

Fundamentals of EIA & Reviewing EIA

ACBA 7004
Week 3

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Activities for next week:

- Read and review: Government outlines plans to replace 'over-complicated' EIA regime (endsreport.com)
- New legislation proposes radical changes, replacing EIA | UK (environment-analyst.com)

(2) Divergence Series | Divergence in environmental policy post-Brexit – YouTube

Additional suggested readings in Moodle (Week 2)

Outline

- Recap from last week
- Impact management
- Impact mitigation
- **Process of reviewing EIA**
- **EIA review (Activity)**

EIA – Three core values

- Integrity - the EIA process will conform to agreed standards
 - Utility - the EIA process will provide balanced, credible information for decision-making
 - Sustainability - the EIA process will result in environmental safeguards
-
- *Source: Sadler, 1996*

EIA – guiding principles

The EIA process should be:

purposive –
meeting its aims
and objectives

focused –
concentrating on
the effects that
matter

adaptive –
responding to
issues and
realities

participative –
fully involving the
public

transparent –
clear and easily
understood

*Source: Sadler,
1996; IAIA/IEMA
1999*

Key operating principles of good EIA practice

- EIA should:
- be applied to all proposals with significant impacts
- begin early in the project cycle
- address relevant environmental, social and health impacts
- identify and take account of public views
- result in a statement of impacts and mitigation measures
- facilitate informed decision making and condition setting

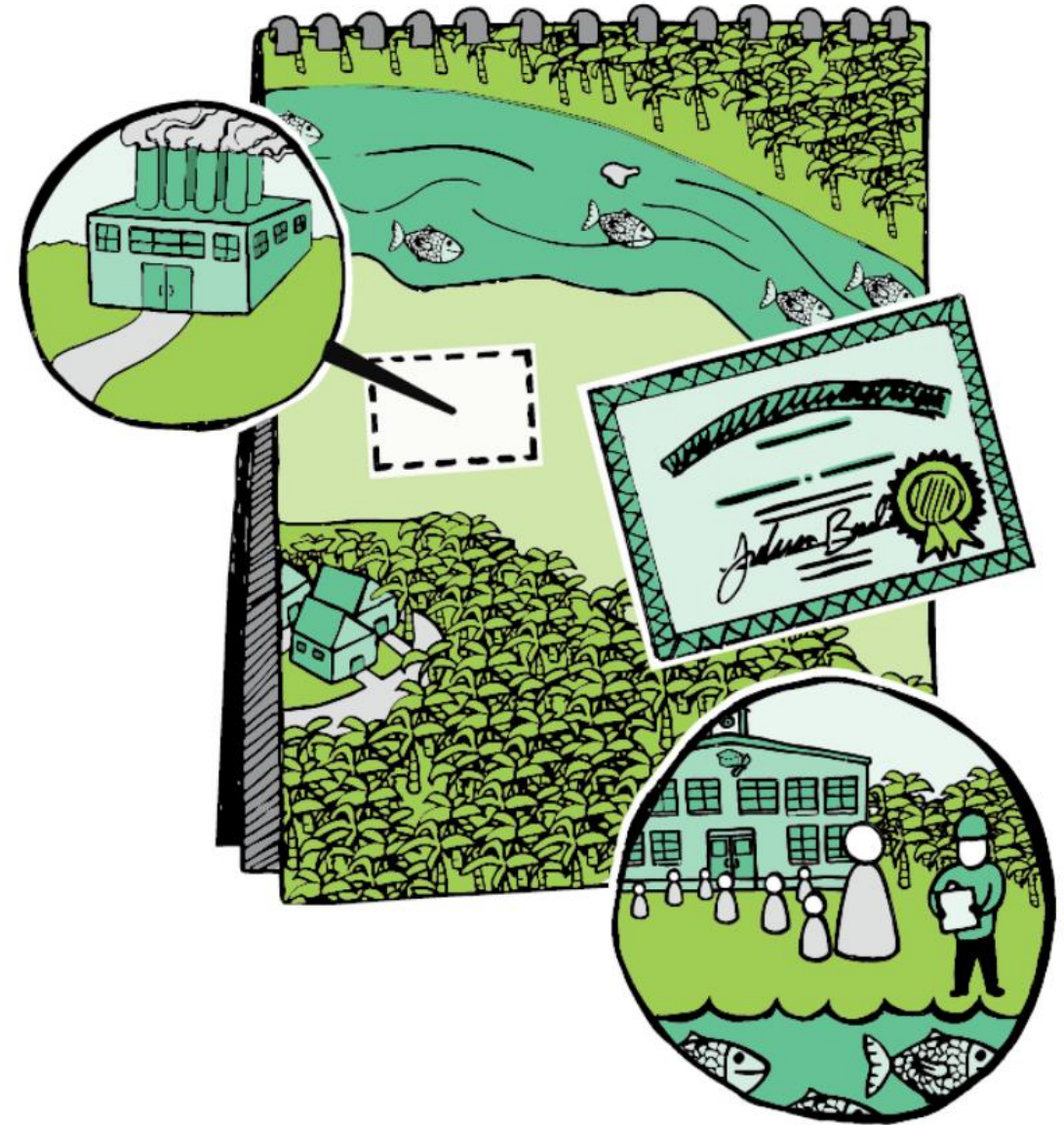
- *Source: Sadler, 1996*

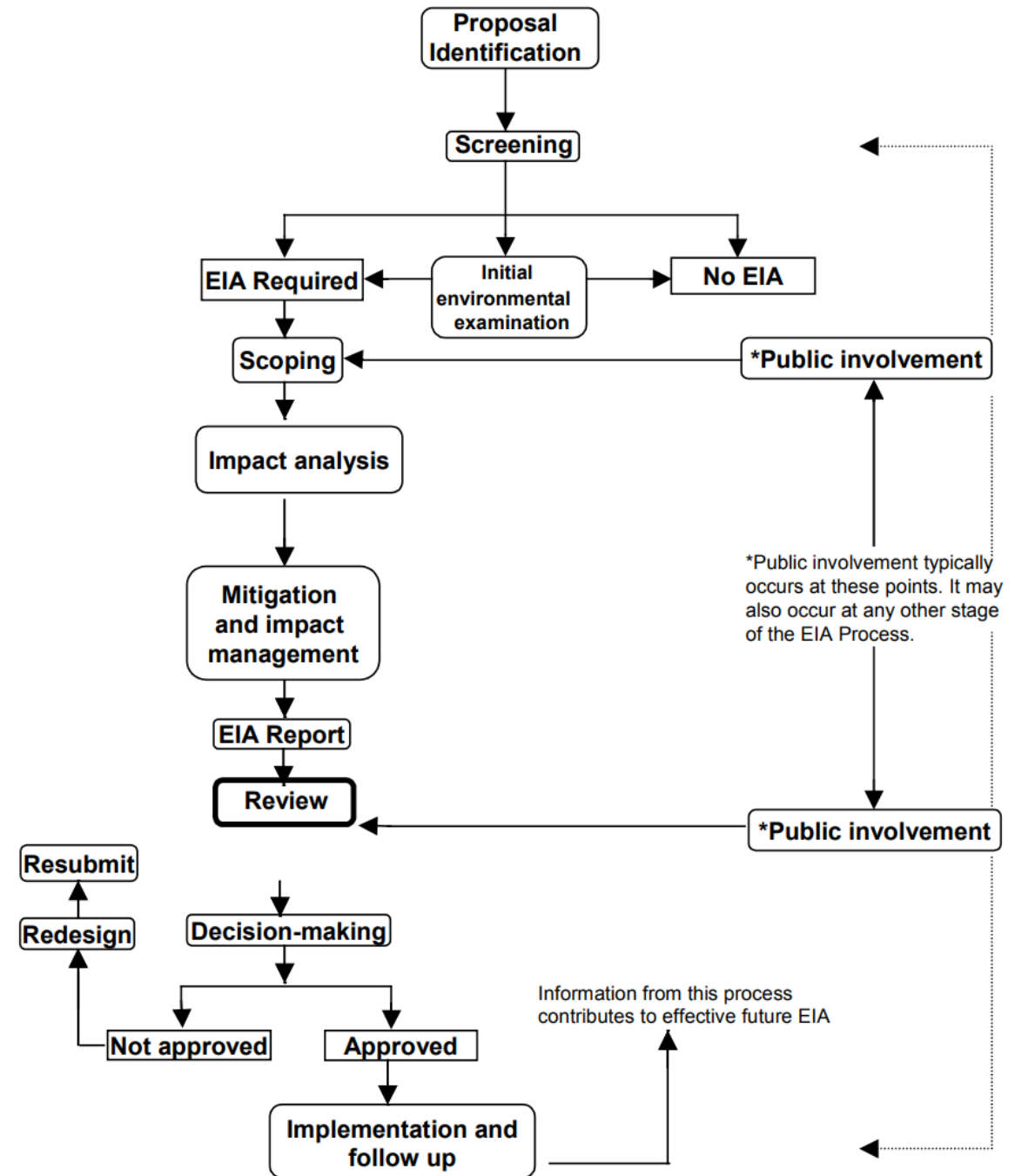
- rigorous – employing ‘best practicable’ methodology
- practical – establishing mitigation measures that work
- credible – carried out with objectivity and professionalism
- efficient – imposing least cost burden on proponents

Source: Sadler, 1996; IAIA/IEMA 1999

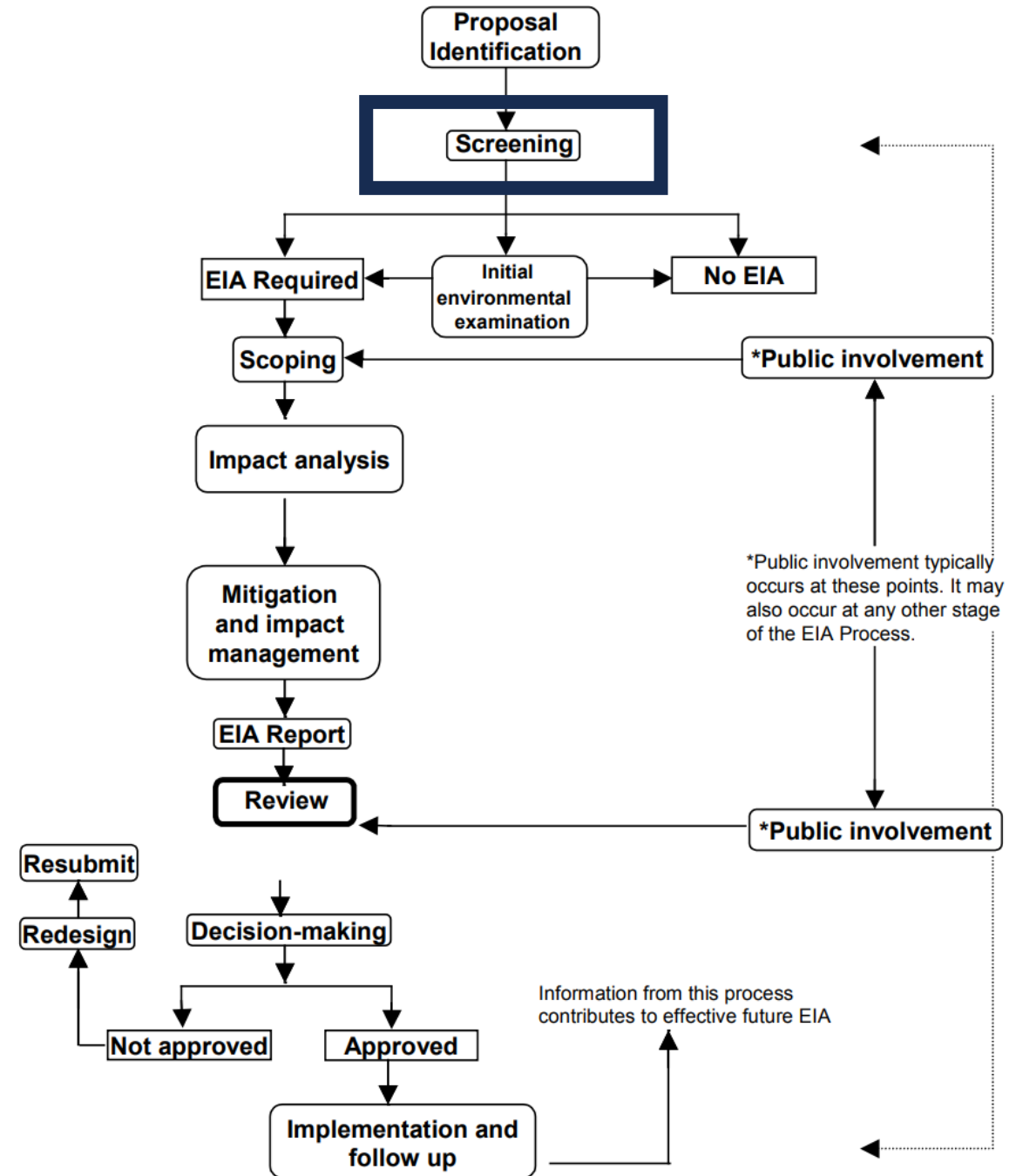
Recap

[EIA-Manual.pdf \(iisd.org\)](http://www.iisd.org/eia-manual.pdf)

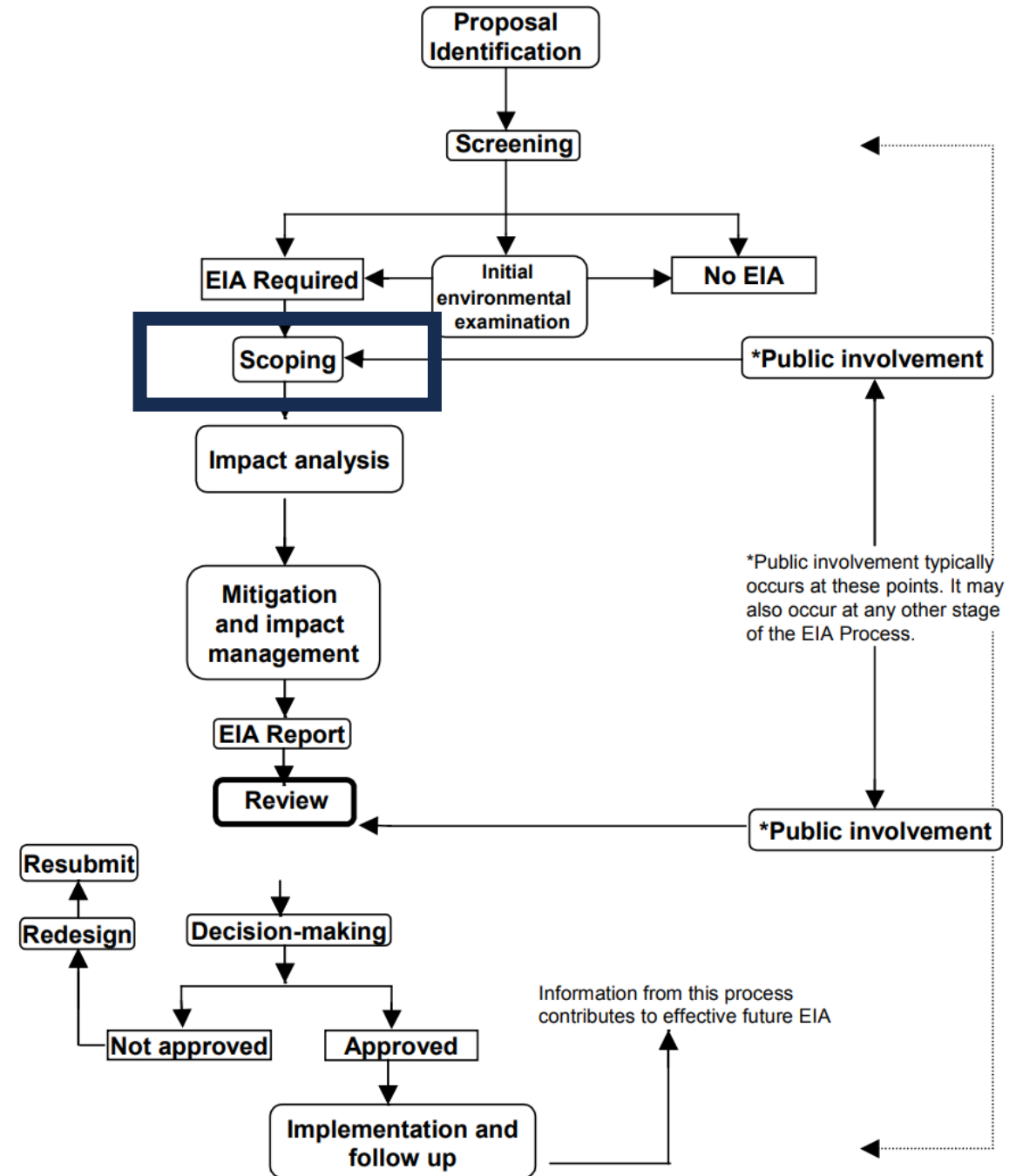




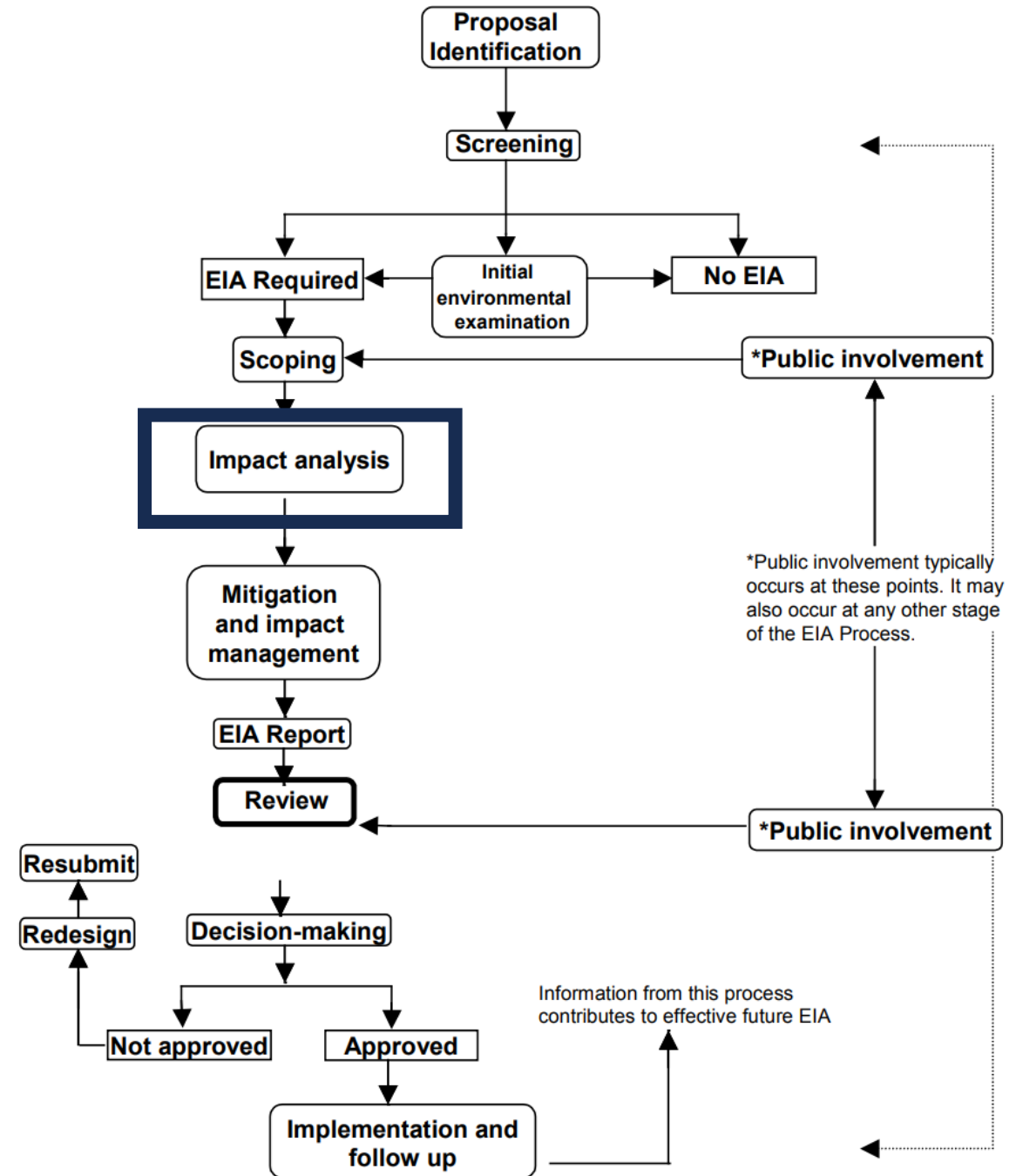
What is screening?



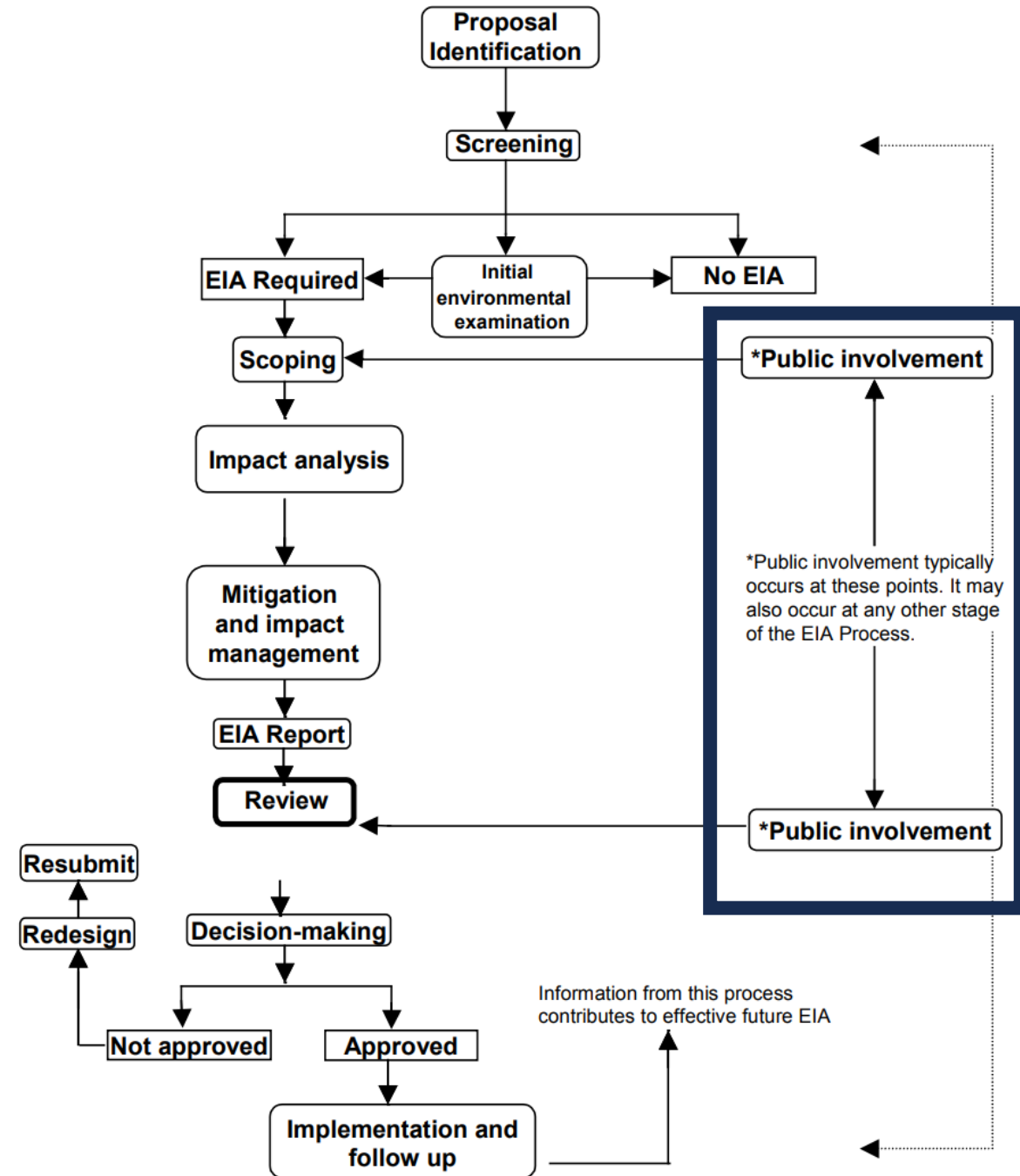
What is scoping?



What sorts of things do we consider in impact analysis?



What public involvement initiatives should be considered...?



Public participation

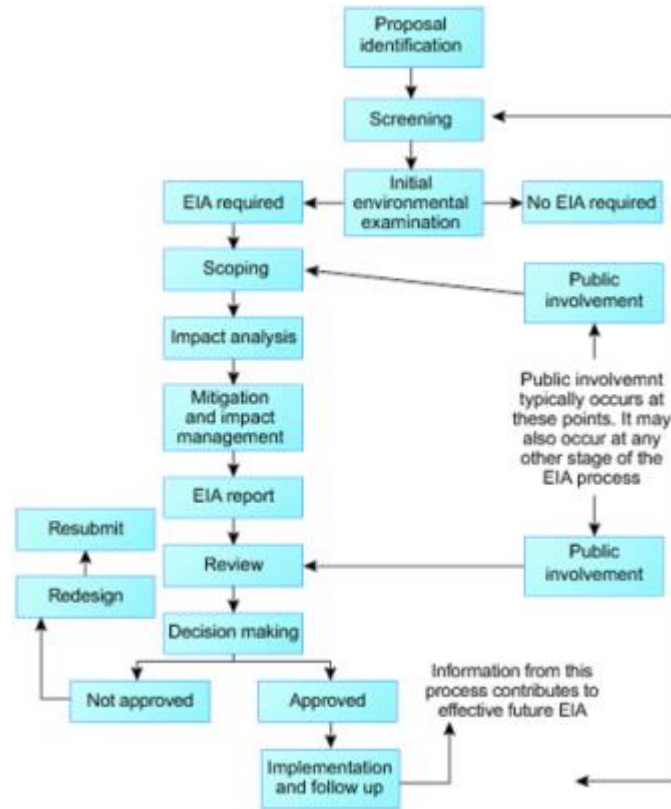
Involvement of the public is crucial to the EIA process

The general public are one of the key stakeholders who may potentially be impacted by the development

They also have a right to care for, and protect, the environment

However, how, and if, the public are included in the EIA process varies between projects, and can be a significant element of success or failure depending on the approach of the developer.

Ignoring the public's opinion, or planning a development that does not take into account the feedback, can result in very strong public resistance towards a development and lengthy planning 'battles'



Source: United Nations University (2007)
https://wedocs.unep.org/bitstream/handle/20.500.11822/26503/EIA_Training_Resource_Manual.pdf

Several notable cases evidence the impacts to proposals of not having public backing.

Not engaging with the public in a constructive, inclusive, and candid manner can result in strong public opposition, leading to high profile activism against a development.

Judicial review of Heathrow airport third runway decision begins

High court to hear five challenges to plans for UK's biggest aviation hub



A protest outside the Royal Courts of Justice in October last year against Heathrow expansion.

Photograph: Kirsty O'Connor/PA

Did the Newbury bypass tree-huggers change anything?

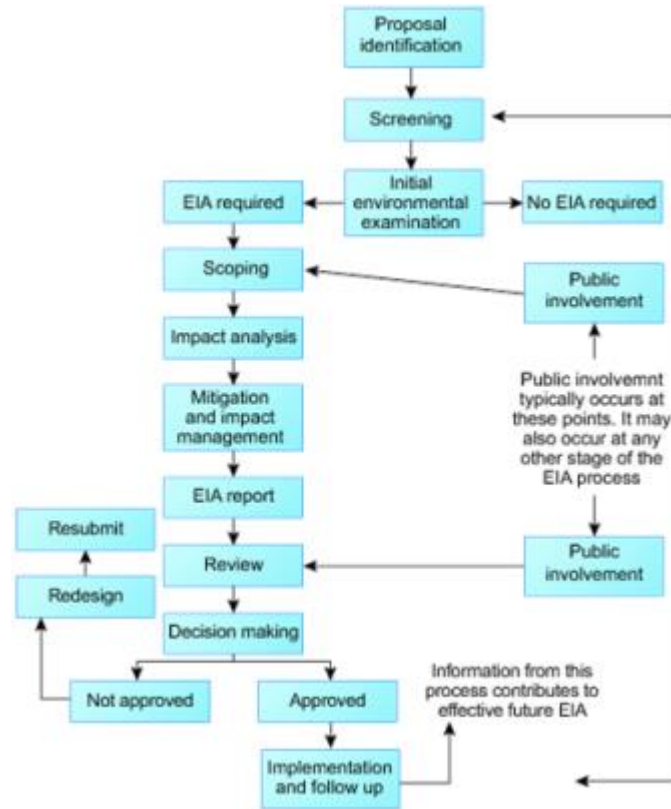


Cost of build



Pros and Cons of Public participation

There are a number of benefits to public participation, but they can also be seen as detrimental to the project from the developer's perspective.



Source: United Nations University (2007)
https://wedocs.unep.org/bitstream/handle/20.500.11822/26503/EIA_Training_Resource_Manual.pdf

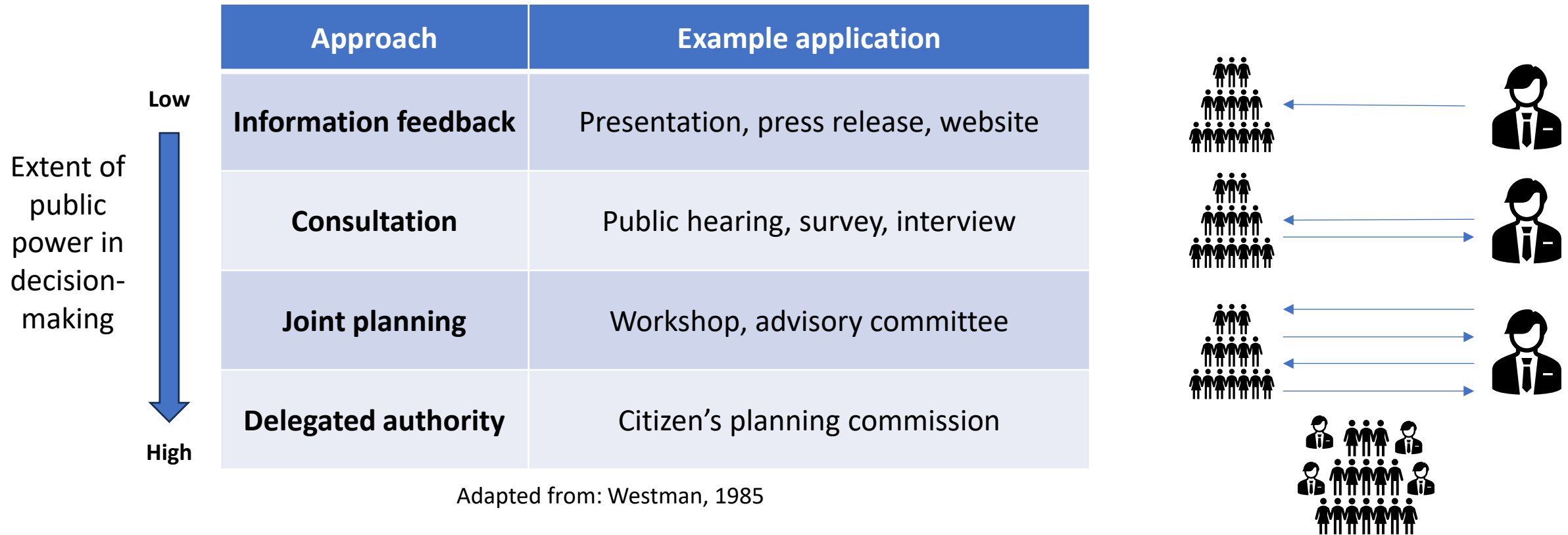
Benefits	Drawbacks
Identify local factors not readily identifiable from other sources	Increases the public profile of the development
Determine the feasibility of alternatives, or even identify new ones.	Extended timeframes to incorporate public opinion
Allow for information dissemination and reduce spread of misinformation	Additional cost involved in public consultations
If done correctly, can avoid lengthy and costly legal challenges	If not conducted, or done effectively, can lead to costly and lengthy public inquiries / legal challenges
Increase the public's say in the decision-making process	Deviate away from the initial preferred option.

Levels of Public participation

It is important to recognise that involvement of the public in the EIA process can be varied in approach.

Particular attention should be paid to the ability for the public to participate in the decision-making process.

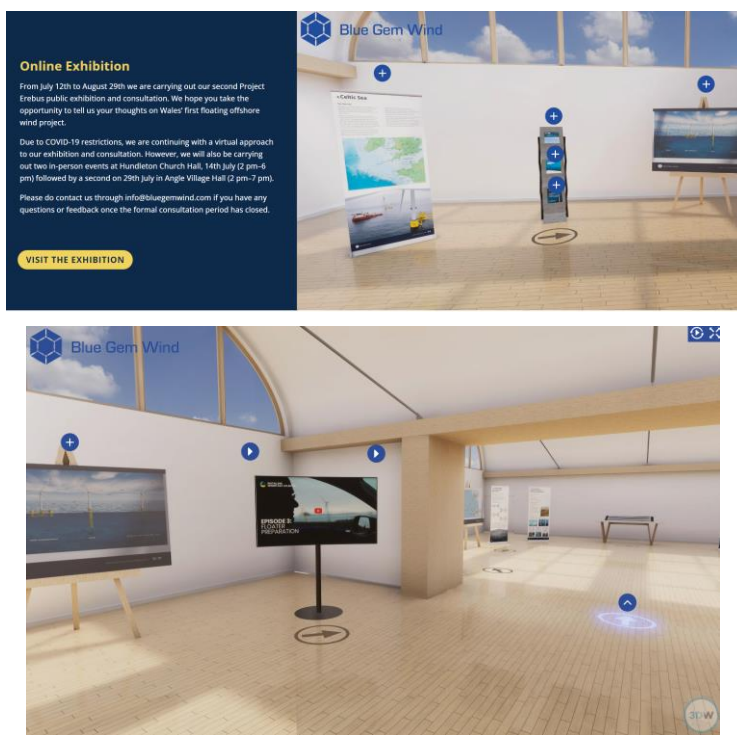
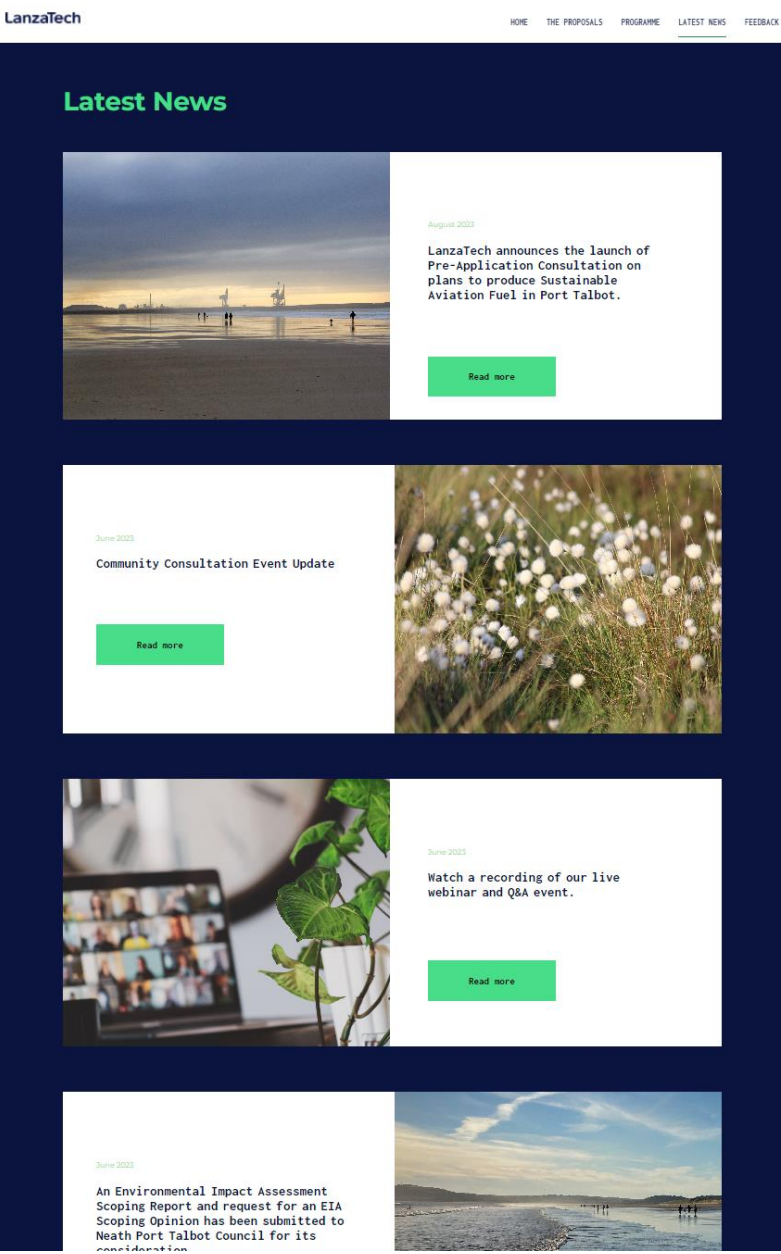
Question: What do you think are the pros and cons of each approach (for the public or the developer)?



Examples of Public participation

It is important to recognise that involvement of the public in the EIA process can be varied in approach.

Particular attention should be paid to the ability for the public to participate in the decision-making process.



[Blue Gem - Erebus - Virtual Exhibition \(3dwtech.co.uk\)](https://3dwtech.co.uk)



Activity

Visit the following website: [Blue Gem - Erebus - Virtual Exhibition \(3dwtech.co.uk\)](http://3dwtech.co.uk/BlueGem-Erebus-VirtualExhibition)

Visit the virtual Erebus exhibition.



Activity

Is the virtual consultation useful?

What key information is provided?

How have they made this content accessible?

How did they assess impacts?

What key legislation is relevant here?

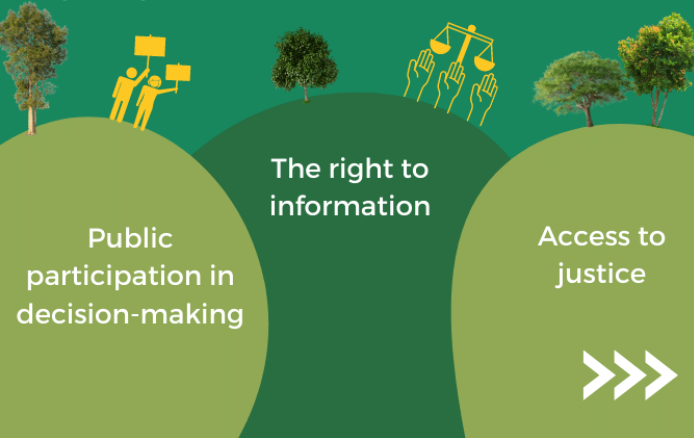
Legal requirement of Public participation



Within the UK context, the requirement for public participation was enhanced with the “UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters”, also known as the Aarhus Convention, a global agreement on the rights of the public to information, decision-making, and justice in environmental manners.

WHAT IS THE AARHUS CONVENTION?

The Aarhus Convention is an international agreement on environmental democracy, adopted in 1998, and based on three main principles:

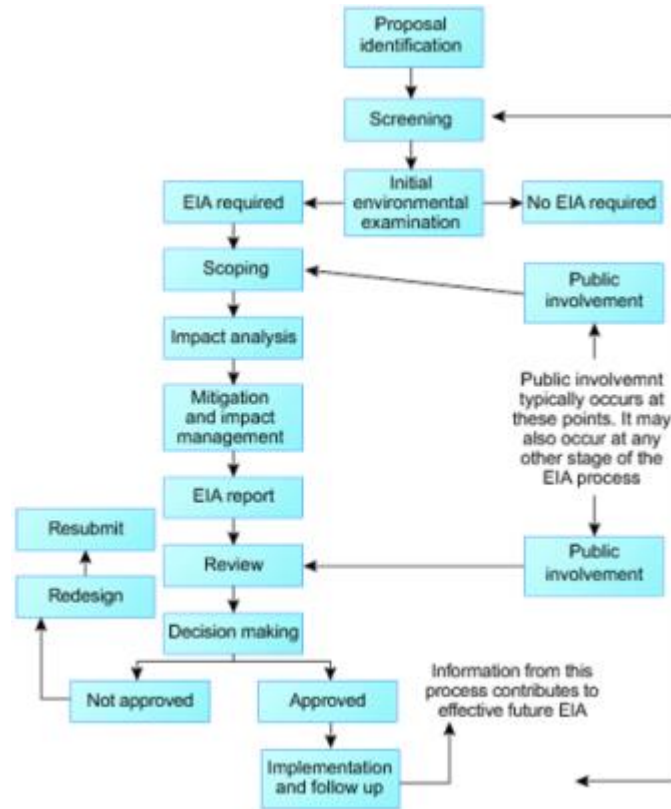


The associated EIA Directives which adopted these principles determine the need in the UK for ‘the public’ to be informed in decisions, both of the proposal, and how to engage in consultation.

Additionally, ‘the public concerned’ must be given ‘early and effective’ opportunities to participate.

However, the application of this legal right is mixed (Hartley and Wood, 2005), and even adopted to minimal standards (Glasson et al., 2012)

Recommendations for Public participation



Source: United Nations University (2007)
https://wedocs.unep.org/bitstream/handle/20.500.11822/26503/EIA_Training_Resource_Manual.pdf

Best practice guidance for inclusion of the public in EIA processes states that early and effective communication is ideal, benefiting the environment, the rights of the public, and the developer.

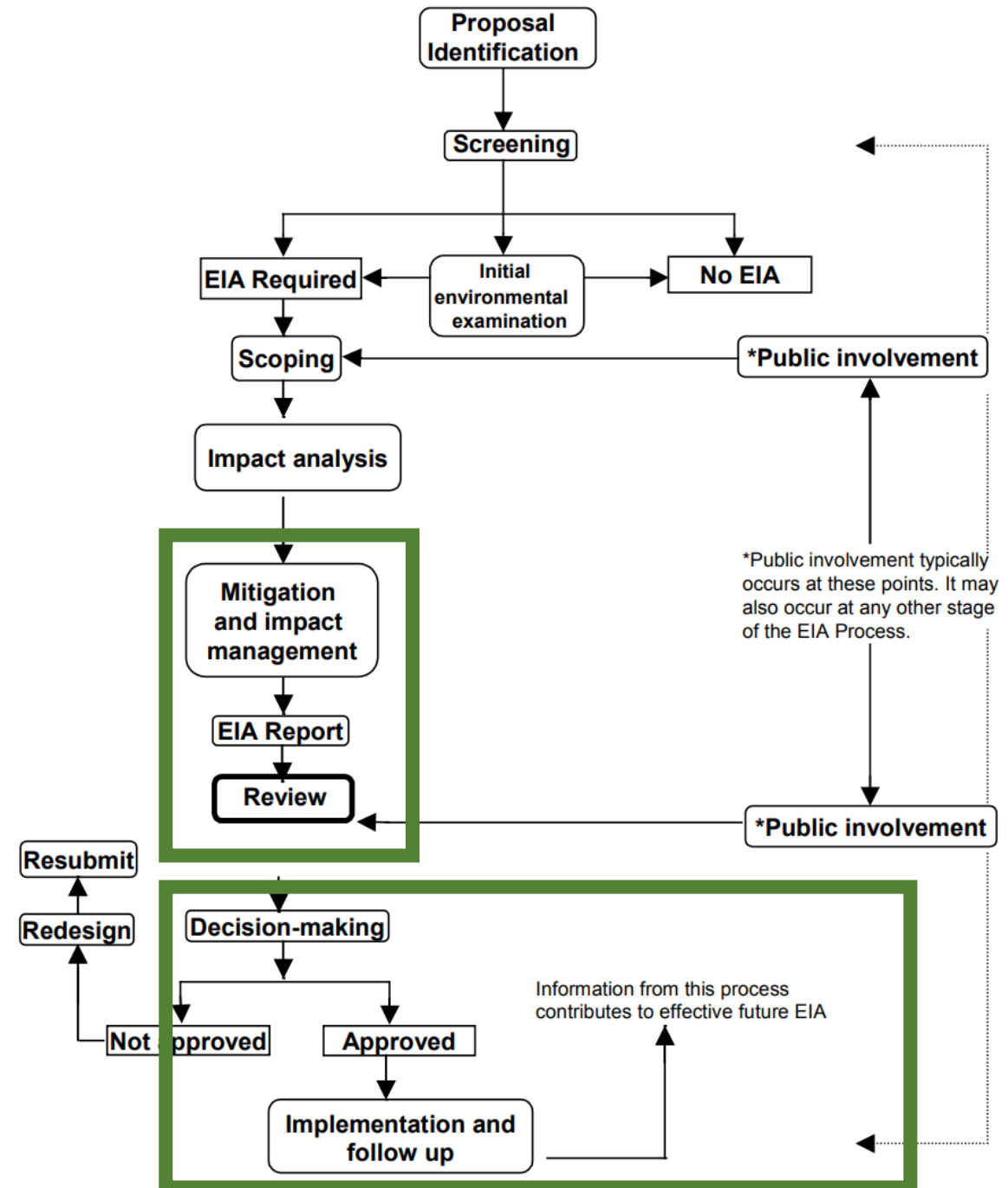
It is essential that the public are considered during all stages of the process, and not included as a box-ticking exercise.

There should be evidence that the public have had the opportunity to influence the decision-making process and been kept informed.

There is also the requirement for accessibility of information and inclusion of minority groups. Identifying all groups and providing the ability for everyone to partake is challenging but critical.

Today:

- Mitigation and Impact Management
- Decision Making
- Review of EIA



The background of the slide features a complex arrangement of interlocking metal gears in various sizes, creating a sense of mechanical complexity. In the upper right quadrant, a circular compass rose is integrated into the gear system. The compass rose has a gold-colored face with black markings for cardinal and intercardinal directions (N, NE, E, SE, S, SW, W, NW) and degree measurements. Its hands are positioned to indicate a specific direction. The overall color palette is dark and industrial, with the white text providing a sharp contrast.

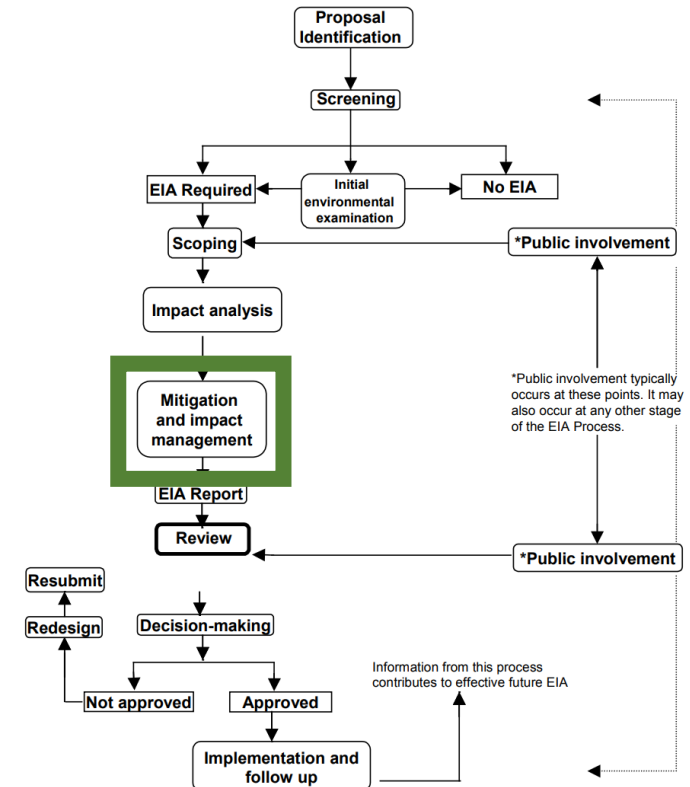
Impact Management in EIA



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Impact Management in EIA

In this section we will learn about plans that you need to develop to **specify, implement and monitor** the identified mitigation measures and address other risks that the project could present, such as technological failures and other emergencies.



Impact Management in EIA

Impact management is a series of plans and protocols that are part of the EIA process (and also continue after project implementation) to manage and monitor identified mitigation measures and other risks such as technology failures and natural disasters that may occur over the project lifetime.

Impact Management in EIA

The analyses of the impacts and mitigation measures (carried out in the previous step) will likely **identify a number of changes in the project design, implementation and closure.** It will also require additional action plans to manage risks and carry out monitoring.

The need for these plans depends on the type of project, the identified impacts, and the risks associated with the project based on its activities and the natural and social context where it will take place. Some of the plans are compulsory, such as an **environmental management plan (EMP)** which is required as part of an EIA report in most countries

Mitigation

Description

Modifications to the location or design of the development made during the pre-application phase that are an inherent part of the project, and do not require additional action to be taken.

Key principles:

- Action at the top of mitigation hierarchy, with greater ability to avoid impacts.
- Best applied early, because they become more difficult to accommodate as the design progresses and stabilises.
- Become a fundamental part of the design seeking consent.
- Described in detail within the ES project description.

Primary
(inherent)

Examples include:

- Reducing the height of a development to reduce visual impact.
- Identifying a key habitat or archaeological feature that should remain unaffected by the development's layout and operation: e.g. retaining an unimproved grassland area in situ as part of an open space strategy.
- Developing a transport strategy that reduces trips, avoiding the need for junction improvements.

Option	Example
Avoid at source	Avoid machinery
Minimise impacts at source	Use quiet machinery
Abate impacts on site	Use acoustic barriers
Abate impacts at receptor	Provide double glazing
Repair impacts	Monitor and remedy
Compensate in kind	Move residents for duration of construction
Other compensation and enhancement	Liaise with residents

Mitigation hierarchy. Adapted from Department of Environment, Transport, and Regions (DETR) 1997

Mitigation

Description

Actions that will require further activity in order to achieve the anticipated outcome. These may be imposed as part of the planning consent, or through inclusion in the ES.

Key principles:

- A flexible form of mitigation that can be proposed at any point within the EIA process, including during the decision-making process.
- Tend to operate in the middle of the mitigation hierarchy, focusing on reducing the significance or likelihood of adverse effects.
- While they would be integrated into the application for consent, this form of mitigation requires additional action post-consent, beyond the core function of the development, to be implemented.
- Carry a greater risk of non-implementation or ineffective application post-consent than primary or tertiary mitigation.
- Best managed through an environmental management plan.

Secondary (foreseeable)

Examples include:

- Describing certain lighting limits, which will be subject to the submission of a detailed lighting layout as a condition of approval.
- Providing a transport or movement framework, underpinning a Section 106 (Town and Country Planning Act 1990 (as amended)) commitment to provide public transport or limit car movements through operational planning.

Mitigation

Description

Tertiary (inexorable)

Actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects.

Key principles:

- Can be identified at any point during the design and EIA process.
- The least flexible form of mitigation – either they exist, or they do not.
- The EIA Co-ordinator must be confident that any tertiary mitigation identified is very likely (>90%) to occur without further specific activity being undertaken within the EIA process.
- It is helpful, but not strictly necessary, to include tertiary mitigation related to construction activities, within a draft Construction Environmental Management Plan (CEMP) (or similar) included in the ES, to ensure that these actions are highlighted to the principal contractor.

Examples include:

- Applying emission controls to an industrial stack to meet the requirements of the Industrial Emissions Directive (Directive 2010/75/EU).
- Considerate contractors' practices that manage activities which have potential nuisance effects.

What are the approaches to impact management?

A core part of impact management is developing an environmental management plan (EMP) which is usually prepared as part of EIA reporting. An EMP translates recommended mitigation measures into specific actions that will be carried out by the proponent. An EMP also forms the basis for impact management during project construction and operation, and outlines activities for continuous monitoring. The content of the EMP can be summarized as follows:

- **Mitigation:** The EMP summarizes all mitigation measure and details about how they will be implemented; the mitigations are linked to the finding's impact analyses.
- **Monitoring:** Monitoring of the environmental impacts during project implementation and also monitoring of the effectiveness of mitigation measures to address impacts.
- **Capacity Development:** The assessment of capacity-building needs that would require stakeholders' involvement in managing environmental and social impacts and monitoring efforts.
- **Implementation Schedule and Cost Estimates:** Costs of the outlined mitigation activities, capacity-building and monitoring; this will include cost of implementation and then ongoing monitoring and follow-up capacity development costs.
- **Integration of the EMP with the Project:** The EMP needs to be developed in a way that fits with the planned project and the mitigation actions and other activities are linked to the project activities.

How to conduct impact management

Development of an EMP is required based on the legislation in most of the reviewed LAC countries. According to this legislation, the project must outline specific mitigation measures, integrate those measures into the planned project activities and present indicators to monitor the impacts. Based on the legislation in Honduras and in the LAC countries (and examples from the literature), the following key steps in developing an EMP can be summarized as follows:

- Summary of the potential impacts of the proposal.
- Linkages to the national and subnational legislation to set environmental commitments thresholds for acceptable impacts and to frame the mitigation and monitoring measures.
- Description of the recommended mitigation measures.
- Statement of their compliance with relevant standards.
- Allocation of resources and responsibilities for plan implementation.
- Schedule of the actions to be taken.
- Program for monitoring and auditing.
- Contingency plan to address additional risks and emergencies.

This assessment forms the basis for the preparation of the Contingency Plan. This plan aims to clearly establish lines of action to follow, assigning responsibilities, functions and setting organization of responses to address emergency situations. It needs to be prepared so that at critical moments of an emergency there is flexibility to facilitate the rapid mobilization of personnel and equipment to the right place, so that the response is quick and effective. The Contingency Plan shall include the following:

- [EIA-Manual.pdf \(iisd.org\)](https://www.iisd.org/publications/eia-manual)

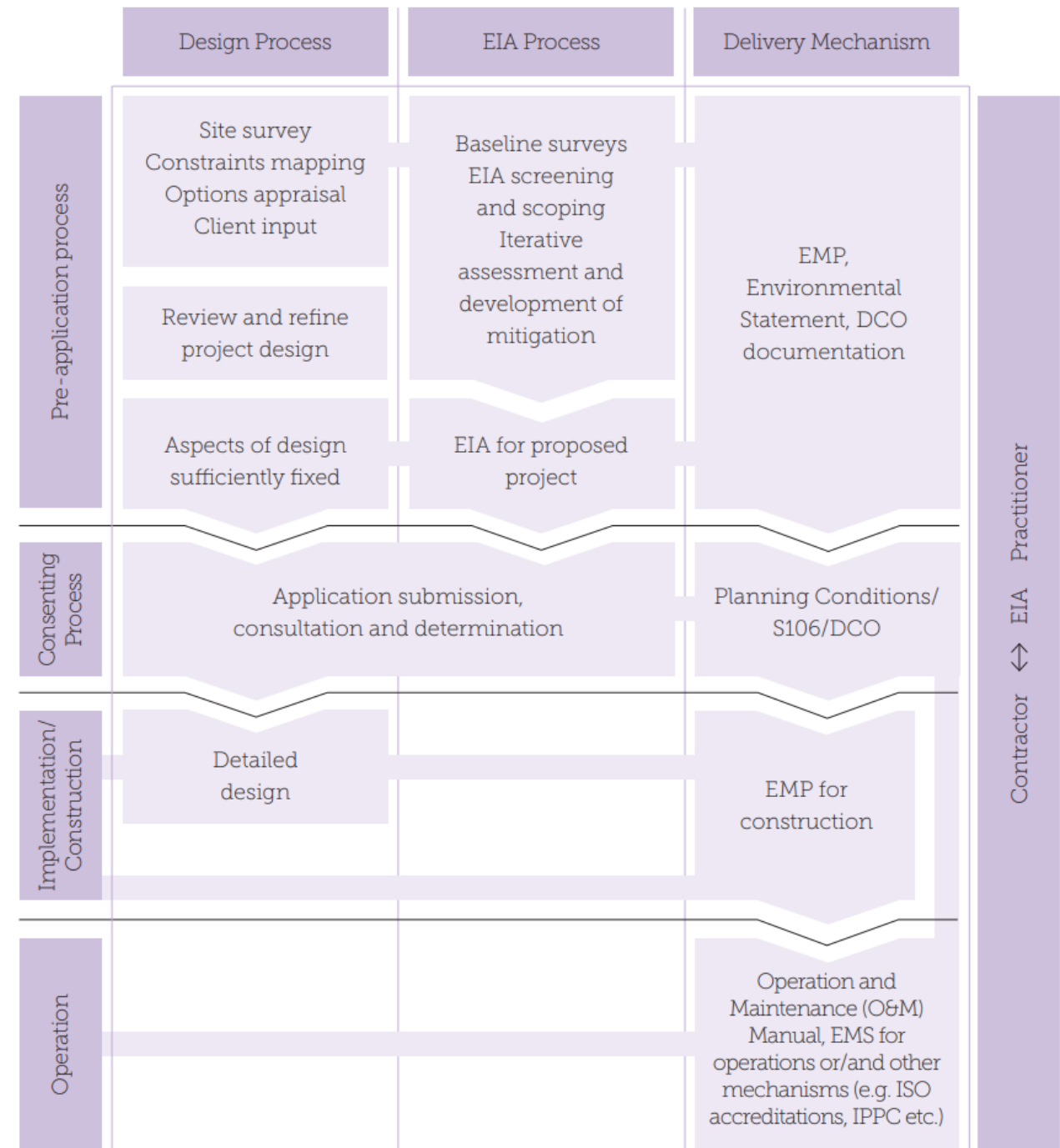
How to conduct impact management

- [Microsoft Word - Environmental Management Plan KGSHE044 Rev A 19 01 15 \(2\).doc \(nottinghamshire.gov.uk\)](#)



EMP

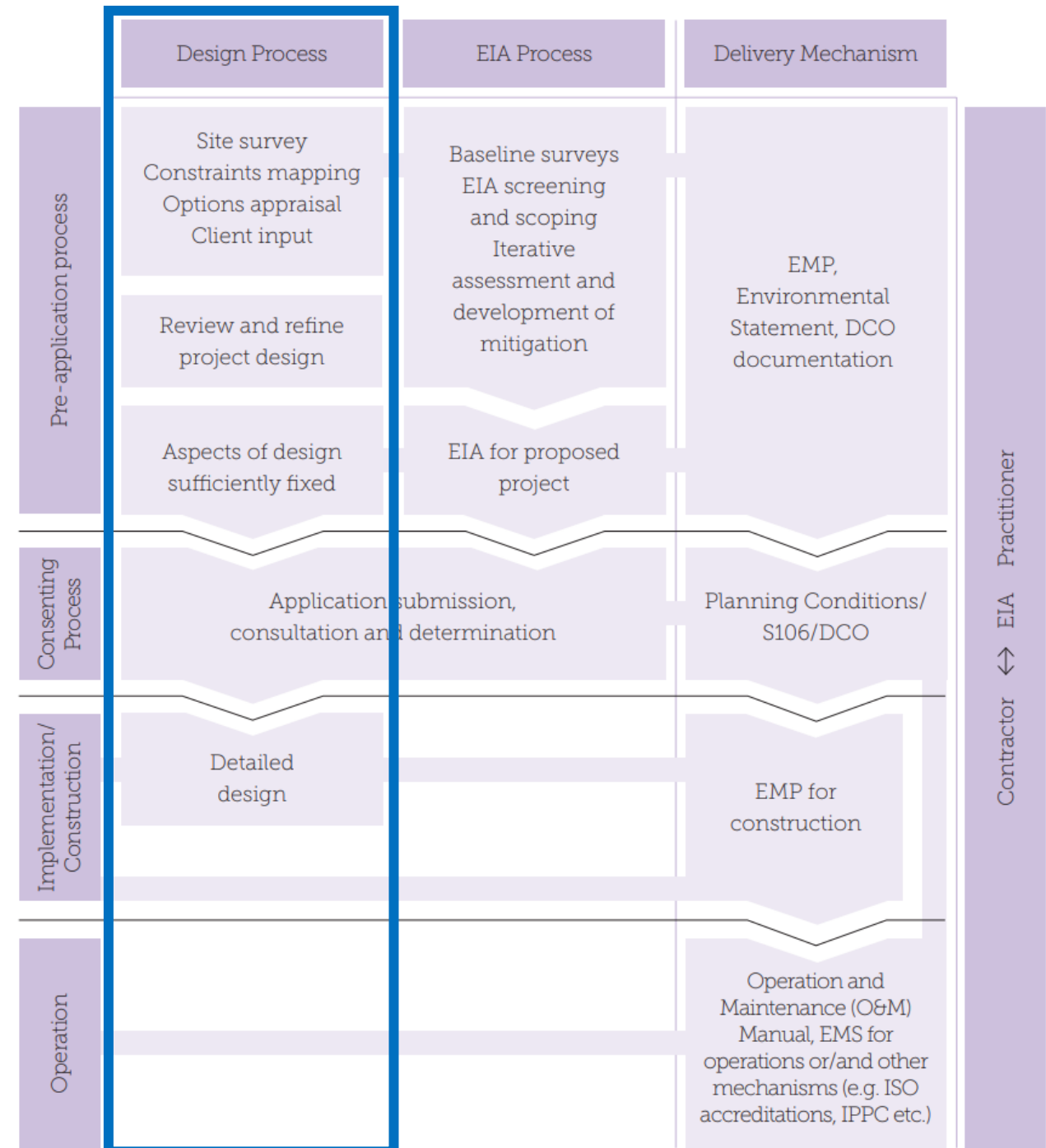
The link between Design and EIA processes
and Mechanisms to Deliver Mitigation
(Adapted from Lochner 2005)



From: EIA: Delivering Quality Development. IEMA (2016)

EMP

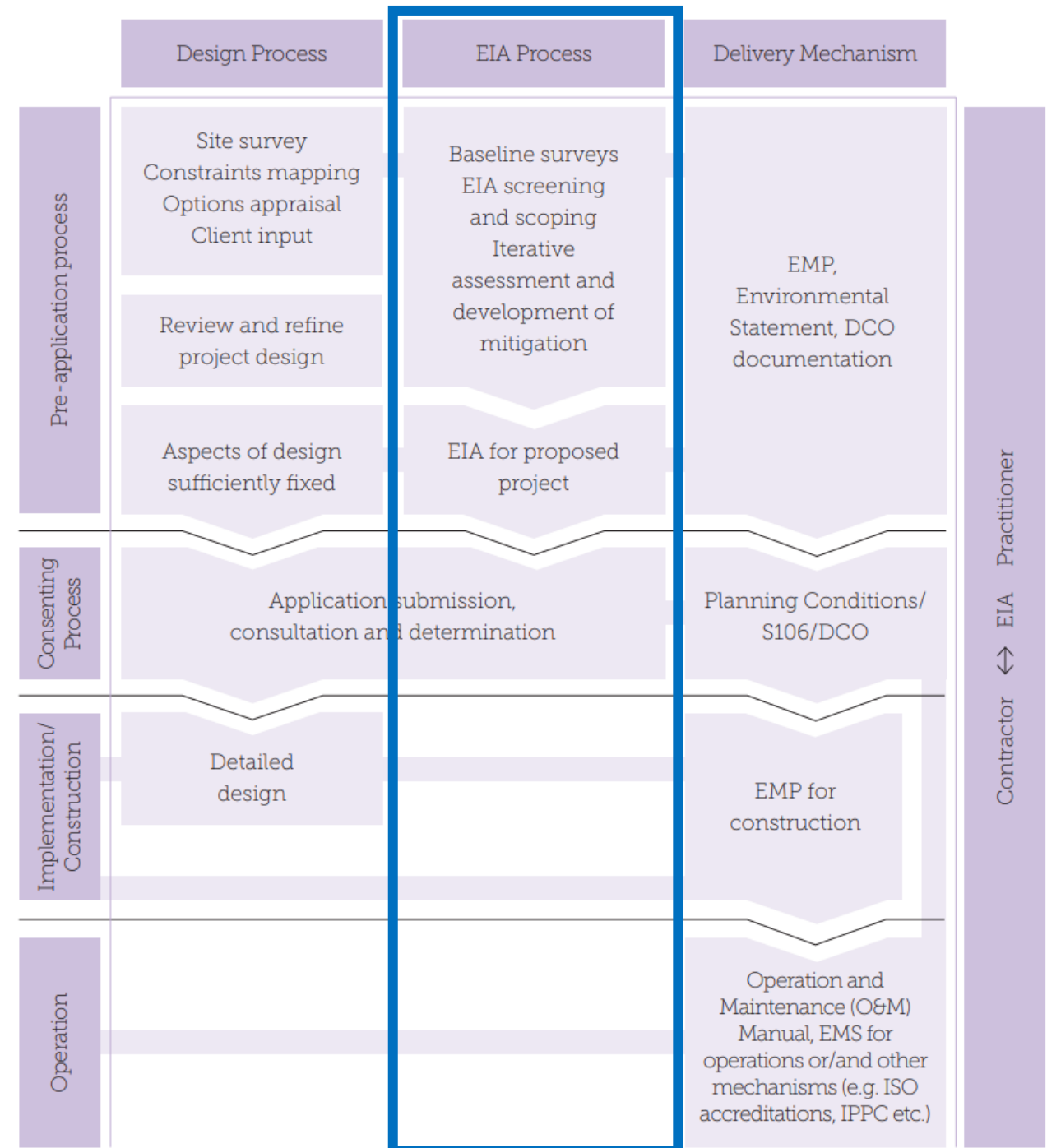
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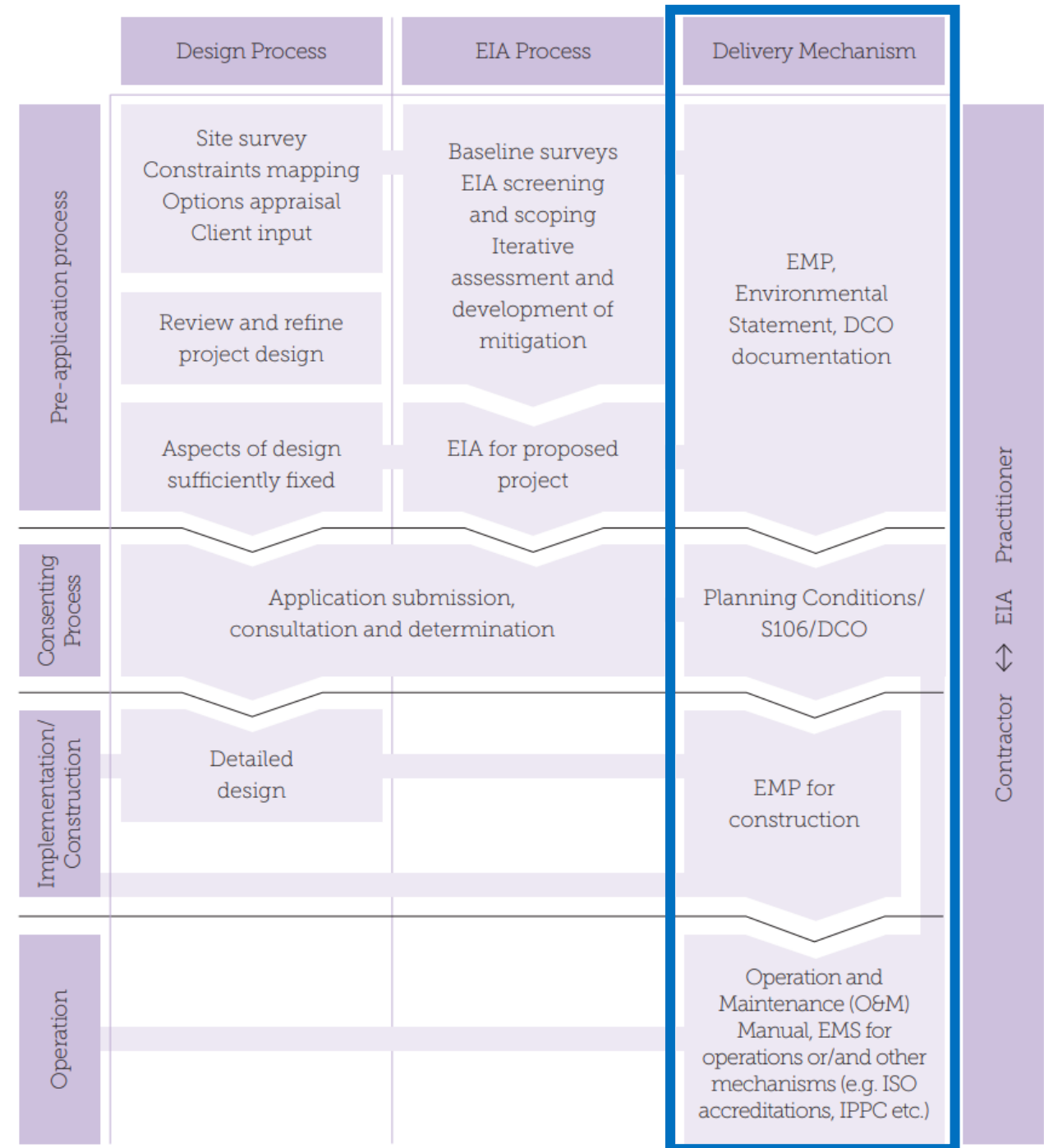
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EMP

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From: EIA: Delivering Quality Development. IEMA (2016)

EMP

An EMP during the construction stage is often known as a Construction EMP or **CEMP**. Consenting authorities often require a CEMP to ensure that the developer is committed to the implementation of mitigation measures identified as part of the EIA at the construction stage.

EMP

An EMP can be used to both improve proportionality of EIA practice and secure environmental mitigation early on in the process, even at the Screening and Scoping stages.

This has the benefit of identifying environmental topics and effects for which, with the implementation of mitigation, there may be no 'likely significant effects'.

The consenting authority and stakeholders should be part of this process. This can help to ensure that only significant topics/effects that would remain following the adoption of the EMP are taken forward into assessment. During the EIA, an EMP can be developed further refining and adding mitigation measures alongside the iterative scoping process, e.g. following the completion of baseline surveys or modelling/assessment.



Activity

Click on the following link to read an example of an EMP.

[Microsoft Word - Environmental Management Plan KGSHE044 Rev A 19 01 15 \(2\).doc \(nottinghamshire.gov.uk\)](#)

What things are covered?

**Can you find another example of an EMP?
Perhaps for your EIA / project?**

(20 mins)



Take a break

10mins



Planning Application Determination

UK Decision Making guidance

The government guidelines for decision making are as follows:

Decision making

The Environmental Statement, together with any other information which is relevant to the decision, and any comments and representations made on it, must be taken into account by the local planning authority and/or the Secretary of State in deciding whether or not to grant consent for the development. The public must be informed of the decision and the main reasons for it both electronically and by public notice.

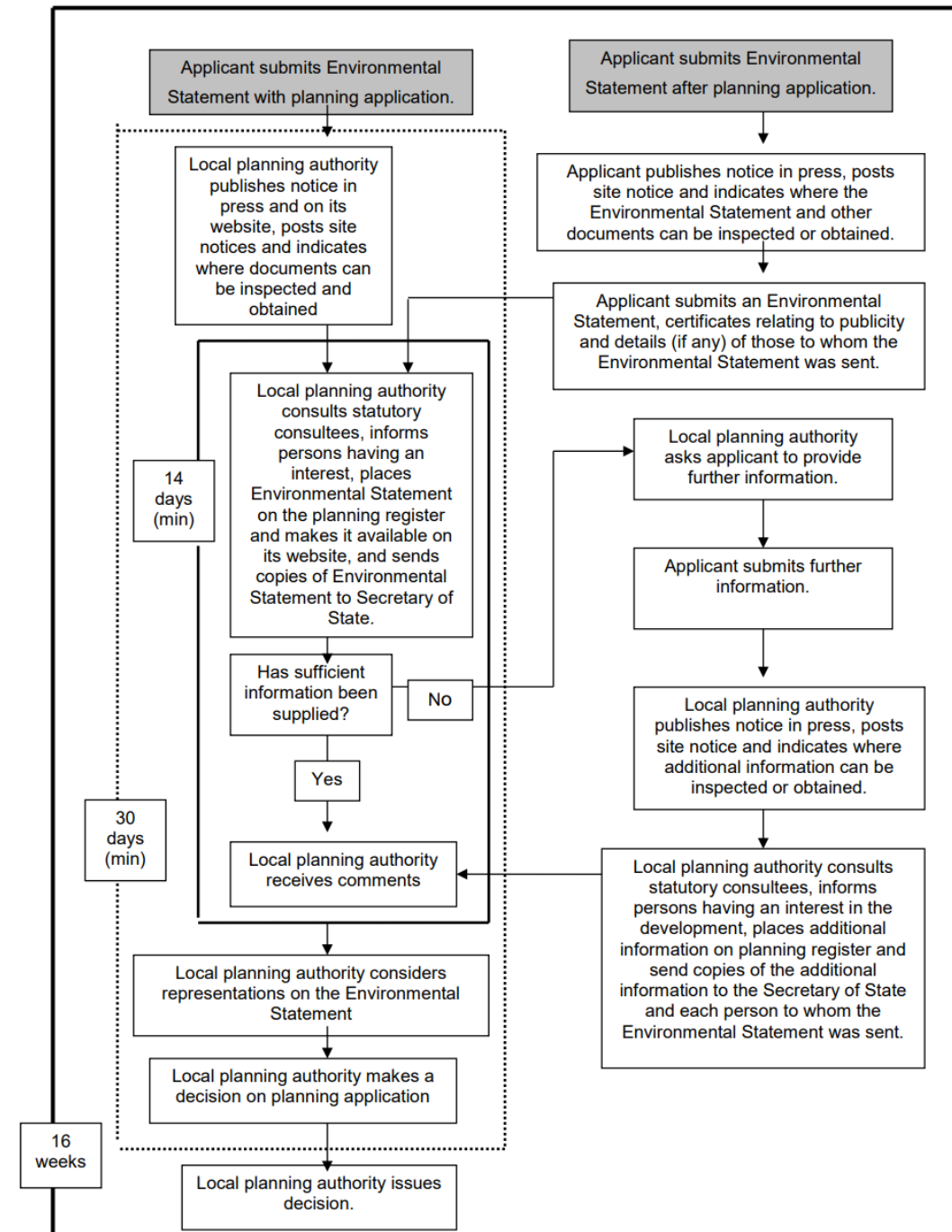
Are there specific arrangements for considering and determining planning applications that have been subject to an Environmental Impact Assessment?

There are specific arrangements for considering and determining planning applications that have been subject to an Environmental Impact Assessment. These arrangements include consideration of the adequacy of the information provided, consultation, reaching a reasoned conclusion on the significant environmental effects of the proposed development, publicity, and informing the consultation bodies and public of both the decision and the main reasons for it. The local planning authority must take into account the information in the Environmental Statement, the responses to consultation and any other relevant information when determining a planning application.



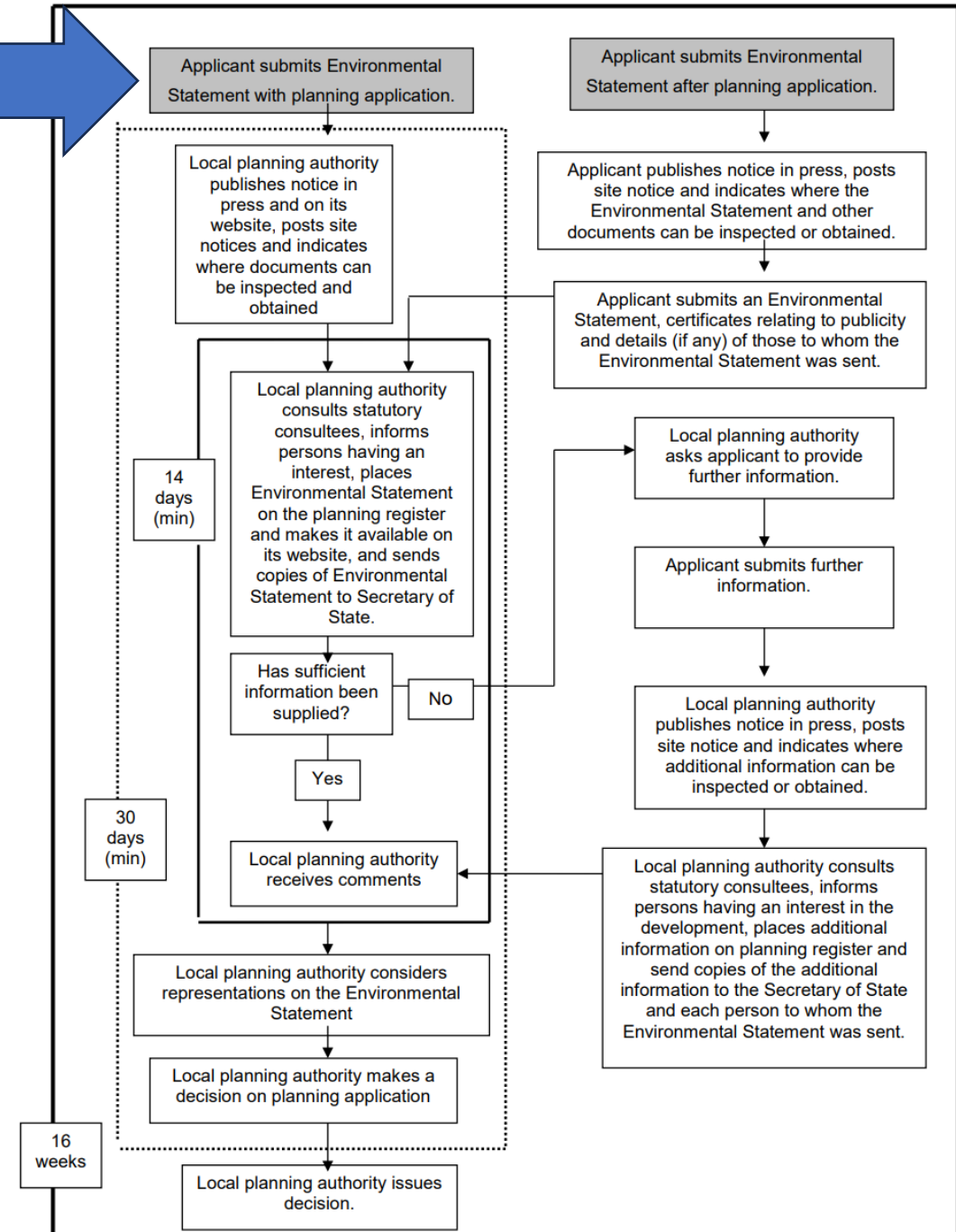
Determining EIA and Planning applications

[EIA-Manual.pdf \(iisd.org\)](http://EIA-Manual.pdf(iisd.org))



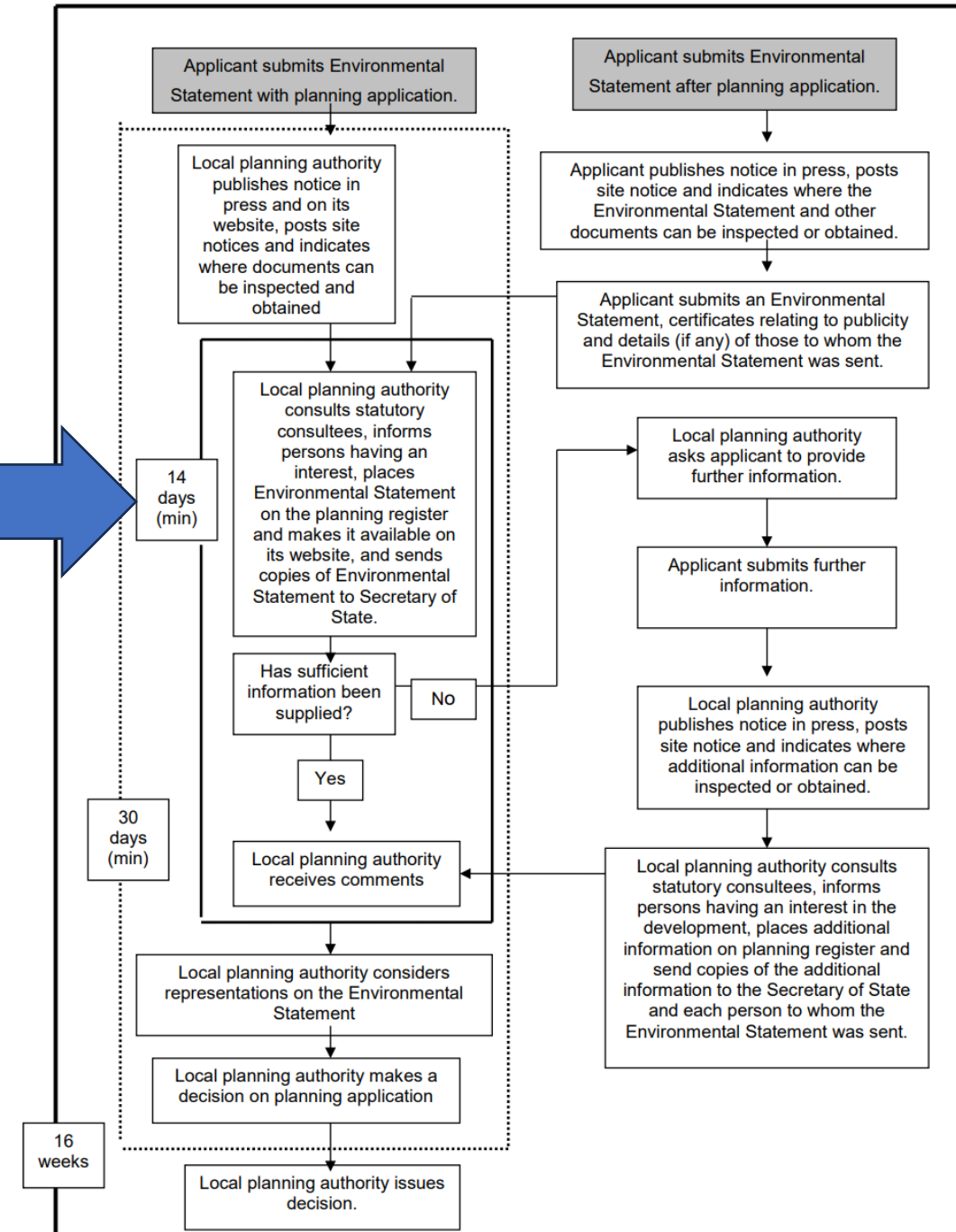
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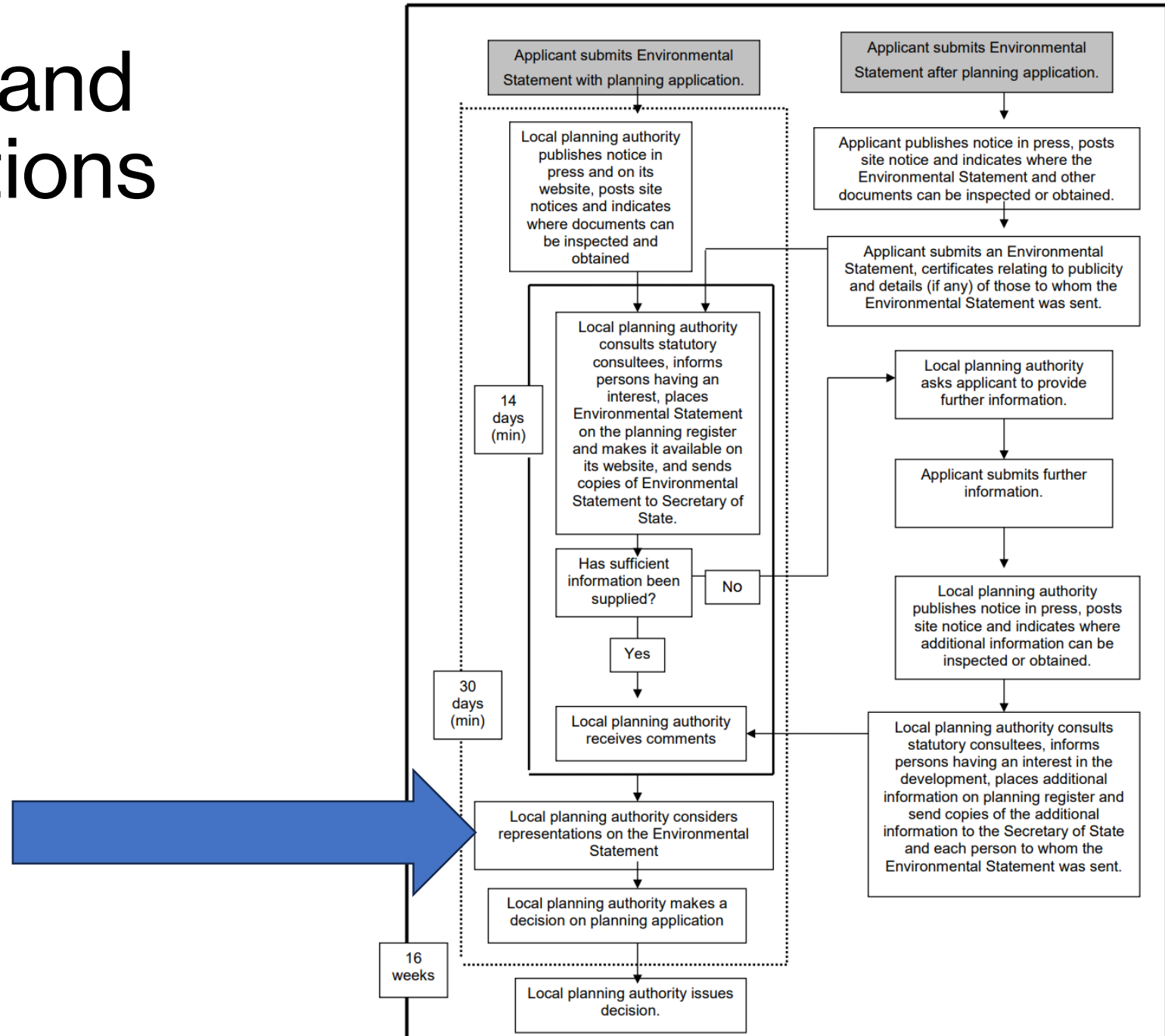
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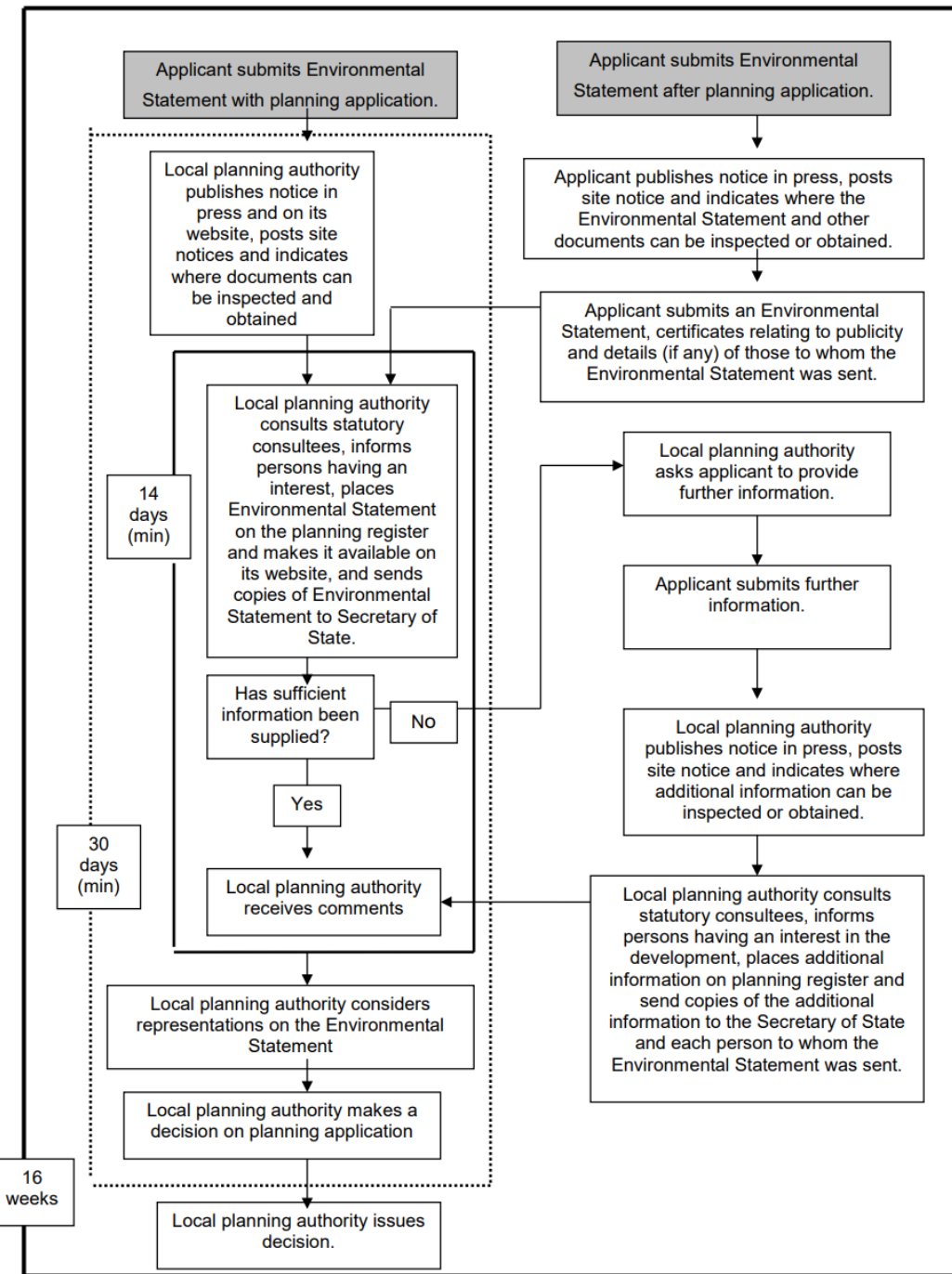
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[EIA-Manual.pdf \(iisd.org\)](http://EIA-Manual.pdf(iisd.org))



How long does a local planning authority have to determine a planning application involving an Environmental Impact Assessment?

How long does a local planning authority have to determine a planning application involving an Environmental Impact Assessment?

Where a valid planning application and Environmental Statement have been received by the local planning authority, they must determine the application within 16 weeks beginning with the day immediately following the day of receipt of the application and Environmental Statement ([regulation 68\(2\)](#)). This period may be extended by written agreement between the local planning authority and the applicant.

Where an Environmental Statement has not been submitted with a planning application but the applicant indicates that they propose to provide one, consideration of the application should be suspended until the Environmental Statement has been received ([regulation 20\(8\)](#)).

Paragraph: 050 Reference ID: 4-050-20170728

Revision date: 28 07 2017 [See previous version](#)

[EIA-Manual.pdf \(iisd.org\)](#)

More information required

If the local planning authority considers that further information is required, they must ask the applicant, in writing, to provide it ([regulation 25](#)).

All information provided must be publicised, and consulted on.

Requests for further information should be limited to **the “main” or “significant”** environmental effects to which a development is likely to give rise and must be on relevant matters and directly relevant to reaching a reasoned conclusion on the significant effects of the proposed development on the environment ([regulation 26](#)).

The local planning authority, the Secretary of State or an Inspector may also require an applicant or appellant to produce evidence to verify any information in the Environmental Statement.

More information required

[EIA-Manual.pdf \(iisd.org\)](https://www.iisd.org/publications/eia-manual.pdf)

Additional information of a substantive nature submitted voluntarily by an applicant must be treated in the same way as information required by the local planning authority (see the definition of “any other information” in [regulation 2\(1\)](#)).

The 16 weeks time limit for determination of an Environmental Impact Assessment application continues to run while any correspondence about the adequacy of the information in an Environmental Statement is taking place.

Transboundary impacts

What are the procedures for considering whether a proposal is likely to have transboundary effects on another country within the European Economic Area?

Local planning authorities are required to send a copy of every Environmental Statement and related planning application to the Secretary of State (Planning Casework Unit) within two weeks of receipt. This is to enable consideration of whether the proposed development is likely to have significant effects on the environment of any European Union Member State, or any other country that has ratified the United Nations Economic Commission for Europe Convention on Environmental Impact Assessment in a Transboundary Context (known as the 'Espoo Convention').

Transboundary Consultation

As a proportion of all planning applications, the number of developments in UK that are likely to have significant effects on the environment of another country will be small. However, should they occur, the Secretary of State must send information about the development to the government of the affected country, and invite them to participate in the consultation procedures, determining with them a reasonable timescale to allow them to do so. In such a case, the Secretary of State may direct ([article 31\(1\) of the Town and Country Planning \(Development Management Procedure\) \(England\) Order 2015](#)) that planning permission may not be granted until the end of such time as may be necessary for consultations with that government. See the [Espoo Convention](#).

[More on the Convention | UNECE](#)
[Text of the Convention | UNECE](#)

Bay Campus Planning Committee Decision



Crymlyn Burrows
SSSI

Sand Dunes

In February 2011, Neath Port Talbot council planning committee met to discuss the application of Swansea University – Bay Campus.

The outcome was to approve the application, subject to conditions.

The committee meeting documents highlights the contrasting trade-offs between social, economic, and environmental factors, the latter detailed in the Environmental Statement.

[PLANNING AND DEVELOPMENT CONTROL COMMITTEE \(npt.gov.uk\)](http://npt.gov.uk)



The committee meeting highlights the following:

- “Swansea University held four public exhibitions. These **took place following submission of the application**, and were held on the 18th March at Swansea University, 22nd March at Crymlyn Burrows Community Centre, 23rd March at Aberavon Shopping Centre, Port Talbot, and on the 25th March in the Waterfront Museum, Swansea.” (p. 5)
- “Environment Agency Wales- No Objection, subject to conditions.” (p. 6)
- “The **application fails to provide an adequate and robust assessment of any other alternative** model for University expansion on another site **or sites in a more sustainable location** or locations closer to the Swansea City Centre which could result in greater overall regeneration benefits to the City and City region” (p. 6)



The committee meeting highlights the following:

- “Neath Port Talbot Biodiversity Forum- The planning sub-group wishes primarily that permission to develop land on Crymlyn Burrows for the proposed Swansea University Second Campus is not granted. It is hoped that this land will be left to develop naturally so that this area will once again become a dynamic sand dune habitat, as set out in the UDP. In the event that this area is granted planning permission clear mitigation measures need to be researched and agreed” (p. 7)
- NPBF highlight conflicting interests between financial and environmental impacts
 - The dune systems of Neath Port Talbot provide the only natural habitats within the county
 - “If access to the SSSI from the campus is not subject to very strict control, then significant areas will suffer irreversible damage. This is not something that should be **left to discussion after planning permission has been granted**” (p.8)
 - “It is also of significant concern that the **mitigation proposals are so light and vague**. An area of dune system that already exists seems to be offered as compensation against loss of dunes from the main site. This does not equate to a target of ‘no net loss’.” (p.9)
 - “In conclusion it is our belief that the mitigation proposals in their current state fall well short of satisfying the concerns of many highly experienced naturalists.” (p. 9)

European Union (EU) guidance on the preparation of an EIA, the purpose of which is to establish how the environmental character of the Site and surroundings will evolve in future years if left unmodified by the Proposed Development. If the Site were left undeveloped it would eventually become a natural wasteland with both positive and negative consequences. It is anticipated that ecological regeneration of the Site would eventually prevail, with the Crymlyn Burrows SSSI gradually encroaching onto the Proposed Development Site over time. It is also thought that the section of the Site currently unguarded by the rock revetment could potentially be subject to coastal erosive processes. The 'No Development' alternative would also lead to the following negative impacts:

- A predominantly barren and featureless Brownfield site would remain unused and undeveloped, contrary to aspirations for the regeneration of the Fabian Way corridor by NPT CBC, CCS, and Welsh Assembly Government;
- The delivery of a science and innovation campus in response to Swansea University's demand for additional academic space, industrial R&D activities and student accommodation would not be realised, potentially meaning that the large multinational companies that are currently expressing interest in locating a premise in the area would choose not to move to the South Wales region;
- The positive socio-economic benefits of the scheme, in particular the provision of jobs, generation of revenue, and the income associated with the injection of between 4,000 and 5,100 students (and over 900 employees), would not be realised; and
- The contaminated soils and groundwater within the Site would not undergo the remediation required to bring it to a standard suitable for residential occupation and public use.

The committee meeting highlights the following:

- Summary of the Environmental Statement:
 - EIA requirement for alternatives, highlighting the benefit of converting a site that would otherwise become a 'natural wasteland'
 - The loss of realisation of Swansea University aims (socio-economic benefits)
 - Remediation of contaminated soil not being conducted

The study considered the merits of each Site under the following five sets of key criteria (outlined by the Applicant): Image & Presence; ☐ Access & Connection; Leisure & Recreation; Deliverability; and ☐ Sustainability.

- For ecology, "there is scope to negate the impact through an off-site funding scheme, to recreate and/or restore an equivalent or larger area of sand dune habitat than is lost by the proposals." (p.45)

The committee meeting concludes:

- “The proposed benefits of the scheme at a national level to provide a significant expansion of Swansea university, and the regional benefits that the investment in integrating education and industry at this single site offer a unique opportunity. This opportunity will potentially drive forward the aspirations for the knowledge economy, within this wider region, and at a local level generate **significant socio-economic benefits**. The location of the development along the Fabian Way Corridor, which has benefited from significant development at SA1, will further improve this gateway into Swansea, and will raise the profile of the area as a whole. **The interaction between the site and wider environment, including the SSSI is seen as a key feature, and intrinsic in this will be the benefits of Wardening to the SSSI and the creation of a management committee to oversee the future of these areas**, which are considered equally important in attracting further investment into the wider area.” (p. 117)
- “The Environmental Statement has adequately addressed and provided clarity on mitigation measures to ensure that the impacts of the development are minimised. The **provision of mitigation** with regard to impacts upon transport, **and ecology** are to be secured through a section 106 agreement, and the imposition of conditions ensure that the **requisite level of controls are placed upon the development with regard to environmental impacts both during construction, and post construction including monitoring of these measures for the future**. (p. 118)
- “It is therefore considered that the proposed development would significantly benefit the aspirations and key principles for socio-economic growth in the region” (p.118)

The committee meeting recommendation:

- “That the Council be minded to grant planning permission.” (p. 118)
1. The **provision and long-term retention of security and wardening for the Crymlyn Burrows SSSI**, the details for which are to be agreed in discussion with CCW and the LPA. This shall include, but not be limited to site security, site management, access management, habitat management and community liaison, for which the security element shall be in place and operational as approved prior to any development taking place, and the warden provision being in place and operational prior to the first use or occupation of any development on the site.
 2. The **provision and long term (minimum 15 years) retention of security/wardening for the Dune Compensation Area at Witford Point, Baglan** (as shown on Drawing No. 5077146-BAG-DWG4038 submitted under Regulation 19) and the beach adjacent to the development site and SSSI. The details for which are to be agreed in discussion with the LPA, but shall include, but not be limited to site security, site management, access management, habitat and species management and monitoring, and the production of awareness raising materials. The scheme shall be in place and operational as approved prior to any development taking place on the development site, including vegetation clearance. These sites also to be overseen by the management committee to be created under the SSSI wardening scheme.
 3. **The creation of a management committee to address issues of arising from the proximity of the Residential Campus to Crymlyn Burrows SSSI**, that shall include but not be limited to site management, access management and community liaison. This committee shall be held quarterly, with representatives of the University, SMD Ltd (as SSSI owners), CCW and the LPA. Regarding the SSSI and its future management .



Take a break

10mins



After consent
in EIA



Signature

Date

Implementing/Construction

Following consent, a Construction EMP (CEMP) outlines the relevant mitigation identified at the pre-application and consenting stage. As additional design or construction information becomes available, the CEMP should amend and further develop relevant content from any previous EMP and evolve this through consultation and direct input from the project team (and ideally the EIA co-ordinator and practitioners).

This will ensure the mitigation measures outlined within an Environmental Statement and supporting EMP continues to be achievable, viable and deliverable by a contractor.

Implementing/Construction

Box 1 - Overview of EMPs and Operational and Maintenance (O&M) Manuals

EMP - A site-specific plan developed to ensure that all necessary measures are identified and implemented in order to mitigate environmental effects and comply with legislation. It should act as a 'live' document allowing it to be updated as new information/details of how mitigation will be achieved.

The EMP should:

- Identify roles and responsibilities;
- Set specific, measurable targets and standards that must be adhered to;
- Identify risks and establish mitigation measures; and
- Establish procedures for communication, monitoring and reporting.

An EMP during the construction stage is often known as a Construction EMP or CEMP. Consenting authorities often require a CEMP to ensure that the developer is committed to the implementation of mitigation measures identified as part

O&M Manual - An O&M Manual is a 'live' document that identifies the environmental risks and legal obligations associated with the operations of the development once it's construction has been completed. It specifies the management measures the operator will implement in order to prevent or minimise the environmental effects associated with the project. The Manual should be compatible within the operation of the development and should link / sit within any existing EMS, Permitting Regime etc.

The O&M Manual should:

- Set out roles and responsibilities;
- Outline general management requirements, including training, records, monitoring and reporting;
- Identification of environmental effects and risks;
- Identification of mitigation measures; and
- Identification of delivery outcomes and assurance that mitigation and enhancement needs of EIA have been completed.

Conditions

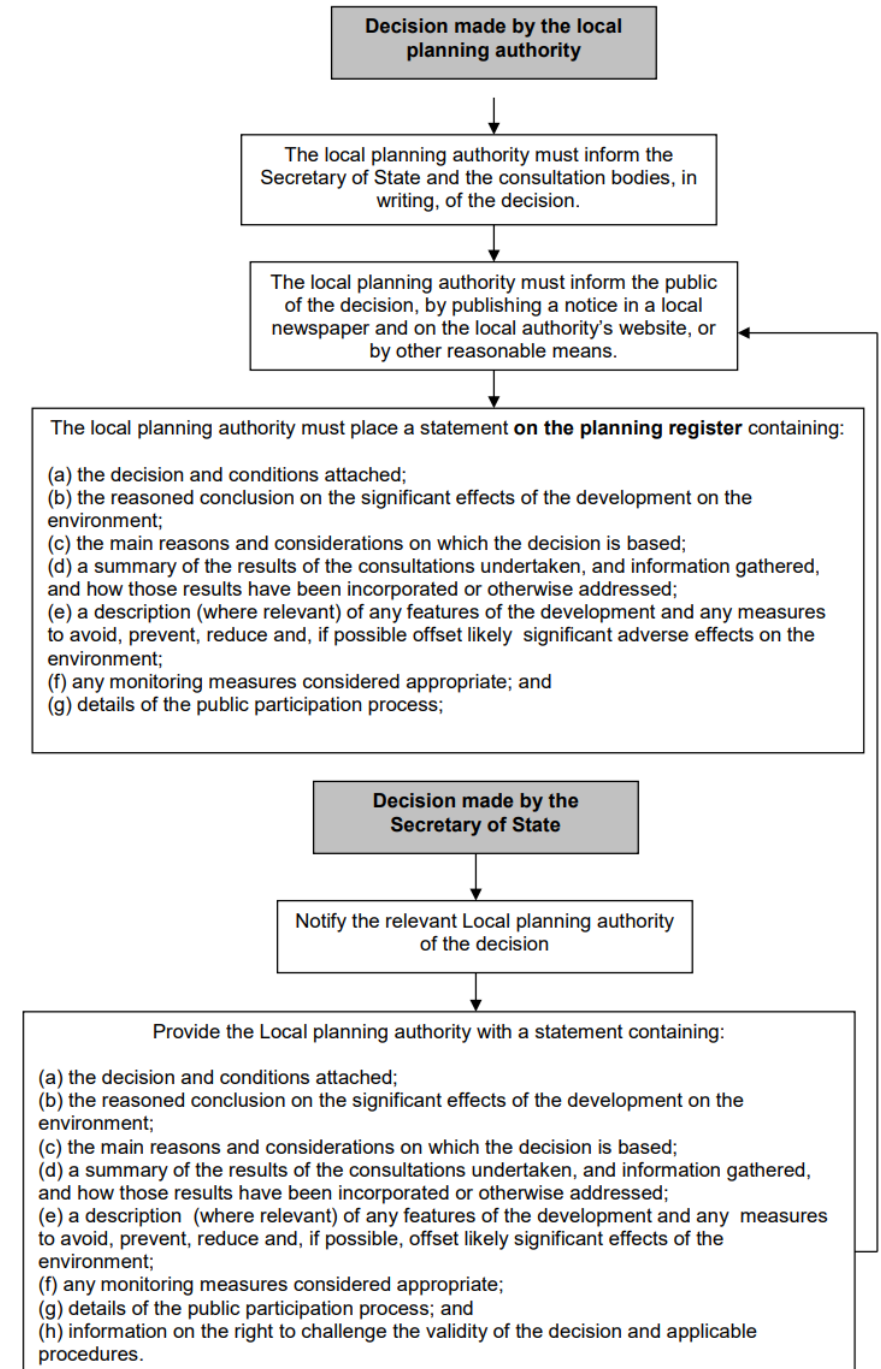
[EIA-Manual.pdf \(iisd.org\)](#)

[Conditions](#) attached to a planning permission or subsequent consent may include mitigation measures. However, a condition requiring the development to be “in accordance with the Environmental Statement” is unlikely to be sufficient unless the Environmental Statement was exceptionally precise in specifying the mitigation measures to be undertaken, and the condition refers to the specific part of the Environmental Statement specifying the mitigation measures.

Mitigation measures can also be secured through [planning obligations](#) which are enforceable by the local planning authority. Planning obligations may be entered into unilaterally by a developer or by agreement between a developer and the local planning authority.

Decision Time

[EIA-Manual.pdf \(iisd.org\)](http://iisd.org)



Publicising the EIA decision

[EIA-Manual.pdf \(iisd.org\)](#)

What are the arrangements for publicising the decision on planning applications involving Environmental Impact Assessment?

The notification and publicity requirements for the Environmental Impact Assessment determination decision are set out in [regulation 30](#).



Town and Country Planning Act 1990
Town and Country Planning (Development Management Procedure)
(Wales) Order 2012 (as amended)

Application 21/0559/OUT for Outline Planning Permission

ARUP
Mr David Brown
4 Pierhead Street
Capital Waterside
CARDIFF
CF10 4QP
United Kingdom

Applicant: The Welsh Ministers

In pursuance of its powers under the above-mentioned Act and Order Powys County Council (hereinafter called "the Council") as local planning authority hereby gives you notice that **OUTLINE PLANNING PERMISSION** is **APPROVED** for the following development, namely:-

Development of a Global Centre of Rail Excellence, comprising of two test tracks of loop configuration being an electrified high speed rolling stock test track of 6.9km in length and an electrified low speed infrastructure test track of 4.5km, with overhead line equipment (OLE) and dual platform station test environment; together with operations and control offices (including staff accommodation and welfare), shunter cabins (2 no.), research and development, education and training, rolling stock storage sidings and maintenance/cleaning/decommissioning facilities; associated, drainage, internal vehicular accesses, branch line rail connection, staff and visitor car parking, lighting, electrical infrastructure (including substations and lineside shore supplies and transformers), fencing (perimeter security, acoustic and stock proof), land reformation and hard and soft landscaping, together with demolition of existing buildings/structures (cross-boundary application - see Neath Port Talbot Application ref P2021/0327 at Land At And Surrounding Nant Helen Open Cast Coal Site, Powys And, Onllwyn Distribution Centre, Neath Port Talbot.

In accordance with the application and plan submitted to the Council on 30th March 2021 subject to the conditions specified hereunder:-

The decision notice stipulates the conditions under which the application is approved, and outlines these in the decision letter, often citing regulations and referring to aspects of the proposed management plan from the ES.

- 4 The development hereby permitted shall be carried out in substantial accordance with the principles and mitigation measures as set out within the Environmental Statement and Addendum unless provided for in any other conditions attached in this permission.

First page of the 31-page decision document for the GCRE project

Challenging a Decision

After a decision has been made by the competent authority, there is still the opportunity for it to be challenged.

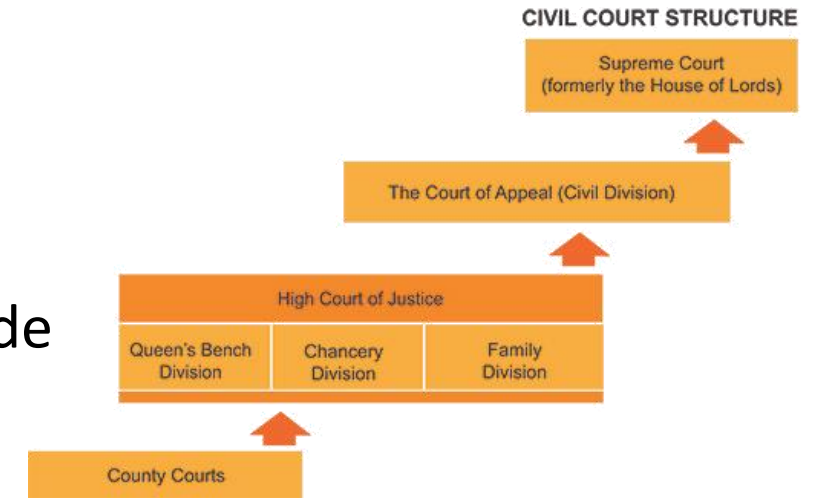
Challenges in the UK can be either through:

1) Judicial review

- process of challenging the lawfulness of decisions made by public authorities.
- can challenge whether an EIA was required if it was screened out, or challenge the decision of the competent authority, even if this is the Secretary of State.

2) European Commission

- Case needs to demonstrate that the UK did not adhere to the obligations to EC Directives, including not conducting an EIA.
- Penalties can be sanctioned to the Member State.



Challenge example: Horse Hill

Case study example: Horse Hill oil drill in Surrey

- Project is to extend oil drilling in Surrey, with four additional wells
- Opposition believes the EIA did not include the contribution of GHG emission from future burning of oil. Council did not believe this to be an indirect effect.
- Challenged in both UK High Court, Court of Appeal, and Supreme Court
- Outcome of High court – dismissed
- Outcome of Court of Appeal – dismissed (2 out of 3 judges dismissed): [In Finch the Court of Appeal declines to define significant indirect effects for EIA | Cornerstone Barristers](#)
- Supreme Court hearing in July 2023. Will set a precedent for all future fossil fuel projects in the UK
- Last week: [Statement from Surrey County Council: Oil drilling at Horse Hill | Surrey News](#)
“The Supreme Court ruled that the County Council acted unlawfully by not considering the indirect, downstream emissions of the oil when burnt in the Environmental Statement submitted with the application”



Challenge example: Derrybrien wind farm

Case study example: Derrybrien wind farm in County Galway

- Project for 70 wind turbines was approved without an EIA in 2001, and work began in 2003
- Opposition believes the project required an EIA due to environmental impacts
- Structural damage to underlying geology resulted in significant landslides in October 2003
- Construction continued in 2004, and completed in 2006
- Challenged in Court of Justice for the European Union (CJEU)
- Outcome of challenge – CJEU determined that Ireland failed to ensure an EIA was conducted
- Developer fined a lump sum of €5m and a daily fine of €15,000 until compliance is achieved
- Developer required to submit a retrospective EIA report
- A retrospective EIA report was submitted but deemed unacceptable as some of the evidence provided was over 15 years old.
- As a result, in 2022, the developer announced that they would decommission the wind farm.
- [European Court of Justice – Tuesday, 9 Nov 2021 – Parliamentary Questions \(33rd Dáil\) – Houses of the Oireachtas](#)
- [Project Information \(derrybrienwindfarm.ie\)](http://derrybrienwindfarm.ie)

Watch Politics of Peat (start at 4:15mins)





Take a break

10mins

A grayscale collage of business and financial items. In the top left is a portion of a black calculator with white buttons. To its right is a silver compass with a black face and white markings. Below the compass is a fan of US dollar bills. In the center is a large pie chart with twelve segments of different shades of gray. To the left of the pie chart is a line graph with three data series and a legend listing months from January to December. In the bottom left is a black pen. In the bottom right is a table with four columns of numerical data.

Assessing what makes a good EIA report?

Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
125,058	125,487	124,000	125,058	125,487	124,000	125,058	125,487	124,000	125,058
154,568	56,845	110,000	150,000	35,000	95,054	97,511	99,011	99,216	101,090
101,684	101,962	89,000	50,000	110,000	154,200	95,000	125,000	124,500	154,000

Why do we review an EIA?

The ultimate purpose of the EIA is to provide critical inputs for decision making about the planned development. The review is carried out to confirm the quality of the information and methods used in the EIA, and that the EIA report addresses all the critical and cumulative impacts as well as the relevant mitigation measures.

Once the EIA report is submitted, designated authorities will usually go through it thoroughly, weighing the methods used, data, mitigation measures and conclusions to assess the impacts of the planned development.

Their review will determine whether or not the project adequately addresses major environmental and social impacts and other risks, and whether or not to grant a licence to the project proponents (or perhaps to request changes). This means that a good quality EIA might still lead to the planned development not being permitted to go ahead based on the identified impacts.

EIA Review

The review is the final check on the quality of the EIA report submitted to obtain a project license. Often this process leads to a requirement for additional information on potential impacts, mitigation measures or other aspects.

The key objectives of EIA review are to:

- Assess the adequacy and quality of an EIA report.
- Take into account public comments.
- Determine if the information is sufficient for a final decision to be made.
- Identify, as necessary, the deficiencies that must be addressed before the report can be submitted.

If the report is accepted, a license is issued to permit the developers to begin project implementation.

Basic Requirements

What is the EIA report?

Once you have completed the assessment, mitigation measures and related management plans, this step includes pulling the information together into a comprehensive report using the terms of reference (TOR). Aspects of a good EIA report include:

- Is well-structured and uses non-technical language supported by data and well-executed analyses.
- Provides information that is helpful and relevant to decision making.
- Results in the satisfactory prediction of the adverse effects of proposed actions and their mitigation using conventional and customized techniques.

After the EIA report is completed, the review process is conducted by the responsible agencies.

Overall there are often many challenges in putting together a comprehensive EIA. These challenges include limited description of the critical impacts, insufficiently described alternatives and mitigation measures and use of outdated models (Table 14, to follow).

Deficiency examples

Example EIA Report	Shortcoming
An EIA report describes the proposed construction of an industrial plant but omits information about construction of a pipeline and other facilities to transport and handle raw materials and finished products to and from the plant.	The description of the proposal does not cover key features.
An EIA report describes the proposed construction of a coal-fired power plant using surface water as a cooling medium. It does not divulge that the surface water body is already used by other industrial activities for this purpose to the limit of its cooling capacity.	Key problems affected by the proposal are not described.
An EIA report for a pipeline project does not indicate that the proposed alignment will dissect certain areas of ecological value.	Sensitive elements in the affected environment are overlooked.
An EIA report for a sanitary landfill indicates that the soil types in the area are very diverse, ranging from sand and clay to peat. The alternatives do not take into account the large differences in compaction and subsidence of these soil types, with subsequent failure of underlining and drainage systems.	Alternatives do not comply with environmental regulations and standards.
An EIA report for a sanitary landfill does not describe a system for collecting methane gas produced in the landfill, even though greenhouse gas emissions contribute to climate warming and should be capped at current levels.	Appropriate mitigating measures are not considered.
An EIA report for a sanitary landfill in an area with very variable soil conditions does not describe the environmental risks and consequences of a possible failure of the underlying sealing and drainage systems.	Serious environmental impacts or risks are not described or are incorrectly described.
An EIA report on an urban development scheme makes use of a mobility prediction model using national averages, although local data is available and would permit a more precise prediction to be made.	Insufficient or outdated prediction models are used.

Source: Adapted from Netherlands EIA Commission in UNU, UNEP, RMIT (2007).

TOR by major organisations

Agency/country	EIA - Term of Reference
Inter-American Development Bank (IDB)	• Project title and identification • Legal and regulatory framework • Identified Impacts/Risks • Disaster risk summary • Impact Mitigation • Economic Analysis • Analysis of Alternatives • Monitoring Plan
European Union	• Contact Details of the Developer • Characteristics of the Project (incl. boundaries including any land required temporarily during construction, physical form of the development). • Location of the Project (maps; land uses, zoning, policies, protected areas). • Characteristics of the Potential Impact (hydrology, air quality, climate, noise and vibration, the landscape and visual environment, historic and cultural heritage resources, and the interactions between them). • Nature of the impacts (i.e. direct, indirect, secondary, cumulative, short, medium- and long-term, permanent and temporary, positive and negative). • Extent of the impact (area, size of the affected population/habitat). • Risk analyses. • Mitigation options. • Monitoring plan.
World Bank	• Project Description • Project site, its location map • Project Alternatives (sites, infrastructure, technologies) • Existing Environment and Baseline Data Collection • Determination of the Potential Impacts • Analysis and Evaluation of Risks • Formulation of Environmental Management Plan • Mitigation Plan • Monitoring Plan • Resettlement Action Plan (if relevant)

Source: IDB, 2011; World Bank, 1999; European Union, 2011.

TOR (Terms of Reference) Examples

[Terms of Reference for Environment Impact Assessment \(physicalplanning.gov.dm\)](#)
[EIASampleTOR.pdf \(physicalplanning.gov.dm\)](#)

[TOR.pdf \(iisd.org\)](#)

Internal and External Review

What are the approaches to EIA reporting and review?

This is often a formal procedure in many EIA systems, which may be undertaken by the responsible authority itself, another government agency or committee or an independent body. This approach can be based on explicit guidelines and criteria for review, or if these are not available, draw on EIA principles, objectives and terms of references. Over time, the approaches to EIA review improved and they are often formalized to a set of criteria or checklists that the reviewers look for. This also helps proponents, since by knowing the criteria they can prepare their reports more efficiently. Specific procedures for EIA review are in place in different countries. In general, these can be divided into two main types:

- **Internal review** – undertaken by the responsible authority or other government agency, with or without formal guidelines and procedures; this is a relatively low cost option however it lacks transparency.
- **External review** – undertaken by an independent body, separate from and/or outside government agencies, with an open and transparent procedure for public comment; helps in ensuring high-quality outcomes. The environmental issues and the technical aspects of the proposal will determine the expertise required by a review team or individual.

Public Comment in EIA Review

Using input from public comment:

Experience with EIA review in a number of countries has shown that public comment is a critical part of the EIA review process.

Input may come from a public hearing, or from written comments submitted to the proponent or government department.

From a hearing there will often be a summary of issues provided by the panel or officers responsible for hearing the submissions. With written comments, a summary of key points will be needed to guide the review of the EIA.

In both cases the summary should focus on information that helps to identify problems with the EIA, contributing to the assessment of impacts, and identifying ways to reduce impacts.

Systematic Review

A systematic review is based on specified criteria.

Criteria can also be formulated as questions and then the reviewer assesses if the EIA meets the criteria completely, partially or not at all.

A detailed list of criteria and questions for reviewers is presented here.

EIA Review

Determining remedial options: Three remedial options are available when an EIA report fails to meet the standards required; these can be listed as follows:

- **Acceptable** – The EIA has acceptable quality; it identifies and mitigates the impacts of the development while at the same time identifying and addressing public participation and social impacts. Here it is also important that the data and methods meet national protocols and/or internally accepted relevant standards. At this level, it is also important that the information is well presented. The EIA is often considered satisfactory, although there may be some minor omissions and inadequacies of approach. The reviewing authority often provides a list of modification needed.
- **Partially acceptable** – The EIA considers the key impacts of the planned project, but there are significant omissions and inadequacies in the methods used, or some mitigation actions may be lacking. At this level, substantial modifications or complements are necessary. The reviewing authority often provides a list of modification needed.
- **Deficient.** The background data are unsatisfactory, poorly analyzed and presented and biased. They are not acceptable.

How to conduct an EIA Review

How to conduct a review? The review can be carried out in three steps: • Step 1: Identify the deficiencies in the EIA report, using the Terms of Reference, relevant guidelines, criteria and information on standards by national agencies and comparable EIA reports.

- Step 2: Focus on any shortcomings in the EIA report and identify gaps and areas that require further information and improvements in the methods based on suggested protocols; look at key gaps in areas that prevent qualified decision making. If no serious omissions are found, this should be stated clearly.
- Step 3: Recommend how and when any serious shortcomings are to be remedied, in to facilitate informed decision making and appropriate measures for project implementation. The elements of EIA review and the aspects considered may differ from the arrangements that are in place in a particular country

Considerations

A comprehensive review of the adequacy and quality of an EIA report would address many or all of the following issues:

- Does the report address the terms of reference?
- Is the necessary information provided for each major component of the EIA report?
- Is the information correct and technically sound?
- Have the views and concerns of affected and interested parties been considered?
- Is the statement of the key findings complete and satisfactory, e.g., for significant impacts, proposed mitigation measures, etc.?

Considerations (Continued)

Is the information clearly presented and understandable by decision makers and the public?

- **Is the information relevant and sufficient for the purpose of decision making and condition setting?**

The response to the last question is the most significant aspect for review conclusions, and will largely determine whether or not an EIA can be submitted as is or with minor revisions.

Reviewer Steps:

- Read the contents of the analysis included in the qualification list, study them, and reflect on the information requirements and qualification criteria.
 - Identify the information required. If the communication of results and fulfillment of formal and administrative aspects are not adequate, the reviewer should request the project coordinator to rewrite the study report and explain its deficiencies. If the communication of results is appropriate and the study provides the necessary information, the review team should continue with the analysis.
 - Study the specific tasks that should have been carried out to comply fully with the requirements described.
 - Seek answers to the questions in the tables. The information required can be found in the study itself; it may be necessary to look for it—do not presume that it is implicit.
 - The study can be qualified negatively if information is repeatedly found to be lacking. Carefully review the qualification system to understand its logic, since this system will be used to deal with each review criterion.
 - Decide on the appropriate qualification and record it in the qualification summary list.
 - Decide if the EIA is acceptable and the licence to operate can be awarded, if the EIA needs improvements or shows that the planned development could have impacts to the area that are too severe and thus is to be rejected.

Reviewer Steps:



Reviewing an EIA

Review Area 1:

- Description of the development, the local environment and the baseline conditions.

Review Area 2:

- Identification, analysis and assessment of impacts.

Review Area 3:

- Alternatives and mitigation.

Review Area 4:

- Communication

Reviewer Steps:



The following rating scale may be used to answer the following questions in detail.

- A. excellent (thoroughly and competently performed)
- B. good (minor omissions and deficiencies)
- C. satisfactory (some omissions and deficiencies)
- D. poor (significant omissions and deficiencies)
- E. very poor (fundamental flaws and weaknesses)
- F. no opinion (insufficient basis/ experience on which to judge)



Activity

We will be spending the rest of this session reviewing an EIA.

- Working in pairs.... Select an EIA report
- Using the Powerpoint provided template: assess your EIA
- **Provide your EIA a scorecard (e.g. A to F) for the relevant considerations.**