



# Guidance on Key Performance Indicators of Strategic Environmental Assessment Effectiveness

Public Participation and Performance Criteria in Strategic Environmental Assessment:  
The Way Forward for Advancing Practice

Environmental Protection Agency, Project Ref. No. 2021-NE-1061

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## EPA RESEARCH PROJECT PROGRAMME 2021-2030

Public Participation and Performance Criteria in Strategic Environmental Assessment: The Way Forward for Advancing Practice.

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### EPA Research Report

A copy of the end-of-project report is available on request from the EPA.

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# How to use this document

This document is interactive and designed to facilitate navigation through the guidance note sections. Open it in Adobe Reader to enable interactive features.

On the **content page** click on **the titles** and go directly to the section of interest.

Throughout the guide, click the **“Content”** button at the top right of the page to go to the content page.



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Executive Summary

## Executive Summary

This guidance explains how the following 10 key performance indicators (KPIs) can be used to evaluate the effectiveness of Strategic Environmental Assessment (SEA).

<b>KPI 1</b>	SEA documents <b>easily accessible</b> on a public website.
<b>KPI 2</b>	Consideration of realistic and appropriate “within-plan” <b>alternatives</b>
<b>KPI 3</b>	Assessment of <b>cumulative impacts</b>
<b>KPI 4</b>	<b>Environmental authority recommendations</b> taken on board.
<b>KPI 5</b>	<b>Public recommendations</b> on SEA documents taken on board.
<b>KPI 6</b>	<b>Changes made to the plan</b> in response to proposed SEA mitigation measures.
<b>KPI 7</b>	SEA’s contribution to <b>environmental improvement</b>
<b>KPI 8</b>	SEA <b>monitoring</b> carried out and monitoring findings referred to in the current SEA.
<b>KPI 9</b>	Planning team documentation of <b>lessons learned</b> from the SEA and <b>suggestions for improving</b> the next round of SEA.
<b>KPI 10</b>	Planning team documentation of the <b>costs and benefits of the SEA</b>

The guidance explains how to determine the status of each KPI and how to find the relevant information. It also presents the current status (i.e. baseline) of each KPI, based on 20 case studies, and provides a good practice example. The intention is that, over time, SEA effectiveness in Ireland will continue to improve through better practice relating to these KPIs.

<sup>1</sup>Plans and programmes, as considered by Directive 2001/42/EC on Strategic Environmental Assessment, are referred to as plans for simplicity.

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# Content

# Executive Summary

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<b>KPI 1</b>	SEA documents <b>easily accessible</b> on a public website.
<b>KPI 2</b>	Consideration of realistic and appropriate “within-plan” <sup>1</sup> <b>alternatives</b> .
<b>KPI 3</b>	Assessment of <b>cumulative impacts</b> .
<b>KPI 4</b>	<b>Environmental authority recommendations</b> taken on board.
<b>KPI 5</b>	<b>Public recommendations</b> on SEA documents taken on board.
<b>KPI 6</b>	<b>Changes made to the plan</b> in response to proposed SEA mitigation measures.
<b>KPI 7</b>	SEA’s contribution to <b>environmental improvement</b> .
<b>KPI 8</b>	SEA <b>monitoring</b> carried out and monitoring findings referred to in the current SEA.
<b>KPI 9</b>	Planning team documentation of <b>lessons learned</b> from the SEA and <b>suggestions for improving</b> the next round of SEA.
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The guidance explains how to determine the status of each KPI and how to find the relevant information. It also presents the current status (i.e. baseline) of each KPI, based on 20 case studies, and provides a good practice example. The intention is that, over time, SEA effectiveness in Ireland will continue to improve through better practice relating to these KPIs.

<sup>1</sup> Plans and programmes, as considered by Directive 2001/42/EC on Strategic Environmental Assessment, are referred to as plans for simplicity.

## Introduction

This guidance explains how 10 key performance indicators (KPIs) can be used to evaluate the effectiveness of Strategic Environmental Assessment (SEA). The KPIs can be used:

- ✓ during the SEA process by planners/consultants as a self-check;
- ✓ during the SEA document review process by consultees/the public to check on the SEA process and resulting documentation, and associated plan content;
- ✓ during periodic national SEA performance reviews to check whether SEA is achieving its objectives efficiently and effectively;
- ✓ in international studies to compare the effectiveness of different approaches to SEA or different countries' SEA systems.

The indicators, which are summarised in Table 1, cover the seven dimensions of SEA effectiveness (Box 1). The order of the KPIs is not reflective of their importance.

### *Box 1. Dimensions of SEA effectiveness<sup>2</sup>*

- 1. Context effectiveness:** SEA legislation, guidance/training/capacity, resources for carrying out SEA, power relations between stakeholders, and the wider political and institutional culture.
- 2. Procedural effectiveness:** how, and how well, the SEA process is undertaken, e.g. data used, appropriate scoping and consideration of alternatives.
- 3. Pluralist effectiveness:** level of engagement from and satisfaction of different stakeholders, and how stakeholders' values and perspectives are integrated into the SEA process.
- 4. Substantive effectiveness:** changes to the plan in response to the SEA and the extent to which the plan conforms with the SEA's recommendations.
- 5. Normative effectiveness:** compliance with the planning organisation's mandate and the achievement of objectives such as sustainable development, environmental justice and/or resilience.
- 6. Knowledge and learning effectiveness:** improvement in stakeholders' understanding of environmental issues, changes to stakeholders' views, and build-up of practitioners' know-how and environmental governance capacity.
- 7. Transactive effectiveness:** the costs and benefits of SEA, its efficiency and its cost-effectiveness

<sup>2</sup>SEA effectiveness dimensions are discussed further in Environmental Protection Agency (2017), Second Review of Strategic Environmental Assessment Effectiveness in Ireland, [https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA-RR-306\\_web.pdf](https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA-RR-306_web.pdf) (accessed 2 July 2024).



Table 1. KPIs of SEA effectiveness, and guidance related to these KPIs

SEA effectiveness dimension	KPI	Rationale	What the aim is (target)	Existing guidance on this KPI
Context	1. SEA documents <b>easily accessible</b> on a public website	A precursor to effective public participation and subsequent monitoring (baseline comparison and reporting transparency)	All SEA documents are easily accessible on a public website	
	2. Consideration of realistic and appropriate “within-plan” <b>alternatives</b>	Helps to develop a plan with minimal significant environmental impacts	SEA considers realistic alternatives to within-plan issues, not just one plan-wide set of alternatives	<a href="https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/SEA-Alternatives-157-Published_web.pdf">https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/SEA-Alternatives-157-Published_web.pdf</a> (accessed 9 July 2024)
Procedural	3. Assessment of <b>cumulative impacts</b> of the plan plus other plans, projects and external trends	A key differentiator between the SEA of a plan and a project’s environmental impact assessment, in which SEA provides much “value added” to the assessment process	SEA assesses the overall impacts of the plan, plus the cumulative impacts of other plans, trends (e.g. financial, climate) and projects	<a href="https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA-Good-Practice-Guidelines-SEA.pdf">https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA-Good-Practice-Guidelines-SEA.pdf</a> (accessed 2 July 2024)
Pluralist	4. <b>Environmental authority recommendations</b> taken on board	Consultation with environmental authorities and the public is a key component of effective SEA. It helps ensure that the plan’s negative impacts are minimised and positive impacts are maximised	A clear list of consultation comments, with a high proportion of comments integrated into the plan or clear reasons given for not integrating them	
	5. <b>Public recommendations</b> on SEA documents taken on board			

SEA effectiveness dimension	KPI	Rationale	What the aim is (target)	Existing guidance on this KPI
Substantive	6. <b>Changes made to the plan</b> in response to proposed SEA mitigation measures	Shows how the SEA has informed and influenced the development of the plan, and that the planning team have been responsive to outside information about their plan's environmental impacts	A clear list of mitigation measures, with a high proportion of measures integrated into the plan or valid reasons given for measures not incorporated	
Normative	7. SEA's contribution to <b>environmental improvement</b>	Aims to capture the true environmental contribution of SEA	SEA focuses on key impacts of the plan, tests against environmental targets and leads to plan changes towards achieving environmental targets	
Knowledge and learning	8. SEA <b>monitoring</b> carried out and monitoring findings referred to in the current SEA	Supports improvement of subsequent rounds of plan-making and the early identification of unforeseen impacts of the implementation of the plan	SEA monitoring is carried out for all plans. For cyclical plans, SEA monitoring findings are referred to in the current SEA	<a href="https://www.epa.ie/publications/research/environmental-technologies/06695-EPA-SEA-Statements-and-Monitoring-Report.pdf">https://www.epa.ie/publications/research/environmental-technologies/06695-EPA-SEA-Statements-and-Monitoring-Report.pdf</a> (accessed 9 July 2024)
	9. Planning team documentation of <b>lessons learned</b> from the SEA and <b>suggestions for improving</b> the next round of SEA	Encourages the planning team to reflect on the SEA process and its effectiveness, to improve effectiveness in the future	The planning team has learned lessons from this SEA and makes suggestions for improving the next round of SEA	
Transactive	10. Planning team documentation of the <b>costs and benefits of the SEA</b>	Encourages the planning team to think about minimising the costs and maximising the benefits of SEA, to improve effectiveness in the future	The planning team understands the costs and benefits of this SEA, and has ideas for how to decrease costs and increase benefits for future SEAs	

Table 2 shows the current status – the baseline – of SEA effectiveness in Ireland, based on 20 case studies reviewed in summer–autumn 2023. KPI performance status is divided into:



This guidance explains how to find information on each KPI and its status, and provides a good practice example. The intention is that, over time, SEA effectiveness in Ireland will improve (i.e. progress towards green) through better practice relating to these KPIs.

*Table 2. Current status of SEA effectiveness in Ireland based on a review of 20 case studies in 2023*

SEA effectiveness KPI	Current status
KPI 1: SEA documents <b>easily accessible</b> on a public website	Good
KPI 2: Consideration of realistic and appropriate “within-plan” <b>alternatives</b>	Partial
KPI 3: Assessment of <b>cumulative impacts</b> of the plan plus other plans, projects and external trends	Partial
KPI 4: <b>Environmental authority recommendations</b> taken on board	Poor
KPI 5: <b>Public recommendations</b> on SEA documents taken on board	Partial
KPI 6: <b>Changes made to the plan</b> in response to proposed SEA mitigation measures	Poor
KPI 7: SEA’s contribution to <b>environmental improvement</b>	Poor
KPI 8: SEA <b>monitoring</b> carried out and monitoring findings referred to in the current SEA	Poor
KPI 9: Planning team documentation of <b>lessons learned</b> from the SEA and <b>suggestions for improving</b> the next round of SEA	Not possible to evaluate
KPI 10: Planning team documentation of the <b>costs and benefits of the SEA</b>	Not possible to evaluate

# KPI 1. SEA documents easily accessible on a public website

**KPI 1 target:** All SEA documents are easily accessible on a public website.

**How to determine:** In a search engine, type “[name of plan] strategic environmental assessment” or “[name of plan]”. All the related SEA documents, that is, the SEA scoping report, SEA environmental report (ER), non-technical summary and SEA statement should be found within approximately the first 10 results.

**Criteria:**

All the SEA documents are available online	Some of the SEA documents are available online	None of the SEA documents are available online
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**How easy is it to find information?** Easy. On a web search engine.

**Baseline:** Good.

**Good practice example:** South Dublin County Development Plan 2022–2028 (<https://www.sdcc.ie/en/devplan2022/adopted-plan/>).

This is a good example because the SEA information is presented on the local authority website as part of the plan information, with clear links to all the SEA and plan documents.

**Illustration:**

The screenshot shows the website for the South Dublin County Development Plan 2022-2028. The navigation bar includes: Home, Adopted Plan, Stage 1, Stage 2 - Draft Plan, Stage 3-Material Amendments, and Latest News. Below the navigation are three content tiles: 'Chapter 11: Infrastructure and Environmental Services' with a leaf icon, 'Chapter 12: Implementation and Monitoring' with a gear icon, and 'Environmental Reports' with a photo of a bridge over a river. A sidebar on the left lists: Statement, County Development Plan Interactive Map, Land Use Zoning Maps, Appendices, and South Dublin County Development Plan Irish Version. The main content area is titled 'Related file(s)' and lists three PDF documents: 'Final SEA Report' (5.64mb), 'Final SEA Report Non Technical Summary' (1.58mb), and 'SEA Statement' (719kb).

## KPI 2. Consideration of realistic and appropriate “within-plan” alternatives

**KPI 2 target:** SEA considers realistic “within-plan” alternatives.

**How to determine:** In the SEA ER, look in the alternatives section for the alternatives that were considered. “Within-plan” alternatives are those that offer different approaches to multiple issues within the plan, such as scale of development (e.g. high vs low growth), location of development (e.g. site A vs site B) and technologies to be used (e.g. onshore wind vs photovoltaics).

When there is only one set of alternatives that relates to the entire plan (e.g. more economically oriented vs more “sustainable” plan) it is known as a “whole-plan” alternative and not a “within-plan” alternative.

If possible, identify the key issues considered in plan-making and determine whether or not alternatives have been considered for these.

### Criteria:

Considers several sets of “within-plan” alternatives that deal with key issues and are realistic	Alternatives are not considered for one issue, do not consider key issues or are not realistic	Includes only “whole-plan” alternatives
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**How easy is it to find information?** Easy. In either the SEA ER or SEA statement.

**Baseline:** Partial.

**Good practice example:** Roscommon County Development Plan 2022–2028 (<https://www.rosdevplan.ie/roscommon-county-development-plan-2022-2028/>). Please also see EPA guidance on alternatives in SEA<sup>3</sup>.

This is a good example because the alternatives are “within plan”, and they are “appropriate” because they clearly deal with key issues for that plan (population growth, rural growth, etc.).

### Illustration:

<b>Section 6</b>	<b>Description of Alternatives .....</b>	<b>76</b>
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6.3	Tier 1: Alternatives for Positioning under the Settlement Hierarchy .....	76
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<sup>3</sup>[https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/SEA-Alternatives-157-Published\\_web.pdf](https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/SEA-Alternatives-157-Published_web.pdf) (accessed 1 July 2024).

## KPI 3. Assessment of cumulative impacts

**KPI 3 target:** SEA assesses the cumulative impacts of the plan plus other trends (e.g. climate, financial), plans and, where appropriate, projects.

**How to determine:** In the SEA ER, search for the term “cumulative”. There should be a section on this after the main impact assessment. Look for the following:

1. A series of clear statements about the overall impacts of the plan.
2. A list (or discussion) about what other external trends, plans and, where appropriate, projects also affect the plan area and/or environmental parameter. This could refer back to the baseline “likely future without the plan” section.
3. An assessment of the cumulative impacts of 1, the overall impacts of the plan, and 2, impacts of other trends/plans/projects.

### Criteria:

Discusses both the overall impacts of the plan and its cumulative impacts with other trends, plans and, where appropriate, projects	Discusses the overall impacts of the plan or the impacts of other plans, but not both, or lists other plans, etc., but does not discuss their cumulative impacts	Does not discuss the overall impacts of the plan, does not list other plans that might affect the area or gives only vague/general statements about cumulative impacts with other plans, etc.
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**How easy is it to find information?** Easy. However, some critical judgement is needed to determine good/partial/poor. It should be possible from the SEA ER to determine the cumulative impacts of all actions on the **receiving environment** (i.e. **environmental receptors**), not just **the impacts of the plan**. Vague/general/generic descriptions are not good enough.

**Baseline:** Partial.

**Good practice example:** Southern, Eastern & Midland Regional Programme 2021–2027 SEA Environmental Report

([https://www.southernassembly.ie/uploads/general-files/603814\\_SEM\\_Reg\\_Prog\\_2127\\_SEA\\_Environmental\\_Report\\_Post\\_Consultation\\_FINAL\\_2.pdf](https://www.southernassembly.ie/uploads/general-files/603814_SEM_Reg_Prog_2127_SEA_Environmental_Report_Post_Consultation_FINAL_2.pdf)).

Please also see EPA guidance on cumulative impact assessment.<sup>4</sup>

None of the 20 SEAs reviewed to inform this guidance fulfilled all of the points above. This good practice example is good because it clearly states the overall impacts of the plan, identifying plan components with particularly strong impacts. A better example would also discuss cumulative impacts with other plans, projects and existing trends, which can sometimes be gleaned from the “likely future without the plan” section of the ER.

<sup>4</sup><https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA-Good-Practice-Guidelines-SEA.pdf> (accessed 2 July 2024).

**Illustration:** (In the example below, RSO = SEA objective.)

***Climate Change***

- 6.5.16 The detailed assessment identified that energy efficient renovations and retrofitting of homes will have a moderate/minor beneficial effect on climate change as a result of a higher number of homes heated using cleaner energy such as heat pumps rather than fossil fuels. Renovations will also reduce the amount of heat lost from uninsulated homes and reduce energy wastage. The detailed assessment found that RSO5.1 will have a neutral effect on climate change.
- 6.5.17 The overall effects of the Regional Programme on climate change would be moderate/minor beneficial.

***Material Assets***

- 6.5.18 The detailed assessment identified that RSO2.1 and RSO5.1 could result in minor adverse effects on material assets by creating large amounts of waste from renovations, retrofits and town centre regeneration. The extent to which these renovations reduce the use of solid fuel and safeguard resources is unknown at this level. The remaining RSOs are all predicted to have a neutral effect on material assets.
- 6.5.19 The effects of the Regional Programme would be minor adverse on material assets.



## KPI 4 and KPI 5. Consultation responses taken on board

**KPI 4 target:** Environmental authority recommendations are taken on board (either integrated into the plan and considered in the SEA ER or a cogent reason given for why not).

**KPI 5 target:** Public recommendations on SEA documents are taken on board (either integrated into the plan and considered in the SEA ER or a cogent reason given for why not).

**How to determine:** In the SEA statement, SEA ER and (if not available there) in any land use plan's executive summary of the plan consultation stage, look for information about consultation: search for "consultation", "environmental authority/authorities" or "public". The information is typically in tables. You are identifying and distinguishing the following:

1. **environmental authority** comments on the **scoping report**;
2. **environmental authority** comments on the **SEA ER** for the draft plan;
3. **public** comments on the **SEA ER** for the draft plan (in practice, these may be subsumed within more general comments on the draft plan's environmental impacts).

The environmental authority and public comments may be reported in the same table and may need to be differentiated. "Environmental authorities" are those established under SEA legislation (e.g. EPA, Department of Housing, Local Government and Heritage). In Ireland, the "public" includes all individual citizens, non-governmental organisations and organisations representing the public, such as public participation networks.

For each comment made, determine if:

- ✓ The SEA ER shows that the plan-making authority took the comments into account, either by changing the plan/SEA (e.g. policy or zoning) or by responding clearly to the issue raised by the environmental authority/public (e.g. this is not in the plan's remit).
- ✓ Any changes/recommendations by the public documented in the SEA ER have been incorporated into the plan/SEA. For 1 and 2 (environmental authorities; KPI 4) and 3 (the public; KPI 5), the following criteria apply.

### Criteria:

Distinguishes between public and environmental authority comments. Either lists consultation comments separately or notes, for each issue raised by consultation, how many comments were made on this. A total of $\geq 75\%$ of comments taken into account and incorporated into the plan/SEA	Between 25% and 74% of comments taken into account and incorporated into the plan/SEA	Less than 25% of comments taken into account and incorporated into the plan/SEA. General statement about consultation comments having been taken into account without an explanation as to how
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**How easy is it to find information?** Onerous. SEA documents often combine public and environmental authority comments and information on consultation on the plan, SEA or Natura Impact Statement in one table. These all need to be differentiated, and points related to only the Natura Impact Statement need to be taken out. Look for clear lists of comments; a clear response to each comment, including responses being presented directly next to the relevant comments; responses dealing with the comments' intent, not a tangentially related issue; and relevant responses being integrated into the plan.

In turn, environmental authorities' comments should be plan specific and respond to issues raised by the SEA documents; otherwise, it may be difficult to incorporate them into the plan/SEA. There will need to be a cross-check with the plan even if the SEA statement and/or ER states that the measures have been integrated, as there may be discrepancies between the SEA documentation and the actual plan (the discrepancies may be between the draft and the final SEA ER, or the draft plan and the adopted plan).

**Baseline:** KPI 4 (environmental authorities): **Partial**, KPI 5 (the public): **Poor**.

**Good practice example:** Agri-Food Strategy to 2030 SEA Environmental Report (<https://assets.gov.ie/162883/8a51629f-5e6a-44d0-9ea4-d85d3b233634.pdf>).

Please also see EPA guidance on public participation (<https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/guidance-note-on-public-participation-in-sea.php>).

None of the 20 SEAs reviewed to inform this guidance did a "good" job according to the criteria above. The following example is good because it clearly lists each consultee comment, provides a clear answer to each comment and makes some changes in response to the comments. Ideally, it would give a better response than "There are a range of views...".

### Illustration:

Comment Received:	Response:
<ul style="list-style-type: none"> <li>There should be more focus on composting and anaerobic digestion / anaerobic digestion has limited potential</li> </ul>	<ul style="list-style-type: none"> <li>There are a range of views on the potential of anaerobic digestion. Some amendments have been made to action 7 Goal 1 Mission 1.</li> </ul>
<ul style="list-style-type: none"> <li>Direct payments should be linked to land use activities that focus on co-benefits and ecosystem services; Results based agri-environmental schemes; Mainstream pilot results-based programs - co-create systems with farmers; Carry out biodiversity studies, and increased targeted agri-environment schemes; Results-based, High Nature Value farming initiatives need to be mainstreamed across all land-use types. Payment supports for ecosystem services rather than carbon farming</li> </ul>	<ul style="list-style-type: none"> <li>Text added to Exec Summary which highlights direction of new CAP, especially eco-schemes and conditionality; action 2 in Goal 2 of Mission 1 states " Put in place more targeted agri-environmental schemes under the next Rural Development Programme (RDP) to protect and enhance Ireland's habitats and species. These schemes should include results-based actions, including payments for delivery of specific measures"; the strategy promotes the concept of co-creating initiatives with farmers – see Goal 3 of Mission 4.</li> </ul>
<ul style="list-style-type: none"> <li>More research into regenerative agriculture.</li> </ul>	<ul style="list-style-type: none"> <li>See action 6 Goal 1 Mission 1.</li> </ul>
<ul style="list-style-type: none"> <li>Food Waste Hierarchy recommends feeding people with this food as a circular economy solution over bioenergy, animal feed, or compost. Impact of reducing food waste and adopting zero waste approaches is underestimated.</li> </ul>	<ul style="list-style-type: none"> <li>Text amendment to action 6 Goal 6 Mission 1.</li> </ul>
<ul style="list-style-type: none"> <li>Major EU policies such as Farm to Fork, Biodiversity need more impact analysis / the strategy doesn't reflect adequately the measures in Farm to Fork and EU Biodiversity Strategy</li> </ul>	<ul style="list-style-type: none"> <li>There are a range of views on these EU Strategies. They are considered in the Strategy and have influenced its contents. However, it also has to be recognised that detailed discussions on their implementation remain ongoing and the Strategy has highlighted the need for impact assessments.</li> </ul>
<ul style="list-style-type: none"> <li>The significant number of fisheries being harvested above Maximum Sustainable Yields should be addressed / sustainable Total Allowable Catches (TACs) need to be set in line with the Common Fisheries Policy (CFP) legal obligations</li> </ul>	<ul style="list-style-type: none"> <li>Goal 5 of Mission 1, to enhance the environmental sustainability of the seafood sector, contains ten actions, several of which address these very issues.</li> </ul>

## KPI 6. Changes made to the plan in response to proposed SEA mitigation measures

**KPI 6 target:** Changes are made to the plan in response to all proposed SEA mitigation measures, or a valid reason is given for why the changes were not made.

**How to determine:** In the SEA statement, search for “mitigation” – there should be a section that explains how the mitigation measures proposed in the SEA ER have been integrated into the plan. For each mitigation measure, determine whether or not the SEA documentation indicates that the mitigation measure has been integrated into the plan and, if so, whether or not this has in fact been done.

Mitigation measures are generally in the form of amendments/wording changes to existing policies, new policies or changes in land use zoning. Look for the following:

1. a clear list of plan-level mitigation measures proposed as a result of the SEA process, which links to plan impacts identified at the SEA impact assessment stage; and
2. a clear indication of if and where the mitigation measures have been integrated into the plan (e.g. an amendment to an existing policy, new policy, changes in land use zoning), or for an acceptable reason as to why they have not been integrated.

### Criteria:

<p>Clear mitigation list and <math>\geq</math> 75% of mitigation measures incorporated into the plan/SEA. It is clear what mitigation was incorporated into the plan in response to the SEA. Valid reasons are given for measures not incorporated</p>	<p>Clear mitigation list and 25–74% of comments incorporated into the plan/SEA. Information is given for measures not incorporated</p>	<p>No/unclear mitigation measures and/or <math>&lt;</math> 25% of comments incorporated into the plan/SEA. General statements about mitigation being incorporated into the plan with no detail</p>
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**How easy is it to find information?** Surprisingly difficult. Look for mitigation measures that are clearly listed, respond to environmental impacts identified earlier in the SEA, are at the plan level (not leaving the problem to be solved at the project level) and are integrated into the plan.

For the latter, there will need to be a cross-check with the plan even if the SEA ER states that the measures have been integrated, as there may be discrepancies between the SEA documentation and the actual plan.

**Baseline:** Poor.

**Good practice example:** EirGrid Grid Implementation Plan 2017–2022 SEA Environmental Report  
[https://cms.eirgrid.ie/sites/default/files/publications/Environmental-Report\\_SEA-Grid-IP2017-2022.pdf](https://cms.eirgrid.ie/sites/default/files/publications/Environmental-Report_SEA-Grid-IP2017-2022.pdf).

This example clearly shows the draft plan policies and proposed mitigation measures (underlined). It would be even better if there was an explanation from the planning authority where it does not agree with the proposed mitigation – “N” in the final column.

### Illustration:

Table 12-1: EirGrid Policies – SEA Recommendations

Aspect	Number	Original	Proposed Amendment, Recommendation or Addition (indicated by underlined text)	Agreed Y/N
General	ENVP1	To uphold best practice in the environmental design and appraisal of transmission development projects.	To <u>apply</u> best practice in the design and environmental appraisal of transmission development projects	Y
	ENVP2	To develop EirGrid’s approach to the protection of the environment in transmission development, and to make this publicly available.	To <u>continue to</u> develop EirGrid’s approach to the protection of the environment in transmission development, <u>and fully integrate this approach throughout the procedures for transmission development and make this publicly available.</u>	Y
Biodiversity	ENVP3	That any transmission development project, either individually or in combination with other projects, that has the potential to give rise to likely significant effects on any European (Natura) site(s) shall be subject to Appropriate Assessment (AA) in accordance with Article 6 of the EU Habitats Directives.	n/a	n/a
	ENVP4	To protect flora, fauna and habitats which have been identified in accordance with Articles 12 of the Habitats Directive, the Birds Directive, Wildlife Act 1976 (as amended), the Flora Protection Order (S.I. No. 356 of 2015), and the European Communities (Birds and Natural Habitats) Regulations 2011.	<u>Note: Legal requirement</u> To protect flora, fauna and habitats ( <u>terrestrial and aquatic</u> ) <u>which have been identified</u> in accordance with Articles 12 of the Habitats Directive, the Birds Directive, Wildlife Act 1976 (as amended), the Flora Protection Order (S.I. No. 356 of 2015), and the European Communities (Birds and Natural Habitats) Regulations 2011. <u>This protection will be afforded at the earliest opportunity in the project development process i.e. option selection.</u>	Y
	ENVP5	To promote a pro-active good practice approach to tree and hedgerow management in grid development, with the aim of minimising the impact of transmission development on existing trees and hedgerows.	<u>Recommendation</u> - Consideration to be given to combining ENVP6 and ENVP6. To promote a pro-active good practice approach to tree and hedgerow management in grid development, <u>with the aim of avoiding in the first instance and minimising and mitigating</u> the impact of transmission development on existing trees and hedgerows.	N Y
	ENVP6	To protect trees, hedgerows or groups of trees which function as wildlife corridors, in accordance with Article 10 of the EU Habitats Directive.	To protect <u>and restore (where possible) habitats</u> which function as wildlife corridors, in accordance with Article 10 of the EU Habitats Directive.	Y
Climate Change	ENVP7	To integrate measures to address climate change into grid development, by way of both effective mitigation and adaptation responses, in accordance with available guidance and best practice.	To integrate measures to address climate change and <u>climate change resilience</u> into grid development, by way of effective mitigation and adaptation responses, in accordance with available guidance and best practice.	Y

## KPI 7. SEA's contribution to environmental improvement

**KPI 7 target:** SEA makes a positive environmental contribution: it focuses on key/significant impacts of the plan, tests against relevant environmental targets and leads to plan changes towards achieving environmental targets.

### How to determine:

- ✓ Focus on key impacts: In the SEA ER section on overall or cumulative impacts (generally near the end of the ER), consider whether or not there is greater emphasis on impacts that are expected to be more significant for that plan (e.g. water, biodiversity and soil for agricultural plans, land take and flood risk for county development plans).
- ✓ Test against environmental targets: In the SEA ER section on overall or cumulative impacts, consider if there are statements about whether or not the plan would achieve environmental targets (e.g. Water Framework Directive objectives, air quality standards or condition/integrity of European sites).
- ✓ Changes towards achieving environmental targets: Based on the analyses carried out for KPIs 4–6, consider whether or not the SEA has led to plan changes towards achieving these environmental targets. Examples could be a plan policy requiring greater energy efficiency, or a reduction in proposed land use zoning to enable achievement of climate or water quality objectives.

### Criteria:

<p>Focuses on key impacts of the plan, tests against environmental targets and leads to plan changes towards achieving environmental targets (or clearly documents how the plan already achieves all relevant environmental targets)</p>	<p>Focuses on key impacts of the plan and tests against environmental targets</p>	<p>No clear focus (SEA is vague and wordy), no test against environmental targets and no plan changes towards achieving environmental targets</p>
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**How easy is it to find information?** Easy.

- ✓ Focus on key impacts: Some understanding of the plan's most significant impacts can be gleaned from KPIs 4–6. It is then easy to determine whether or not the SEA focuses on these (however, if the SEA uses a generic set of strategic environmental objectives that are also used elsewhere, then this is a sign of a lack of focus on key issues in this plan).
- ✓ Test against environmental standards: The section on overall/cumulative impacts will indicate whether or not the plan's impacts have been modelled or tested against environmental targets.
- ✓ The review carried out for KPIs 4–6 will answer the question about changes towards achieving environmental targets (however, if the SEA-preferred alternatives have not been selected, then this can be a sign of not achieving environmental targets).

**Baseline:** Poor.

**Good practice example:** None of the 20 SEAs reviewed to inform this guidance provided a good example. Hypothetical examples are:

- ✔ The SEA for a county development plan notes that water quality in a river is poor/moderate due in part to run-off from a large area near the main river, zoned for redevelopment. It suggests that new development should be limited to the part of the zoned plan area furthest from the river, and that a park or appropriate green buffer strip should be put in place between the river and the area marked for development. This suggestion is integrated into the plan.
- ✔ A draft county development plan proposes zoning land for housing development outside the built-up area of the town in an area with poor pedestrian and cycle connectivity to the town. The SEA recommends zoning alternative lands within the existing built-up area where sustainable mobility options are available. The final plan reflects this change.

## KPI 8. SEA monitoring carried out and monitoring findings referred to in the current SEA

**KPI 8 target:** SEA monitoring has been carried out and the monitoring findings are referred to in the current SEA.

**How to determine:** Search the internet for “[name of plan] plan monitoring” or ask the plan implementation team for the previous plan for any SEA monitoring information. The SEA monitoring may be part of more general plan monitoring; however, simple “environmental monitoring” without reference to the previous SEA process or SEA ER does not count as SEA monitoring. Review the SEA scoping report and SEA ER to see if any of that monitoring information is referred to.

### Criteria:

SEA monitoring has been carried out for the previous plan cycle and is referred to in this plan’s SEA	SEA monitoring has been carried out for the previous plan cycle	No obvious SEA monitoring has been carried out for the previous plan cycle
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**How easy is it to find information?** Relatively easy. The main problem is that very few monitoring reports have been prepared and published to date.

**Baseline:** Poor.

**Good practice example:** EirGrid Grid Implementation Plan 2017–2022: SEA-related Monitoring Report ([https://cms.eirgrid.ie/sites/default/files/publications/210727-EirGrid-SEA-Monitoring-Report\\_PUBLISHED\\_FINAL.pdf](https://cms.eirgrid.ie/sites/default/files/publications/210727-EirGrid-SEA-Monitoring-Report_PUBLISHED_FINAL.pdf)).

Please also see EPA guidance on SEA statements and monitoring.<sup>5</sup>

Of the 20 case studies reviewed, only the EirGrid Grid Implementation Plan had an associated monitoring report available. It is clearly structured around the plan’s SEA monitoring framework and is quantitative where possible. Despite attempting to monitor all of the indicators in the SEA monitoring framework, it was possible to do so in only about half the cases because of problems with the remaining indicators (e.g. monitoring data not available and too onerous to collect, monitoring carried out by other agencies too infrequently to allow identification of the plan’s impacts). This highlights the problems of using monitoring indicators that are not very carefully thought through and relying on monitoring data collected by other agencies for other purposes.

Many of the monitoring data come from environmental impact statements for grid-related projects, some of which may be predictions rather than monitoring.

<sup>5</sup> <https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/06695-EPA-SEA-Statements-and-Monitoring-Report.pdf> (accessed 2 July 2024).



## Illustration:

### 5.4.4 Cultural Heritage

**Table 14: SEA Monitoring Objectives, Targets, and Indicators: Cultural Heritage**

Objective	Target	Indicator
<b>CH1:</b> Avoid impacts upon archaeological heritage (including entries to the RMP) and architectural heritage (including entries to the RPS and NIAHs).	<b>CH1_T1:</b> No developments occurring which result in full or partial loss to entries to the RMP and the context of the above within the surrounding landscape where relevant, resulting from development provided for by the Grid IP.	<b>CH1_I1:</b> Number of developments occurring which result in full or partial loss to entries to the RMP and the context of the above within the surrounding landscape where relevant, resulting from development provided for by the Grid IP.
	<b>CH1_T2:</b> No developments occurring which result in full or partial loss to entries to the RPSs/NIAHs and the context of the above within the surrounding landscape where relevant, resulting from development provided for by the Grid IP.	<b>CH1_I2:</b> Number of developments occurring which result in full or partial loss to entries to the RPSs/NIAHs and the context of the above within the surrounding landscape where relevant, resulting from development provided for by the Grid IP.

#### Monitoring Results (CH1\_T1): Loss to Records of Monuments and Places

- There were no full or partial loss to entries in the Records of Monuments and Places in project documents.
- Table 15 summarizes the numbers of instances, where new assets intersected with the Zones of Notification (ZoN) of RMPs. The intersection with a ZoN does not indicate a full or partial loss to the monument, simply that the National Monuments Service must be notified in advance of any excavation works. Overhead lines are designed such that structures avoid and conductors oversail RMPs; while archaeological monitoring attaches to underground cables intersecting ZoNs.

## KPI 9. Planning team documentation of lessons learned from the SEA and suggestions for improving the next round of SEA

**KPI 9 target:** The planning team learns lessons from the SEA and makes suggestions for improving the next round of SEA, and these suggestions are integrated into the next round of SEA.

**How to determine:** In the SEA statement for the associated plan (or other SEA documents on the plan website), check if the planning team has documented lessons learned from the SEA and suggestions for how the next round of SEA could be improved. In the scoping report for the next round of SEA, where available, look for references to lessons learned from the previous SEA, and how the new SEA is responding to these lessons.

**How easy is it to find information?** Easy.

**Baseline:** Not currently carried out. There are no current requirements for this in SEA legislation or planning practice. However, it represents good SEA practice and it is highly relevant for capturing all SEA effectiveness dimensions.

**Good practice example:** In the scoping report for a hypothetical SEA:

“The planning team for the previous round of plan X concluded that the SEA for plan X could have been improved by starting the SEA earlier, providing more information to decision-makers about SEA, and focusing more clearly on mitigation measures. This round of SEA began on date X, at the same time as discussions began about the new plan. A workshop for decision-makers was held on date Y, where the SEA process was explained, and their early views about key environmental issues were compiled...”



## KPI 10. Planning team documentation of the costs and benefits of the SEA

**KPI 10 target:** The planning team understands the costs and benefits of the SEA and has ideas about how to decrease the costs and increase the benefits of future SEAs, and these ideas are integrated into the next round of SEA.

**How to determine:** In the SEA statement (or other SEA documents on the plan website), check if the planning team has documented: the key benefits of the SEA process; how these could be improved; the key costs of the SEA process; how these could be reduced. These could be based on the table below.

Costs	Benefits
<ul style="list-style-type: none"> <li>✓ Consultants</li> <li>✓ SEA consultation (as opposed to plan consultation, including consultation on scoping report)</li> <li>✓ Planners' time in meeting with consultants, responding to their queries, etc.</li> <li>✓ Any legal challenge to the SEA</li> <li>✓ Implementing changes made in response to SEA, e.g. costs to developers, the public, planners, over the lifetime of the plan</li> </ul>	<ul style="list-style-type: none"> <li>✓ Avoiding problems of plan development and examination</li> <li>✓ Avoiding legal challenges to the plan</li> <li>✓ Preventing significant adverse environmental effects over the lifetime of the plan</li> <li>✓ Environmental improvements over the lifetime of the plan</li> <li>✓ Informing project environmental impact assessments</li> <li>✓ Informing and facilitating faster development consent</li> </ul>

In the scoping report for the next round of SEA, where available, look for references to costs and benefits of the previous SEA, and how the new SEA will reduce costs and/or increase benefits.

**How easy is it to find information?** Easy.

**Baseline:** Not currently carried out. There are no current requirements for this in SEA legislation or planning practice.

**Good practice example:** In the SEA statement for a hypothetical SEA:

“This SEA took the following time to prepare: plan-makers' time (X days), and consultants' time (€XX). In addition, it is anticipated that the proposed monitoring will entail X days/year. We had no legal challenges to the plan or SEA. Benefits were consideration of new alternatives (A, B, C), inclusion of new mitigation measures (X, Y, Z), and expected future benefits in terms of better environmental protection. Benefits could be improved by having more meetings with the consultants, especially around alternatives and mitigation”.

## Abbreviations

- ER** Environmental report
- KPI** Key Performance Indicator
- SEA** Strategic environmental assessment

# Key Performance Indicator of SEA effectiveness

KPI	Rationale	What the aim is (target)
<b>1</b> SEA documents <b>easily accessible</b> on a public website	A precursor to effective public participation and subsequent monitoring (baseline comparison and reporting transparency)	All SEA documents are easily accessible on a public website
<b>2</b> Consideration of realistic and appropriate “within-plan” <b>alternatives</b>	Helps to develop a plan with minimal significant environmental impacts	SEA considers realistic alternatives to within-plan issues, not just one plan-wide set of alternatives
<b>3</b> Assessment of <b>cumulative impacts</b> of the plan plus other plans, projects and external trends	A key differentiator between the SEA of a plan and a project’s environmental impact assessment, in which SEA provides much “value added” to the assessment process	SEA assesses the overall impacts of the plan, plus the cumulative impacts of other plans, trends (e.g. financial, climate) and projects
<b>4</b> <b>Environmental authority recommendations</b> taken on board	Consultation with environmental authorities and the public is a key component of effective SEA. It helps ensure that the plan’s negative impacts are minimised and positive impacts are maximised	A clear list of consultation comments, with a high proportion of comments integrated into the plan or clear reasons given for not integrating them
<b>5</b> <b>Public recommendations on SEA documents</b> taken on board		
<b>6</b> <b>Changes made to the plan</b> in response to proposed SEA mitigation measures	Shows how the SEA has informed and influenced the development of the plan, and that the planning team have been responsive to outside information about their plan’s environmental impacts	A clear list of mitigation measures, with a high proportion of measures integrated into the plan or valid reasons given for measures not incorporated
<b>7</b> SEA’s contribution to <b>environmental improvement</b>	Aims to capture the true environmental contribution of SEA	SEA focuses on key impacts of the plan, tests against environmental targets and leads to plan changes towards achieving environmental targets
<b>8</b> SEA <b>monitoring</b> carried out and monitoring findings referred to in the current SEA	Supports improvement of subsequent rounds of plan-making and the early identification of unforeseen impacts of the implementation of the plan	SEA monitoring is carried out for all plans. For cyclical plans, SEA monitoring findings are referred to in the current SEA
<b>9</b> Planning team documentation of <b>lessons learned</b> from the SEA and <b>suggestions for improving</b> the next round of SEA	Encourages the planning team to reflect on the SEA process and its effectiveness, to improve effectiveness in the future	The planning team has learned lessons from this SEA and makes suggestions for improving the next round of SEA
<b>10</b> Planning team documentation of the <b>costs and benefits of the SEA</b>	Encourages the planning team to think about minimising the costs and maximising the benefits of SEA, to improve effectiveness in the future	The planning team understands the costs and benefits of this SEA, and has ideas for how to decrease costs and increase benefits for future SEAs

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