

# 1. Methodology and Process

## 1.1. Assessing Effects in the context of Environmental Impact Assessment

The main purpose of an Environmental Impact Assessment is to understand the 'significant environmental effects' of a development. The Methodology used for an individual EIA needs to be tailored to reflect the project. However, the basic principles will always apply.

In terms of EIA, an effect is considered to be the result of an impact on a receptor. A consistent approach to this terminology should avoid confusion about a developments 'impacts' and its 'effects'.

Effect	=	Impact	x	Receptor
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The magnitude of an effect is therefore dependent on a number of variables and how 'impacts' and 'receptors' are quantified.

## 1.2. Receptors

The significance of an effect is relative to the sensitivity or quantity of a receptor. Receptors are set out in accordance with the magnitude of their importance. Some receptors are given relatively high levels of importance through legislation, such as designated conservation sites, or world heritage sites. Determining the importance of other receptors can be more subjective. To maintain consistency in how receptors are considered, an EIA should use a consistent hierarchy:

- International
- National
- Regional

- Borough
- Local/Neighbourhood

Each environmental topic area within the ES Scoping Report should clearly set out what receptors are relevant for the development site.

### **1.3. Environmental Impacts**

The assessment of environmental impacts has been developed giving due regard to the following:

- Beneficial and adverse impacts
- Short, medium and long term impacts
- Direct and indirect impacts
- Permanent and temporary impacts
- Cumulative impacts

For most topics, each of the impacts assessed will be categorised as being:

- Negligible
- Low
- Moderate
- High
- Severe

These impacts can be classified as being either positive or negative. For some topics, the impacts are influenced by wider legislation. For example the Air Quality methodology is set against legislation which set targets in relation to human health. However, it must be stressed that where legislative targets are used, these are normally minimum standards and relate to existing and new development. In most instances, new development should be aiming to achieve more than the bare minimum standards and the methodology should reflect this.

A developer knows their proposals better than anyone and their scoping report should set out clearly how they intend to quantify impacts.

## 1.4. Assessing Effects

Once the receptors and impacts have been established they need to be assessed against each other to provide the likely significant effects. Each of these will be considered in relation to the following:

- Extent and magnitude of the effect
- Effect duration (whether short, medium or long term)
- Effect nature (whether direct or indirect, reversible or irreversible)
- Whether the effect occurs in isolation, is cumulative or interactive
- Performance against environmental quality standards or other relevant pollution control thresholds although recognising that these usually set minimum requirements only
- Sensitivity of the receptor
- Compatibility with environmental policies.

In order to define the magnitude of the effect the matrix overleaf has been developed.

An effect will be categorised as being either:

- **Substantial Benefit/Disbenefit**  
This will have a material influence on the decision making process as well as the design of the scheme
- **High Benefit/Disbenefit**  
This could have a considerable influence on decision making and will result in major design changes.
- **Moderate Benefit/Disbenefit**  
This is unlikely to have an impact on decision making, but would require design alterations.
- **Minor Benefit/Disbenefit**  
This will require minor design changes.
- **Negligible Benefit/Disbenefit**  
This will not have an impact on either decision making or the design of the scheme.

The cumulative impacts of these effects are also important. In isolation the lower categories may not have an overwhelming influence on decision making; however in combination with a number of others, the importance is increased.