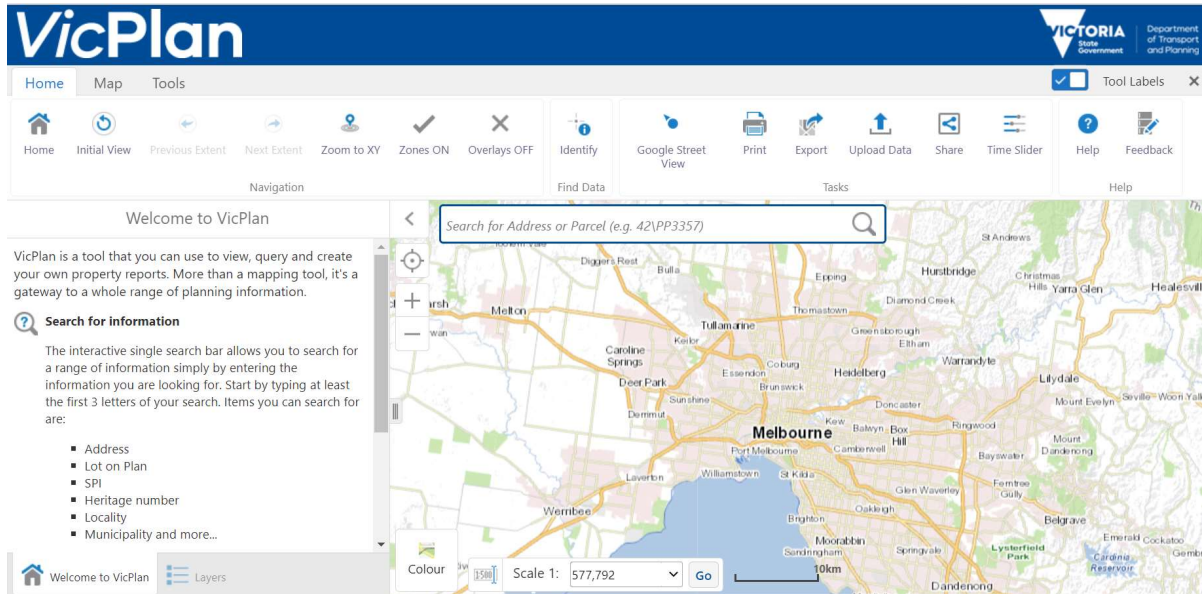
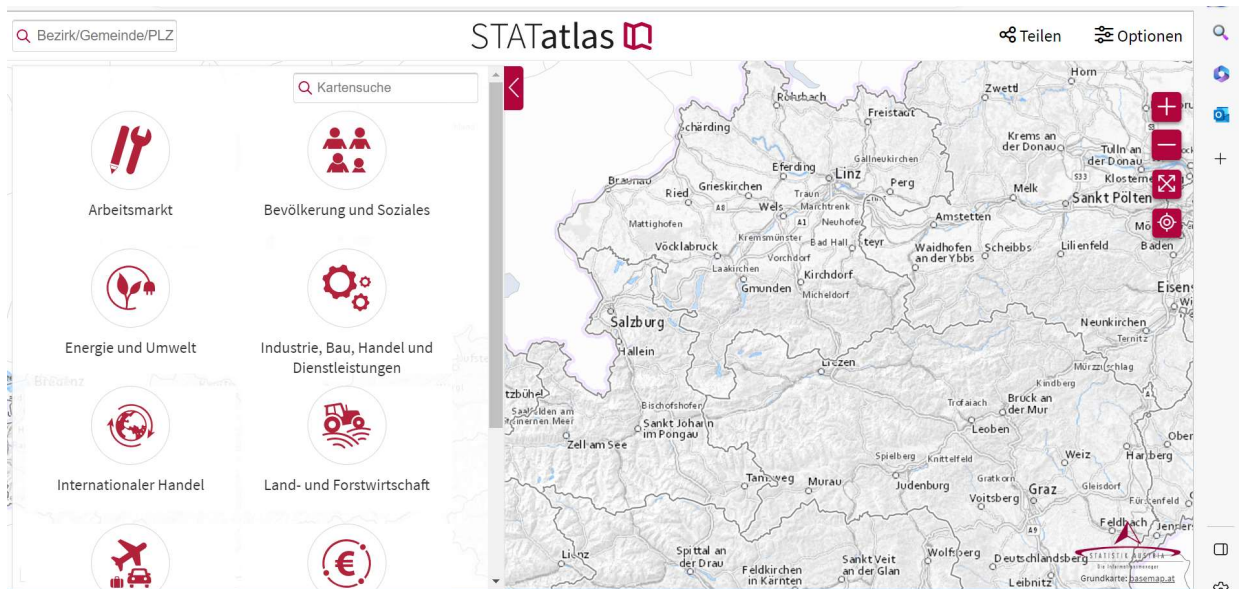


Figure 5.13: StatAtlas



### The need to consider alternative solutions for delivering environmental betterment over environmental protection

**5.190**The WSP report<sup>273</sup> refers to a criticism of the existing regimes, in that assessment practices have operated during a timescale during which the state of nature has declined. Although alternative reasons are provided, such as the impacts arising from agriculture and urbanisation, the WSP report does acknowledge that the existing regimes are often too focussed on ‘damage limitation’, rather than encouraging ‘enhancement’. This is explained on the basis that the assessment regimes do not set targets, but instead, monitor against existing laws and legislation. The regimes therefore reflect the requirement set out in other pieces of legislation and policy, which themselves are focused on protection rather than enhancement.

**5.191**While accepting the potential for pursuing environmental outcomes, the WSP report explains that this does not automatically require the development of new and alternative assessment models. Rather, the report recommends that the government consider the different options through which the pursuit of environmental outcomes can be articulated and embedded through the existing assessment regimes.

**5.192**Figure 5.14 provides an overview of the practices that have been identified for delivering environmental betterment over environmental protection. They are also shown through Table 5.5 that provides an assessment of their desirability and their potential deliverability. As with previous objectives, we will now outline the practices that we identified and offer some explanation to the evaluations provided.

Figure 5.14: Identified practices for delivering environmental betterment over environmental protection.



Table 5.5: Evaluations of the practices identified for delivering environmental betterment over environmental protection

Identified practices	Potential desirability		Potential delivery challenges		Potential applicability to regime...		
	High	Low	Low	High	EIA	SEA	HRA
The need to consider alternative solutions for delivering environmental betterment over environmental protection							
Developing a public Environmental Offsets Register	✓			✓	✓	✓	✓
Providing guidance on environmental off-setting	✓		✓		✓	✓	✓
Legislating for environmental off-setting	✓			✓	✓	✓	✓

<sup>273</sup> WSP (2023) *Analysis of the Environmental Assessment Regimes: England and Northern Ireland*.

**Identified practice: Developing a public Environmental Offsets Register.**

**5.193** Western Australia has developed a central, publicly accessible record for all offset agreements in Western Australia<sup>274</sup>. It has been designed to promote transparency and accountability. There is also an environmental offsets metric, including calculator.

**Potential desirability for pursuing in England and Northern Ireland**

**5.194** There are registers for biodiversity off-setting so there is potential to explore how these compare with their international counterparts.

**Potential delivery challenges**

**5.195** Registers for biodiversity off-setting are already appearing and provide clear opportunities for effective information to be disseminated. However, they can sometimes be hard to find. Desirability is therefore high with cost likely to be dependent on the format of how they are displayed.

Developing a public Environmental Offsets Register.						
Examples: Western Australia						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Identified practice: Providing guidance on environmental off-setting.**

**5.196** Western Australia has developed guidance for supporting environmental off-setting<sup>275</sup>. The document seeks to ensure that the basis for decision-making on environmental offsets is understood and consistently applied. The guidelines apply to all biodiversity offsets required as a condition of Western Australian environmental approval processes.

**Potential desirability for pursuing in England and Northern Ireland**

**5.197** There is always potential for more refined and constructive guidance to ensure relevant stakeholders are fully informed about the opportunities available to them. It is important, however, for guidance to be properly sign-posted and kept up to date.

**Potential delivery challenges**

**5.198** Providing additional guidance would be a cost-effective intervention, particularly if the guidance is able to draw from existing examples in place. Attention will need to be given to ensuring the guidance is kept up to date. Promotional activities will be needed to ensure visibility.

Providing guidance on environmental off-setting.						
Examples: Western Australia						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓		✓		✓	✓	✓

**Identified practice: Legislating for environmental off-setting.**

**5.199** The 2022 Finnish Nature Conservation Act includes specific measures relating to ecological compensation<sup>276</sup>. The legislation is based on the present Nature Conservation Act, which has been updated and new provisions and entirely new chapters are also proposed to be included in the Act. These include provisions on voluntary ecological compensation, threatened habitats, management of data on the natural environment, and national biodiversity strategy and action programme. Climate change adaptation is also included in the objectives of the Act.

**Potential desirability for pursuing in England and Northern Ireland**

**5.200** Expectations surrounding biodiversity net gain, and environmental off-setting, have been elevated in recent years. Its pursuit can be achieved via a multiple of channels, with

<sup>274</sup> Government of Western Australia (2023) *Environmental offsets* [online]. Available at: <https://www.wa.gov.au/service/environment/environmental-impact-assessment/environmental-offsets#:~:text=The%20Government%20of%20Western%20Australia%20Environmental%20Offsets%20Register.is%20to%3A%20facilitate%20transparency%20and%20accountability%20of%20offsets>

<sup>275</sup> Government of Western Australia (2023) *Guidelines for Environmental offsets* [online]. Available at: <https://www.wa.gov.au/service/environment/environmental-impact-assessment/environmental-offsets>

<sup>276</sup> Finnish Government (2023) *Government gave proposal for new Nature Conservation Act* [online]. Available at: <https://valtioneuvosto.fi/en/-/1410903/government-gave-proposal-for-new-nature-conservation-act>

legislation being one possible route. There is potential to review current provision and compare with legislative counterparts.

**Potential delivery challenges**

**5.201**The level of challenge will ultimately depend upon the type of legislation considered necessary and whether it can be pursued by amending any existing legislation. Relevant stakeholders will need to be given an opportunity to contribute, while an appropriate amount of transition will be needed to ensure the legislation meets its intended goals.

Legislating for environmental off-setting.						
Examples: Finland						
Potential desirability		Potential delivery challenges		Potential applicability to regime...		
High	Low	Low	High	EIA	SEA	HRA
✓			✓	✓	✓	✓

**Summary**

**5.202**Table 5.6 provides a summary of the identified practices. As this Chapter has shown, international practices can generate many alternative ideas and many of those showcased above could potentially provide a positive contribution to the objectives for improvement set out. In reflecting upon delivery, issues of context are evident, either with respect to supporting the idea or presenting a possible challenge

Table 5.6: Summary of identified measures.

Identified practices	Potential desirability		Potential delivery challenges		Potential applicability to regime...		
	High	Low	Low	High	EIA	SEA	HRA
<b>The need for earlier, more integrated, environmental assessment</b>							
Using an independent body to help provide timely and focused advice.	✓			✓	✓	✓	✓
Exploring strategies for cost recovery through assessment activity.	✓		✓		✓	✓	✓
Providing clearer guidance with respect to screening procedures.	✓			✓	✓	✓	✓
Using tools to help give greater certainty to screening decisions.		✓		✓	✓	✓	✓
Exploring organisational structure with respect to the management of assessment regimes.	✓			✓	✓	✓	✓
Exploring the potential use for 'landscape-scale' strategic agreements with respect to strategic sites.		✓	✓		✓	✓	✓
Introducing requirements for the formal review of assessment outputs.	✓		✓		✓	✓	✓
Requiring the submission of screening requests to an independent body.		✓		✓	✓	✓	✓
Providing tools to support effective project management.	✓		✓		✓	✓	✓
Providing contact information for key personnel.	✓		✓		✓	✓	✓
Appointing panels of experts to ensure there is an accessible pool of skill and expertise.	✓			✓	✓	✓	✓
Requiring mandatory scoping.		✓		✓	✓	✓	✓
Hosting an online portal to assist with the exchange of assessment correspondence.	✓			✓	✓	✓	✓
Providing greater prescription with respect to the undertaking of assessments.	✓			✓	✓	✓	✓
Providing regional / sub-regional teams to act as the first point of contact for assessment activities.		✓		✓	✓	✓	✓

The need for a greater focus on monitoring, mitigation and enforcement							
Appointing independent staff to monitor and enforce the application of, and adherence with, mitigation and conditions.	✓			✓	✓	✓	✓
Publicly releasing monitoring and environmental audit results.	✓		✓		✓	✓	✓
Imposing a requirement to prepare an 'Implementation Schedule', to help cross-tabulate an environmental issue with a defined mitigatory action.	✓		✓		✓	✓	✓
Administering a publicly accessible conditions proforma to document how and when conditions have been discharged.	✓		✓		✓	✓	✓
Administering a publicly accessible complaints log to help raise concerns about the implementation of a project, for instance where mitigation is not being applied as expected.	✓		✓		✓	✓	✓
Developing statutory third-party standing rights, enabling eligible third parties to seek civil remedies for contravening environmental legislation.		✓		✓	✓	✓	✓
Providing scope for stakeholders, including the general public, to be directly involved in monitoring and mitigation activities.	✓		✓		✓	✓	✓



The need for provision of improved skills, information and capacity							
Mandatory practitioner registration for impact assessment staff.		✓		✓	✓	✓	✓
Legislating to prioritise the advancement of research, education and training.		✓	✓		✓	✓	✓
Providing an extended range of training and support.	✓		✓		✓	✓	✓
Setting requirements with respect to the qualifications and level of experience that assessors require.		✓		✓	✓	✓	✓
Providing detailed guidance on the operation of assessment regimes.	✓		✓		✓	✓	✓
Taking the opportunity to promote careers in planning, environmental management and assessment.	✓		✓		✓	✓	✓
Giving competent authorities the power to authorise the appointment of impact assessors.		✓		✓	✓	✓	✓
Establishing national or regional centres of excellence to help deliver critical mass, and greater visibility, to assessment-related research.	✓		✓		✓	✓	✓
Making links between assessment practitioners and the local research communities.	✓			✓	✓	✓	✓
Promoting the sharing of knowledge and experience through the development of communities of practice.	✓		✓		✓	✓	✓

The need to provide more accessible information and greater stakeholder engagement and public participation							
Providing clearly sign-posted portals containing details of live and recently completed assessments and providing opportunities for active casework management.	✓			✓	✓	✓	✓
Providing interactive guides, videos and online support to support the use of online tools and portals.	✓		✓		✓	✓	✓
Providing enhanced access to environmental data.	✓		✓		✓	✓	✓
Providing resources to explore and test the application of digital assessments.	✓		✓		✓	✓	✓
Providing opportunities for impact assessments to be discussed and scrutinised in public.		✓		✓	✓	✓	✓
Issuing direction concerning the length and format of assessment outputs.		✓	✓		✓	✓	✓
Providing a searchable library of completed assessments.		✓		✓	✓	✓	✓
Encouraging up-take in the use of Geographic Information Systems.	✓		✓		✓	✓	✓
Providing digital tools to help cross-scrutinise assessment reports from one project to another to help assess cumulative impacts.	✓			✓	✓	✓	✓
Providing a glossary of technical terms and a list of frequently used acronyms.	✓		✓		✓	✓	✓
Providing financial support for enabling the involvement of local groups.		✓		✓	✓	✓	✓
Adopting a Round Table Participative Model to fully engage stakeholders in assessment practices.		✓		✓	✓	✓	✓
Using technology and science to facilitate the collection of data.	✓			✓	✓	✓	✓
Providing a document synthesising and explaining key data sets.	✓		✓		✓	✓	✓
Providing innovation with respect to how environmental impacts are visualised, e.g. through the use of 3D modelling.	✓			✓	✓	✓	✓
Issuing and promoting public statements that offer a brief summary of the key messages arising from an assessment.	✓		✓		✓	✓	✓
Providing scope for stakeholders to become engaged with ongoing project development through the use of Stakeholder Liaison Groups.	✓		✓		✓	✓	✓
Allocating resource for the undertaking of assessment-related research.	✓		✓		✓	✓	✓
The need to consider alternative solutions for delivering environmental betterment over environmental protection							
Developing a public Environmental Offsets Register.	✓			✓	✓	✓	✓
Providing guidance on environmental off-setting.	✓		✓		✓	✓	✓
Legislating for environmental off-setting.	✓			✓	✓	✓	✓

# Chapter 6

## Our conclusions

### Research focus

**6.1** This project has responded to the following research question:

***What can be learnt for improving the implementation and effectiveness of HRA, EIA and SEA in England and NI by making comparisons with and using examples from other jurisdictions outside the UK?***

**6.2** It has also responded to two research objectives:

- To explore whether there is explicit reference to the pursuit of 'environmental outcomes' through international impact assessment regimes.
- To identify whether there are aspects of the international application of impact assessment that could potentially address the perceived deficiencies of EIA, SA/SEA and HRA as operated across England and Northern Ireland.

***What can be learnt for improving the implementation and effectiveness of HRA, EIA and SEA in England and NI by making comparisons with and using examples from other jurisdictions outside the UK?***

**6.3** Clearly the study has shown that a lot can be learnt by looking at practice elsewhere. This is not surprising since comparative practice, and the application of external benchmarking, has been shown to form part of effective policy making. The identified practices demand reflection and could be pursued in a variety of ways. Some of the practices would certainly lead to improvement and would help to respond to the identified deficiencies of the three regimes. The implementation of some will be more complex than others but some of the simplest could be adopted relatively easily.

**6.4** However, the exercise has also shown that the regimes we currently have should not be dismissed or taken for granted. Fundamentally, while there are elements where improvements can be made, all of the three regimes have credibility and provide environmental protection in different ways.

**6.5** Crucially, through the literature on effectiveness and best-practice, the UK is often highlighted as a place where things are generally working well. In other words, England and Northern Ireland, as well as the other nations of the UK, contain elements of best practice themselves. The innovation and reputation of the environment sector as a whole has helped to make these services valuable for export.

**6.6** It is important to note that our research did not intend to assess the effectiveness of the chosen regimes within the selected jurisdiction. While this clearly would have been interesting and useful, the size of the task would have been significant and would have exceeded the time and resources of this project. However, in reviewing the literature, as well as jurisdiction-specific information, it is clear that none of the regimes are 'perfect' with respect to their operation. Imperfections inevitably vary, but there is certainly an element of commonality with respect to identified deficiencies, with current or recent reform programmes drawing from a similar suite of arguments.

**6.7** Fortunately, there appears to be an appetite for reviewing practice, with some regimes regularly assessing how their system has been performing. For example, effectiveness of the Dutch EIA regime was independently examined in both 2020 and 2022. Similarly, in Ireland, examinations were undertaken in both 2012 and 2020 to assess SEA effectiveness, with identified deficiencies being targeted through subsequent action plans<sup>277</sup>. Indeed, the first review led to the establishment of a National SEA Forum, consisting of the SEA statutory authorities across Ireland, to help open up channels for further dialogue and improvement.

**6.8** Membership of the EU also provided a mechanism for review via the REFIT commitment<sup>278</sup>, with some effective solutions being found in response. Fortunately, the environmental assessment community is a collegiate one and there are many actors who collectively seek, and are committed to finding solutions. The similarities across regimes help to achieve this, providing possibilities for successes and elements of best-practice to be selected and cherry-picked. In

some ways, this is what this project has done but doing so will be much more challenging if the UK's regimes become markedly different to the global 'normal' moving forward.

**To explore whether there is explicit reference to the pursuit of 'environmental outcomes' through international impact assessment regimes.**

**6.9** The term 'environmental outcomes' is not prevalent within the literature but it was picked up in relation to the legislative reform being pursued in New Zealand and in the Netherlands. The term was also being used in the Australian states of Victoria and Western Australia. As Chapter Four noted, terminology varied, with 'environmental outcomes' often being used alongside 'environmental values'.

**6.10** The reform currently occurring in New Zealand is of particular interest and is certainly live with consultation, at the Committee Stage of Parliament, having only just been completed. The consultation exercise has seen a wide-range of stakeholders become involved and a detailed analysis of their consultation responses would be a useful exercise. While there generally seems to be support, the push for appropriate resourcing stands out. There are also some interesting debates about the number of outcomes and whether some need to be prioritised over others. Many have raised concerns at the lack of an outcome linked to amenity and the quality of the built environment quality. Ensuring there is local distinctiveness within nationally set outcomes is also seen as being challenging.

**6.11** Although New Zealand's Bill includes a core focus towards the pursuit of environmental outcomes, there is still an effects management system built in which continues to emphasise the need for avoiding, removing and mitigating impacts. The interplay between this effects-based system with the pursuit of outcomes has generated some concern at how both systems will work together. They may sit equally together but there are concerns that the outcomes-based system will take priority, leading to potential environmental impacts arising. Although there are elements of the legislation that seem quite confused, there is a strong desire for getting a workable system. As Emeritus Professor Richard Morgan has noted:

<sup>277</sup> Environmental Protection Agency (2023) *Reviews of SEA Effectiveness* [online]. Available at: <https://www.epa.ie/our-services/monitoring--assessment/assessment/strategic-environmental-assessment/reviews-of-sea-effectiveness-/#:~:text=Second%20review%20of%20SEA%20effectiveness%20in%20Ireland%20A,UCD%2C%20in%20collaboration%20with%20RPS%20and%20Levett-Therivel%20consultants.>

<sup>278</sup> European Commission (2023) REFIT – making EU law simpler, less costly and future proof [online]. Available at: [https://commission.europa.eu/law/law-making-process/evaluating-and-improving-existing-laws/refit-making-eu-law-simpler-less-costly-and-future-proof\\_en](https://commission.europa.eu/law/law-making-process/evaluating-and-improving-existing-laws/refit-making-eu-law-simpler-less-costly-and-future-proof_en)

*“Legislative provisions do not guarantee good practice, but poor provisions make good practice much harder to achieve”<sup>279</sup>*

**6.12** New Zealand’s proposed suite of legislation covers many different elements and sectors, including planning and economic development. The legislation has also been drafted in response to New Zealand’s context, both with respect to governance and its social and community foundations. It is also responsive to the power structures and political agendas that are present in New Zealand. So, while there is much we can reflect upon, we also need to be mindful of limitations too and avoid the temptation of attempting to import one regime from one jurisdiction to another.

**To identify whether there are aspects of the international application of impact assessment that could potentially address the perceived deficiencies of EIA, SA/SEA and HRA as operated across England and Northern Ireland.**

**6.13** As we have shown, looking beyond England and Northern Ireland provides exposure to a multitude of different practices with respect to the implementation of EIA, SEA and HRA. Some of these practices are equivalent or similar to what we have in England and Northern Ireland, particularly with respect to the European jurisdictions studied. This is unsurprising given the UK’s recent connection with the European Union and its associated Directives but there is also an element of familiarity when considering practice beyond the EU. The conventions mentioned in Chapter Two have also played a role in promoting similar practices.

**6.14** Our focus has been on identifying practice that might offer something better than what we have at the moment. With this in mind, there are certainly some desirable practices in the **54** that we presented through **Figure 5.1**. It is worth noting, however, that the majority relate to how the regimes are operationalised and resourced, rather than anything specific with respect to how the underlying legislation has been constructed. Consequently, flaws in the underlying legislation could be potentially overcome with good organisation and resource.

**6.15** There is commonality in the use of language across the regimes and jurisdictions, and those involved in assessment, irrespective of their location, seem to share similar commitments and values. In other words, there are definable national and international communities of practice who, between them, possess considerable knowledge about the successes and challenges of their respective system (the International Association for Impact Assessment, IAIA, is a

noteworthy example). The literature, together with the exchanges we have had with external international contacts, shows there is a good deal of consensus about what needs to be done to deliver greater effectiveness. However, many of these actions are dependent on resources, structures and policy directions that extend beyond their influence.

**6.16** The **54 practices** identified vary in terms of their desirability and the extent to which they could be delivered in an England and Northern Ireland context. Delivery challenges were largely aligned to the perceived availability of resource. We acknowledge that some of the identified practices may actually be happening in England and Northern Ireland already since our focus has been predominantly set to exploring international experience. If that is the case, then some additional investigation of these practices would also be useful.

**6.17** As we have expressed through our consideration of environmental outcomes, a series of options exist with respect to delivering change. While major legislative reform could be one way through which these practices are brought forward, it is not the only way. Indeed, the pursuit of environmental outcomes could be delivered under the terms of the current legislation, but with revised guidance and support. Regardless of what options become available, it will be important to ensure risks, timescales and resource demands are properly considered.

**To consider the role of contextual factors in supporting or inhibiting the application of identified international good practice to England and Northern Ireland.**

**6.18** There was some considerable deliberation with respect to the jurisdictions we opted to study. Our short-list should not be seen as exclusionary to other practices in other parts of the world since many of these will also generate some important learning points. We must also acknowledge the fact that even within our selected jurisdictions, some interesting practices will have been missed. This is certainly likely where differences occur across different states and regions.

**6.19** We have highlighted the importance of context throughout. While the jurisdictions we chose had similar levels of context, there are clearly differences and caution is obviously needed in any translation of practice. This was shown in the discussion at the end of Chapter Four since while we spoke about the pursuit of environmental outcomes, there are different contextual factors to those that exist across the UK.

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<sup>279</sup> Response by Emeritus Professor Richard Morgan to the Natural and Built Environment Bill on behalf of the New Zealand Association for Impact Assessment (NZAIA), February 2023.

## Limitations

**6.20 Time.** At the start of the commission, details surrounding the proposed reform were limited to the outline of powers provided via the LURB. Since then, and particularly following the release of the EOR consultation document, further details have come forward. While there are still many questions, there is now greater clarity as to what is being proposed. Had we started the research now, there would have been greater potential to refine the scope of the research to explore and identify international comparators to some of the ideas being pitched. However, it also recognised that starting the research now would have limited the ability of the team to generate insight to help inform the EOR consultation that is now live.

**6.21 Selection.** Chapter Three explains our approach to selecting the chosen jurisdictions. While we are ultimately pleased with the cases that we chose, on the basis of the practices that we have since observed, the short-listing process was a challenging one. Essentially, while the intention was to choose those jurisdictions that were using 'environmental outcomes' as a term, our initial research returned few hits. While Chapter Four does contain examples, these were not immediately apparent and were only returned with more detailed scrutiny of legislation and guidance.

**6.22** As noted through Chapter Three, particular reflection was required to determine the selection of particular states and / or regions. While the team tried to scope a number of options, the making of the decision was often difficult.

**6.23 The challenge of language.** Given the language constraints of the team, the research has been skewed towards those jurisdictions where English has been the dominant or predominant language. While the academic literature was available in English, legislation and guidance was often written in the native language of the jurisdiction. Internet browsers offered some translation, but is acknowledged that certain nuances may have become blurred. The interchangeable use, at least in the Netherlands, between 'environmental outcomes' and 'environmental values' was interesting. A re-run of literature searches using this phrase might have generated additional hits.

**6.24 The scale of material.** The above challenge was accentuated by the volume of material accompanying each regime, with evidence coming in the form of academic literature, legislation and guidance. The role and interplay of this was often unclear to begin with, particularly as some regimes were undergoing reform. Consequently, for some jurisdictions and regimes, it was necessary to look at both adopted and proposed systems.

## Next steps

**6.25** There are a number of additional steps that could be taken to progress the research. Specifically, it is felt that there is potential to:

- **Undertake additional research to explore particular elements of the proposed EOR consultation.** For example, paragraph 3.2 refers to the financing of assessment regimes and mentions the role for cost recovery. Exploring international practices with regards to this, from within the pool of selected regimes and jurisdictions, would be useful.
- **Further engage with some of the international experts to explore some of their comments in additional detail.** This might be useful to further test some of the identified practices included through Chapter Five. While the response rate was generally good, with about a third of the contacted experts replying, there would be merit in making additional contact with the experts from within New Zealand, the Netherlands, Western Australia and Victoria.
- **Track the ongoing progression of the reforms being pursued in New Zealand, the Netherlands and Western Australia.** It will be particularly helpful to monitor ongoing stakeholder engagement to identify areas of potential concern or opportunity. Making contact with key actors within these jurisdictions and regimes would be particularly helpful.

**Appendix A**  
**Summary of perceived  
deficiencies**

Appendix A1: Identified deficiencies (39 Essex)

Regime	Environmental Impact Assessment (EIA)	Strategic Environmental Assessment (SEA)	Habitats Regulations Assessment (HRA)
<b>Identified issues</b>	<ul style="list-style-type: none"> <li>■ Legislative complexity</li> <li>■ The over-use of discretionary judgements</li> <li>■ The challenge of salami-slicing [where a large project is broken down into smaller projects to avoid being assessed)</li> <li>■ Assessing cumulative effects can be challenging</li> <li>■ Assessing indirect effects can be challenging</li> <li>■ There are variations in the quality of information.</li> <li>■ There is an excessive amount of information included in ESs</li> <li>■ A lack of skills and expertise</li> <li>■ Procedural weaknesses, e.g. the inaccessibility of EIA documents</li> </ul>	<ul style="list-style-type: none"> <li>■ Uncertainty as to scope</li> <li>■ Inadequate consideration of alternatives</li> <li>■ The poor timeliness of assessments</li> <li>■ Variations in administrative and cultural practices</li> <li>■ Potential lack of flexibility by the courts.</li> <li>■ Poor availability of skills and expertise</li> </ul>	<ul style="list-style-type: none"> <li>■ Insufficient review and enforcement by the courts</li> <li>■ Challenges of establishing necessary dialogue.</li> <li>■ Variation in evidence and methodologies.</li> <li>■ The sequencing of decisions.</li> <li>■ The scope of the regime</li> </ul>



Appendix A2: Long list table of identified requirements in response to identified issues per regime (as presented by WSP, Table 10.2<sup>280</sup>)

Environmental Impact Assessment	Strategic Environmental Assessment	Habitats Regulations Assessment
<ul style="list-style-type: none"> <li>■ Proportionality: slim-lining a process, whose growth in complexity and product has served no clear benefits and has disincentivised use;</li> <li>■ Improved scoping, involving more early assessment and engagement to support better allocation of resource and attention on the important issues;</li> <li>■ Weak link between EIA and environmental decline;</li> <li>■ Skills and confidence: more explicit requirements, standards and competence in EIA and the mechanisms to deliver these;</li> <li>■ Getting better and productive engagement with stakeholders and the public in order to secure good environmental outcomes;</li> <li>■ Post-consent: poor assurance of commitments to environmental performance of the implemented scheme; and</li> <li>■ Little emphasis or incentive for maximising environmental benefits and gains.</li> </ul>	<ul style="list-style-type: none"> <li>■ Clearer and stronger requirement for SEA and definitions of the plans and programmes that trigger this requirement;</li> <li>■ Bolder scoping that focuses on data and issues that are likely to be significant, and disregards those that are not;</li> <li>■ Generation and assessment of thought out and clearly articulated alternatives. Ensuring effective coverage of alternatives means that these don't need to be revisited at the EIA stage;</li> <li>■ Use of more comprehensive spatial evidence base to provide consistent data sets;</li> <li>■ Assessment -Baseline-led or objectives-led assessment? Integration of wider assessment processes under SEA/SA;</li> <li>■ Better integration of SEA/SA into the plan making it is intended to report. Examples include use of the environmental evidence base and plan-makers to respond to explicit recommendations made by the SA/SEA;</li> <li>■ More effective stakeholder engagement through more accessible information and bespoke events;</li> <li>■ Implementation – monitoring and tiering; and</li> <li>■ Skills and Resources.</li> </ul>	<ul style="list-style-type: none"> <li>■ Clarification of legal terminology and processes;</li> <li>■ Making existing data readily available and user friendly;</li> <li>■ Making site-specific advice more accessible in one place;</li> <li>■ Basing scientific judgements on a clearer framework of evidence;</li> <li>■ Allowing for earlier consideration of avoidance or mitigation measures; and</li> <li>■ Ensuring earlier expert engagement to increase LPA confidence in scientific evidence.</li> </ul>

<sup>280</sup> WSP (2023) *Analysis of the Environmental Assessment Regimes: England and Northern Ireland*, Table 10.1

## **Appendix B**

### **List of general references**

## List of references

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### Future practice debates

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## **Appendix C**

### **Contextual information about the short-listed jurisdictions**

## Contextual Summary of the Selected Jurisdictions

### Data sources:

Population / area / Population density / Urban population: <https://www.sng-wofi.org/country-profiles/>  
 GDP per capita / Forest area: <https://databank.worldbank.org/>  
 CO2 emission estimates (million tons per capita) / Threatened species: data.un.org  
 % of terrestrial and inland waters protected: <https://www.protectedplanet.net/>  
 Number of protected areas and other effective area-based (ecological) conservation measures: <https://www.protectedplanet.net/>  
 Date of commencement for EIA / SEA regulations: <https://www.eia.nl/en/topics/esia-sea/introduction2>  
 Government type / Constitution / Legal system: <https://www.cia.gov/the-world-factbook/>  
 Democracy Index: Economist Intelligence: <https://pages.eiu.com> (Score 1 to 10, with 10 being considered most democratic).  
 Governance structure: <https://www.sng-wofi.org/country-profiles/>

Country	Context				Governance structure:
Austria	<b>Population (2021):</b> 8,956,279	<b>CO2 emission estimates (million tons per capita):</b> 7.1	<b>Threatened species:</b> 188	<b>Government type:</b> federal parliamentary republic	<b>Governance structure:</b> The Austrian federal system comprises two tiers of subnational governments: states (Länder) and municipalities (Gemeinden). There are 9 states (Bundesländer) including Vienna  There are 2,093 municipalities, including 15 statutory cities (Statutarstädte), 186 urban municipalities (excluding statutory cities), 771 market towns and the remaining being small municipalities. The statutory cities have a special statute, gathering the power and responsibilities of a municipality and an administrative district. The average size of a municipality is 4,313 inhabitants.
	<b>Area (2018):</b> 83 879 km <sup>2</sup>	<b>Urban population:</b> 59% of national population (2022)	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 1,668	<b>Constitution:</b> several previous; latest adopted 1 October 1920, revised 1929, replaced May 1934, replaced by German Weimar constitution in 1938 following German annexation, reinstated 1 May 1945	
	<b>Population density:</b> 106 inhabitants / km <sup>2</sup>	<b>Forest area (% of land area):</b> 47.3	<b>Date EIA was introduced:</b> 1994	<b>Legal system:</b> civil law system; judicial review of legislative acts by the Constitutional Court	
	<b>GDP per capita (US\$, 2021):</b> 49,700	<b>% of terrestrial and inland waters protected:</b> 29.5%	<b>Date SEA was introduced:</b> 1994	<b>Democracy rating (ranking):</b> 8.07 (=20)	
Australia	<b>Population (2021):</b> 25,739,256	<b>CO2 emission estimates (million tons per capita):</b> 15.3	<b>Threatened species:</b> 1,773	<b>Government type:</b> federal parliamentary democracy under a constitutional monarchy; a Commonwealth realm	<b>Governance structure:</b> There are <b>6 states</b> and <b>2 federal territories</b> .  Each state has its own constitution and has its own parliament. Each parliament has a lower and upper house with directly elected representatives (except for Queensland, which has only one chamber).  Across the six states and the Northern Territory, there are <b>537</b> local government units. In the Australian Capital Territory, local government responsibilities are managed by a departments of the territory's government. The average size of a municipality is 47,951 inhabitants.
	<b>Area (2018):</b> 7 741 220 km <sup>2</sup>	<b>Urban population:</b> 86.2% of national population	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 11,149	<b>Constitution:</b> approved in a series of referenda from 1898 through 1900 and became law 9 July 1900, effective 1 January 1901	
	<b>GDP per capita (US\$, 2021):</b> 59,934.1	<b>Forest area (% of land area):</b> 17.4%	<b>Date EIA was introduced:</b> 1989	<b>Legal system:</b> common law system based on the English model	
	<b>Population density:</b> 3 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 20.36%	<b>Date SEA was introduced:</b> 1999	<b>Democracy rating (ranking):</b> 8.90 (9=)	

Belgium	<b>Population (2021):</b> 11,847,338	<b>CO2 emission estimates (million tons per capita):</b> 8.1	<b>Threatened species:</b> 70	<b>Government type:</b> federal parliamentary democracy under a constitutional monarchy	<b>Governance structure:</b>  There are three layers of subnational government: <b>6 federated entities</b> (including <b>3 regions</b> and <b>3 communities</b> ), <b>10 provinces</b> and <b>581 municipalities</b> .  The <b>Flemish Region</b> ( <i>Vlaams Gewest</i> ) represents 44% of the Belgian territory and 57.7% of its population, while the <b>Walloon Region</b> ( <i>Région Wallonne</i> ) accounts for 55% of the area and 31.8% of the population. The <b>Brussels capital region</b> ( <i>Région de Bruxelles-Capitale</i> ) accounted for 0.53% of Belgian territory but 10.6% of the total population in 2020. The three communities cut across the regions.  The average size of a municipality ( <i>communes, gemeenten</i> ) is 19, 890 inhabitants.
	<b>Area (2018):</b> 30,528 sq km	<b>Urban population:</b> 98.1% of national population (2020)	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 2,256	<b>Constitution:</b>	
	<b>GDP per capita (US\$, 2021):</b> 51,700	<b>Forest area (% of land area):</b> 22.8	<b>Date EIA was introduced:</b> 1984	<b>Legal system:</b>	
	<b>Population density:</b> 384.2 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 15.5%	<b>Date SEA was introduced:</b> 2004	<b>Democracy rating (ranking):</b> 7.51 (36)	
Canada	<b>Population (2021):</b> 38.005 million	<b>CO2 emission estimates (million tons per capita):</b> 15.2	<b>Threatened species:</b> 180	<b>Government type:</b> federal parliamentary democracy (Parliament of Canada) under a constitutional monarchy; a Commonwealth realm; federal and state authorities and responsibilities regulated in constitution	<b>Governance structure:</b>  Canada is a federal state with two levels of subnational government: the provincial/territorial level with <b>10 provinces</b> and <b>3 territorial governments</b> . The three territories – Nunavut, the Northwest Territories and Yukon – account for 0.3% of Canada's population but approximately 40% of Canada's surface area. The largest province by population is Ontario (that has 38% of the country's population), followed by Quebec (23% of the country's population). These two provinces, together with British Columbia, have a multi-tiered local government system, with a regional tier with some authority over local authorities.  At the municipal level there are <b>3,905 local authorities</b> .
	<b>Area (2018):</b> 9 879 750 km <sup>2</sup>	<b>Urban population:</b> 81.6% of national population (2020)	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 9,899	<b>Constitution:</b> consists of unwritten and written acts, customs, judicial decisions, and traditions dating from 1763; the written part of the constitution consists of the Constitution Act of 29 March 1867, which created a federation of four provinces, and the Constitution Act of 17 April 1982	
	<b>GDP per capita (US\$, 2021):</b> 52,051.4	<b>Forest area (% of land area):</b> 38.7%	<b>Date EIA was introduced:</b> 1990	<b>Legal system:</b> common law system except in Quebec, where civil law based on the French civil code prevails	
	<b>Population density:</b> 4 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 12.71%	<b>Date SEA was introduced:</b> 1990	<b>Democracy rating (ranking):</b> 8.87 (12=)	

Denmark	<b>Population (2021):</b> 5,856,733	<b>CO2 emission estimates (million tons per capita):</b> 4.9	<b>Threatened species:</b> 82	<b>Government type:</b> parliamentary constitutional monarchy	<b>Governance structure:</b>  Denmark has a two-tier system of local government. There is a regional scale that comprises <b>5 regions</b> : Region Hovedstaden, Region Midtjylland, Region Nordjylland, Region Sjælland, and Region Syddanmark. Nordjylland is the largest by population.  There are <b>98 municipalities (kommuner)</b> . The average size is <i>59,591 inhabitants</i> .
	<b>Area (2018):</b> 42 924 km <sup>2</sup>	<b>Urban population:</b> 88.1% of national population (2020)	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 1,088	<b>Constitution:</b> several previous; latest adopted 5 June 1953	
	<b>GDP per capita (US\$, 2021)</b> 67,803.0	<b>Forest area (% of land area):</b> 15.7	<b>Date EIA was introduced:</b> 1989	<b>Legal system:</b> civil law; judicial review of legislative acts	
	<b>Population density:</b> 136 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 16.97%	<b>Date SEA was introduced:</b> 1993	<b>Democracy rating (ranking):</b> 9.09 (6=)	
Finland	<b>Population (2021):</b> 5,541,696	<b>CO2 emission estimates (million tons per capita):</b> 7.5	<b>Threatened species:</b> 62	<b>Government type:</b> parliamentary republic	<b>Governance structure:</b>  There are two levels in the subnational system of Finland. At the regional level, there are <b>21 counties</b> and <b>1 autonomous region</b> (Åland Islands). There are <b>309 municipalities (Kuntaa)</b> at the local level. The average size of a municipality is 17,851 inhabitants.
	<b>Area (2018):</b> 338 420 km <sup>2</sup>	<b>Urban population:</b> 85.5% of national population (2020)	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 17,801	<b>Constitution:</b> previous 1906, 1919; latest drafted 17 June 1997, approved by Parliament 11 June 1999, entered into force 1 March 2000	
	<b>GDP per capita (US\$, 2021):</b> 53,982.6	<b>Forest area (% of land area):</b> 73.7	<b>Date EIA was introduced:</b> 1994	<b>Legal system:</b> civil law system based on the Swedish model	
	<b>Population density:</b> 16 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 13.4%	<b>Date SEA was introduced:</b> 1994	<b>Democracy rating (ranking):</b> 9.27 (3=)	
Germany	<b>Population (2021):</b> 83,129,285	<b>CO2 emission estimates (million tons per capita):</b> 7.9	<b>Threatened species:</b> 205	<b>Government type:</b> federal parliamentary republic	<b>Governance structure:</b>  Sub-national government in Germany comprises of a three-tier system, comprising of <b>16 states</b> (Länder), <b>400 districts</b> (Kreise) and <b>10 789 municipalities</b> (Gemeinden). The average size of a municipality is 10,789 inhabitants.
	<b>Area (2018):</b> 357 588 km <sup>2</sup>	<b>Urban population:</b> 79.8% of national population (2020)	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 23,207	<b>Constitution:</b> previous 1919 (Weimar Constitution); latest drafted 10-23 August 1948, approved 12 May 1949, promulgated 23 May 1949, entered into force 24 May 1949	
	<b>GDP per capita (US\$, 2021)</b> 50,801.8	<b>Forest area (% of land area):</b> 32.7	<b>Date EIA was introduced:</b> 1991	<b>Legal system:</b> civil law system	
	<b>Population density:</b> 233 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 37.59%	<b>Date SEA was introduced:</b> 2004	<b>Democracy rating (ranking):</b> 8.67 (15=)	



Hong Kong	<b>Population (2021):</b> 7,413,100	<b>CO2 emission estimates (million tons per capita):</b> 5.7	<b>Threatened species:</b> 92	<b>Government type:</b> presidential limited democracy; a special administrative region of the People's Republic of China	<b>Governance structure:</b> <b>Territorial Level 2 (TL2):</b>
	<b>Area (2018):</b> 1,108 sq km	<b>Urban population:</b> 100% of national population	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 104	<b>Constitution:</b> several previous (governance documents while under British authority); latest drafted April 1988 to February 1989, approved March 1990, effective 1 July 1997 (Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China serves as the constitution); note - since 1990, China's National People's Congress has interpreted specific articles of the Basic Law	<b>Territorial Level 3 (TL3):</b>
	<b>GDP per capita (US\$, 2021):</b> 49,660.6	<b>Forest area (% of land area):</b> <i>No data available</i>	<b>Date EIA was introduced:</b> 1989	<b>Legal system:</b> mixed legal system of common law based on the English model and Chinese customary law (in matters of family and land tenure); PRC imposition of National Security Law incorporates elements of Chinese civil law	
	<b>Population density:</b> 6,746.73 / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 41.88%	<b>Date SEA was introduced:</b> 1989	<b>Democracy rating (ranking):</b> 5.60 (85)	
Ireland	<b>Population (2021):</b> 5,028,230	<b>CO2 emission estimates (million tons per capita):</b> 6.8	<b>Threatened species:</b> 84	<b>Government type:</b> parliamentary republic	<b>Governance structure:</b>
	<b>Area (2018):</b> 70 280 km <sup>2</sup>	<b>Urban population:</b> 63.7% of national population (2020)	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 823	<b>Constitution:</b> previous 1922; latest drafted 14 June 1937, adopted by plebiscite 1 July 1937, effective 29 December 1937	Ireland has a single tier of subnational government composed of <b>31 county and city councils</b> . These comprise 26 county councils, 3 city councils, 2 city and county councils. The average size of a municipality is 161 097 inhabitants.
	<b>GDP per capita (US\$, 2021):</b> 99,152.1	<b>Forest area (% of land area):</b> 11.4	<b>Date EIA was introduced:</b> 1999	<b>Legal system:</b> common law system based on the English model but substantially modified by customary law; judicial review of legislative acts by Supreme Court	
	<b>Population density:</b> 71 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 14.43%	<b>Date SEA was introduced:</b> 2004	<b>Democracy rating (ranking):</b> 9.00 (7)	

Netherlands	<b>Population (2021):</b> 17,533,405	<b>CO2 emission estimates (million tons per capita):</b> 8.2	<b>Threatened species:</b> 75	<b>Government type:</b> parliamentary constitutional monarchy; part of the Kingdom of the Netherlands	<b>Governance structure:</b> Sub-national government in the Netherlands comprises <b>12 provinces</b> (Provinces) and <b>352 municipalities</b> (Gemeenten). The subnational tier also includes a functional layer at the regional level, comprising the Dutch water authorities (Waterschappen).  The average size of a municipality is 49,548 inhabitants.
	<b>Area (2018):</b> 41 540 km <sup>2</sup>	<b>Urban population:</b> 92.2% of national population (2020)	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 462	<b>Constitution:</b> many previous to adoption of the "Basic Law of the Kingdom of the Netherlands" on 24 August 1815; revised 8 times, the latest in 1983	
	<b>GDP per capita (US\$, 2021):</b> 58,061.0	<b>Forest area (% of land area):</b> 11.0	<b>Date EIA was introduced:</b> 1987	<b>Legal system:</b> civil law system based on the French system; constitution does not permit judicial review of acts of the States General	
	<b>Population density:</b> 420 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 22.47%	<b>Date SEA was introduced:</b> 1987	<b>Democracy rating (ranking):</b> 8.88 (11)	
New Zealand	<b>Population (2021):</b> 5,122,600	<b>CO2 emission estimates (million tons per capita):</b> 6.5	<b>Threatened species:</b> 265	<b>Government type:</b> parliamentary democracy under a constitutional monarchy; a Commonwealth realm	<b>Governance structure:</b> New Zealand has a two-tier system of subnational government. It has 16 regions, comprising <b>11 regional councils</b> and five others that are administered by territorial authorities (city or district councils) who also perform the functions of regional councils (e.g. Auckland Council, Tasman District Council, Nelson City Council, etc.). There are <b>67 territorial authorities</b> which include city councils (12), district councils (54), and unitary authorities (6). City councils are predominantly urban-based and have a population of more than 50 000, while district councils have a smaller and more widely dispersed population.  The average size of a municipality is 75,885 inhabitants.
	<b>Area (2018):</b> 267 710 km <sup>2</sup> (2018)	<b>Urban population:</b> 86.7% of national population	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 10,149	<b>Constitution:</b> New Zealand has no single constitution document; the Constitution Act 1986, effective 1 January 1987, includes only part of the uncodified constitution; others include a collection of statutes or "acts of Parliament," the Treaty of Waitangi, Orders in Council, letters patent, court decisions, and unwritten conventions	
	<b>GDP per capita (US\$, 2021):</b> 48,801.7	<b>Forest area (% of land area):</b> 37.6	<b>Date EIA was introduced:</b> 1991	<b>Legal system:</b> common law system, based on English model, with special legislation and land courts for the Maori	
	<b>Population density:</b> 19 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 33.4%	<b>Date SEA was introduced:</b> 1991	<b>Democracy rating (ranking):</b> 10.00 (2)	
Norway	<b>Population (2021):</b> 5.379 million	<b>CO2 emission estimates (million tons per capita):</b> 4.9	<b>Threatened species:</b> 118	<b>Government type:</b> parliamentary constitutional monarchy	<b>Governance structure:</b> Norway has a two-tier subnational government system, composed of <b>356 municipalities</b> ( <i>Kommuner</i> ) and <b>11 counties</b> ( <i>Fylkeskommuner</i> ) with no hierarchical link. The city of Oslo is both a county and a municipality.
	<b>Area (2018):</b> 62 5 222 km <sup>2</sup>	<b>Urban population (% of land area):</b> 83.0% of national population	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 3,918	<b>Constitution:</b> drafted spring 1814, adopted 16 May 1814, signed by Constituent Assembly 17 May 1814	
	<b>GDP per capita (US\$, 2021):</b> 89,202.8	<b>Forest area (% of land area):</b> 33.4%	<b>Date EIA was introduced:</b> 1990	<b>Legal system:</b> mixed legal system of civil, common, and customary law; Supreme Court can advise on legislative acts	
	<b>Population density:</b> 7 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 30.52%	<b>Date SEA was introduced:</b> 1995	<b>Democracy rating (ranking):</b> 1 (1)	

South Africa	<b>Population (2021):</b> 60,041,996	<b>CO2 emission estimates (million tons per capita):</b> 7.4	<b>Threatened species:</b> 792	<b>Government type:</b> parliamentary republic	<b>Governance structure:</b> South Africa is a quasi-federal state that is divided into three spheres of government (Section 41 of the Constitution). The first layer consists of <b>9 provinces</b> and these cover the whole country. Across these provinces there are <b>257 municipalities</b> , comprising <b>8 metropolitan municipalities, 205 local municipalities, and 44 district municipalities</b> . The metropolitan municipalities operate in a single-tier system, while the district and local municipalities operate alongside each other in a two-tier system.
	<b>Area (2018):</b> 1 219 090 km <sup>2</sup>	<b>Urban population:</b> 67.4% of national population	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 1,663	<b>Constitution:</b> several previous; latest drafted 8 May 1996, approved by the Constitutional Court 4 December 1996, effective 4 February 1997	
	<b>GDP per capita (US\$, 2021):</b> 6,994.2	<b>Forest area (% of land area):</b> 14.1%	<b>Date EIA was introduced:</b> 1997	<b>Legal system:</b> mixed legal system of Roman-Dutch civil law, English common law, and customary law	
	<b>Population density:</b> 49 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 9.26%	<b>Date SEA was introduced:</b> 1998	<b>Democracy rating (ranking):</b> 7.05 (44)	
USA	<b>Population (2021):</b> 331,893,745	<b>CO2 emission estimates (million tons per capita):</b> 7.5	<b>Threatened species:</b> 62	<b>Government type:</b> constitutional federal republic	<b>Governance structure:</b> The United States federal structure is composed of <b>50 state governments</b> (plus the federal capital, the District of Columbia). The largest state, by population, is California, followed by Texas, Florida, New York and Pennsylvania. Each state determines their own system of local government, including the number of governmental units, territorial organisation and their respective powers. Together there are <b>3,031 counties</b> at the intermediary level and <b>35,748 municipalities</b> . The average size of a municipality is 9,135 inhabitants.
	<b>Area (2018):</b> 9 831 510 km <sup>2</sup>	<b>Urban population:</b> 82.7% of national population	<b>Number of protected areas and other effective area-based (ecological) conservation measures:</b> 42,826	<b>Constitution:</b> previous 1781 (Articles of Confederation and Perpetual Union); latest drafted July - September 1787, submitted to the Congress of the Confederation 20 September 1787, submitted for states' ratification 28 September 1787, ratification completed by nine of the 13 states 21 June 1788, effective 4 March 1789	
	<b>GDP per capita (US\$, 2021):</b> 69,287.5	<b>Forest area (% of land area):</b> 33.9	<b>Date EIA was introduced:</b> 1969	<b>Legal system:</b> common law system based on English common law at the federal level; state legal systems based on common law, except Louisiana, where state law is based on Napoleonic civil code; judicial review of legislative acts	
	<b>Population density:</b> 34 inhabitants / km <sup>2</sup>	<b>% of terrestrial and inland waters protected:</b> 13.02%	<b>Date SEA was introduced:</b> 1969	<b>Democracy rating (ranking):</b>	

## **Appendix D**

**Jurisdiction profiles (see  
separate volume)**