2.12 Judgement should always be based on training and experience and be supported by clear evidence and reasoned argument. Accordingly, it is recommended that suitably qualified and experienced landscape professionals carry out landscape and visual impact assessments.

**Landscape and visual effects are assessed separately**

2.13 Landscape and visual assessments are separate, although linked, procedures. The landscape baseline, its analysis and the assessment of landscape effects all contribute to the baseline for visual assessment studies. The assessment of the potential effect on the landscape is carried out as an effect on an environmental resource, i.e. the landscape. Visual effects are assessed as one of the interrelated effects on population [2, 3].

2.14 Landscape effects derive from changes in the physical landscape, which may give rise to changes in its character and how this is experienced. This may in turn affect the perceived value ascribed to the landscape. The description and analysis of effects on a landscape resource relies on the adoption of certain basic principles about the positive (or beneficial) and negative (or adverse) effects of change in the landscape. Due to the inherently dynamic nature of the landscape, change arising from a development may not necessarily be significant.

2.15 Visual effects relate to the changes that arise in the composition of available views as a result of changes to the landscape, to people's responses to the changes, and to the overall effects with respect to visual amenity.

**Assessment of effects on the landscape resource considers the different aspects of landscape**

2.16 In order to reach an understanding of the effects of development on a landscape resource, it is necessary to consider the different aspects of the landscape, as follows:

- **Elements** The individual elements that make up the landscape, including prominent or eye-catching features such as hills, valleys, woods, trees and hedges, ponds, buildings and roads. They are generally quantifiable and can be easily described.

- **Characteristics** Elements or combinations of elements that make a particular contribution to the character of an area, including experiential characteristics such as tranquillity and wildness.

- **Character** The distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and how this is perceived by people. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement. It creates the particular sense of place of different areas of the landscape. Character is identified through the process of characterisation, which classifies, maps and describes areas of similar character.
The process of landscape character assessment can increase appreciation of what makes the landscape distinctive and what is important about an area, and can also improve the understanding of change both in urban areas and the countryside. It thereby contributes to our understanding of the form and pattern of the landscape at a range of scales (national, regional or district). However, to undertake a project-based landscape impact assessment as part of an EIA, it will be necessary to undertake more detailed localised studies.

**Environmental impact assessment and landscape design are iterative processes**

An iterative design approach enables the site planning and detailed design of a development project to be informed by and respond to the ongoing Environmental Impact Assessment, as the environmental constraints and opportunities are taken into consideration at each stage of decision making. Experience indicates that this approach can result in more successful and cost-effective developments, and can reduce the time required to complete the assessment. The iterative approach is appropriate to any new development of whatever scale or type, whether or not it requires a full EIA. The iterative approach is illustrated in Figure 2.2.

Landscape and visual impact assessments are important parts of the iterative design process because they can help to avoid or minimise potential negative effects of the development and, where appropriate, can also help in seeking opportunities for landscape enhancement. During site selection and the initial design of the layout for the development, the landscape architect may produce:

- land use/landscape strategies to evaluate and address constraints, taking advantage of environmental opportunities for each of the options available;
- comparative appraisals of alternative options, to identify those with least overall adverse environmental effect on the landscape and visual amenity.

Once the preferred development option has been selected, the landscape professional works with the design team to:

- identify and develop measures to further reduce residual adverse environmental impacts, taking into account the landscape management implications;
- indicate how the landscape strategy will work in practice, on completion of the development and throughout the lifetime of the project;
- prepare landscape and visual impact assessments to address in detail the residual landscape and visual effects of the proposed development.
Landscape baseline analysis

The analysis draws upon the information gathered during the desk study and field survey work, supported by illustrations and documentary evidence. The baseline studies section of the report covers the existing elements, features, characteristics, character, quality and extent of the landscape. The baseline studies and analysis must be clearly explained in the assessment. The findings should be presented in a clear and structured fashion as they form a key component of the landscape and visual impact assessments. A distinction is made between:

- the description and assessment of the individual elements, features, and characteristics of a landscape and their value or importance; and
- analysis of the way in which these components interact to create the character of the landscape.

Landscape character and characterisation

Landscape character assessment and particularly the stage of characterisation is the basic tool for understanding the landscape and is the starting point for baseline surveys. There is a well-established methodology developed in the UK by the Countryside Agency and Scottish Natural Heritage [4]. The baseline report provides a concise description of the existing character of the site and its surrounding landscape, including the physical and human influences that have helped to shape the landscape and any current trends for change. This will often include, as appropriate, a classification of the landscape into distinct character areas or types, which share common features and characteristics. It may also take into account other landscape character assessments that may have been prepared for the study area. The description of character may be illustrated by photographs or analytical sketches, or both, showing representative views.

Landscape condition

The condition of the landscape refers to the state of an individual area of landscape and is described as factually as possible. Reference to the maintenance and condition of individual elements or features such as buildings, hedgerows, woodland or drainage systems can be helpful. It should be recognised that landscapes in poor condition, such as degraded or damaged landscapes, can be still be highly locally valued (see paragraph 6.18), for example, if open land is scarce or possibly because of cultural associations, as in the case of sites of industrial archaeological value. The assessment therefore sets out what weight has been attached to the condition of the landscape and may also consider the scope for the development to contribute to the restoration or enhancement of the landscape.
Box 6.2 Landscape character assessment

On a broad scale, the Countryside Agency’s and English Nature’s joint Character of England map (1996) illustrates the natural and cultural characteristics of the English countryside based on biodiversity and landscape. The character map also includes contributions from English Heritage on the historic features of the landscape.

The approach identifies the unique character of different areas of the countryside without making judgements about their relative worth. Broad areas of cohesive character have been identified, which can be described in terms of their landscape character, sense of place, local distinctiveness, characteristic wildlife and natural features, and nature of change [12].

New guidance on Landscape Character Assessment, jointly produced by the Countryside Agency and Scottish Natural Heritage, is due to be published in 2002 [4].

In Scotland, Scottish Natural Heritage (SNH) has completed the national programme of landscape character assessments. The series of 29 individual reports, mostly at a scale of 1:50,000, was produced in collaboration with local authorities and other relevant bodies. SNH has also identified Natural Heritage Zones, which provide a comparable strategic framework, of 21 zones defined on the basis of a combination of aspects of natural heritage and landscape character [13].

On a similar basis the Forestry Commission has developed a method of landscape assessment for use in the preparation of Indicative Forest Strategies and the Environment Agency has a closely-related approach for the assessment of river corridors. This includes a ‘Macro’ scale assessment of the wider river valley and a ‘Micro’ scale assessment of the immediate river corridor. This has also been extended to the assessment of the whole river catchment area in a number of studies in the Thames and Midlands regions of the Environment Agency [14].

The Countryside Council of Wales is currently promoting LANDMAP, a method of mapping and evaluating the rural landscape, in terms of the aspects that contribute to the whole. Landmap is used by Welsh planning authorities as the basis for countryside policy making and strategies for development or protection. All these methods provide vocabularies to describe the wider countryside and are important starting points in investigating the landscape resource [15].

Landscape value

6.17 A judgement needs to be made on the value or importance to society of the affected landscape. This will be based on and take into account views of