

UKGAP Theme 2: Influencing planning policy, legislation and development design

**UKGAP Indicator 5: National Policy Recognition - the number of national-level policy statements, plans and strategies (England, Northern Ireland, Scotland and Wales), in which geodiversity issues (and issues relevant to similar disciplines) are formally recognised**

## Relevance

This indicator should help to reveal the extent to which national Governments in the UK are supporting the consideration of geodiversity within the planning system. It should also help to identify whether there is a wider recognition of the value of geodiversity in assisting with some of the major issues for planning and the environment, such as: climate change; localism; the value placed on all landscapes through the European Landscape Convention; green infrastructure and utilising the ecosystem services approach within decision-making.

## Data Sources

The following national planning policy and associated guidance were reviewed:

### England

- Office of the Deputy Prime Minister (2005) Planning Policy Statement 1: Delivering Sustainable Development;
- Communities and Local Government (2007) PPS: Planning and Climate Change: Supplement to PPS1;
- Office of the Deputy Prime Minister (2005) Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation;
- Office of the Deputy Prime Minister (2006) Planning for Biodiversity and Geological Conservation: A Guide to Good Practice;
- Department of Communities and Local Government (2012) National Planning Policy Framework.

### Northern Ireland

- The Planning Service, the Department of the Environment Northern Ireland (1998) Planning Policy Statement 1: General Principles;
- The Planning Service, the Department of the Environment Northern Ireland (1997) Planning Policy Statement 2: Planning and Nature Conservation;
- Department of the Environment Northern Ireland (2011) Draft Planning Policy Statement 2: Natural Heritage (Revised), Consultation Paper; and,
- Department of the Environment Northern Ireland (2011) Supplementary Planning Guidance to Draft Planning Policy Statement 2 (Natural Heritage) Revised, Consultation Paper.
- The Department for Regional Development, Northern Ireland (2011) Shaping our Future – Regional Development Strategy 2025 Consultation 10 Year Review;

### Scotland

- The Scottish Government (1999) National Planning Policy Guidance 14: Natural Heritage;
- Planning Advice Note (2000) Planning Advice Note 60: Planning for Natural Heritage;
- The Scottish Government (2009) National Planning Framework for Scotland 2; and,
- The Scottish Government (2010) Scotland Planning Policy.

## Wales

- Welsh Assembly Government (2002) Planning Policy Wales;
- Welsh Assembly Government (2011) Planning Policy Wales, Edition 4;
- Welsh Assembly Government (2008) People, Places, Futures The Wales Spatial Plan 2008 Update; and,
- Welsh Assembly Government (2009) Technical Advice Note 5: Nature Conservation and Planning.

## Background to the Data

To gain an initial impression of the extent to which geodiversity is considered within national policy, a review was undertaken of both over-arching planning policy, and planning policy (and accompanying guidance) concerning the natural environment, which makes specific reference to geology.

In order to observe the trends in the recognition for geodiversity within planning policy, historically recent policy, current policy and emerging draft revised policy were all examined. The extent to which the word 'geodiversity' and / or other common terms to encompass 'geodiversity' were used was identified. Consideration was also given as to whether policy tended to focus on designated sites and / or recognised the importance of geodiversity within the wider environment. The policy approaches to geodiversity within each country were examined.

## National Planning Policy Approaches

### England

The former *PPS1: Delivering Sustainable Development* (2005) did not make specific reference to geodiversity, despite the fact that most other aspects of the natural environment were included in the following statement: '*Development plan policies should take account of environmental issues such as: the protection of the wider countryside and the impact of development on landscape quality; the conservation and enhancement of wildlife species and habitats and the promotion of biodiversity; the need to improve the built and natural environment in and around urban areas and rural settlements, including the provision of good quality open space; the conservation of soil quality; and the preservation and enhancement of built and archaeological heritage*'. Although landscape quality was mentioned, as were soils, there was no explicit recognition of geodiversity. However, the need to take account of ongoing geomorphological processes was recognised separately within the following statement: '*Development plan policies should take account of the potential impact of the environment on proposed developments by avoiding new development in areas at risk of flooding and sea-level rise, and as far as possible, by accommodating natural hazards and the impacts of climate change*'.

The former *PPS9: Biodiversity and Geological Conservation* (2005) noted that appropriate weight should be attached to '*geological interests in the wider environment*' as well as to designated sites of international, national and local importance. PPS9 also encouraged local authorities to take an integrated approach to planning for biodiversity and geodiversity when preparing local development documents and to: '*promote sustainable development by ensuring that biological and geological diversity are conserved and enhanced as an integral part of social, environmental and economic development, so that policies and decisions about the development and use of land integrate biodiversity and geological diversity with other considerations*'. Further detail and examples of this approach, including the use of Geodiversity Action Plans (GAPs) were provided in the accompanying: *Planning for Biodiversity and Geological Conservation: A Guide to Good Practice* (2006).

The National Planning Policy Framework was published in March 2012 and includes recognition for and use of the term 'geodiversity'. Recognition is given to the need to contribute to, enhance and minimise impacts on geodiversity: '*The planning system should contribute to and enhance the natural and local environment by: protecting and enhancing valued landscape, geological conservation*

*interests and soils' and 'To minimise impacts on biodiversity and geodiversity, planning policies should: aim to prevent harm to geological conservation interests.'*

Some of the emphases found within the recently published Natural Environment White Paper (*The Natural Choice: Securing the Value of Nature, 2011*) are also made. In particular, the conservation and enhancement of the natural environment is set within the context of a wider landscape, soils and ecosystem services approach and consideration is given to green infrastructure.

### **Northern Ireland**

The following statement is made within the current national policy for Northern Ireland; *PPS1: General Principles* (1998) which, whilst including landscape and soils, excludes geodiversity: *'In working towards sustainable development, the Department will aim to: conserve both the archaeological and built heritage and natural resources (including wildlife, landscape, water, soil and air quality), taking particular care to safeguard designations of national and international importance'*.

*PPS2: Planning and Nature Conservation* (1997) is the current guidance relating to geodiversity in Northern Ireland. Whilst the focus is on the conservation of designated sites, the wider geodiversity resource is recognised through statements such as: *'Survival of the entire range of Northern Ireland's wildlife and the maintenance of the full diversity of its geological and physiographical features cannot be achieved solely by site protection but will require the wise management of the total land resource.'*

One of the objectives given within the shorter, recently revised *PPS2: Natural Heritage* (draft, 2011) is: *'to seek to conserve, enhance and restore the abundance, quality, diversity and distinctiveness of the region's natural heritage'*. As well as policies relating to designated sites, a specific policy (Policy NH5) concerns the protection of the natural heritage more generally. Overall, the PPS focuses on the development requirements in relation to the natural heritage and does not include reference to wider issues such as climate change, green infrastructure or ecosystem services.

The accompanying supplementary planning guidance to the revised draft PPS2 (2011) provides more detail with regard to each policy, including the need to provide opportunities to enhance biodiversity and geodiversity as part of development as well as the need to avoid adverse effects. *'Geodiversity'* (which is still referred to as *'earth science'*) is also recognised as being *'of great importance in helping to understand the surrounding dynamic environment which has shaped and continues to shape the land. It is also important in providing an understanding of current and future environmental change. Earth science also plays a key role in influencing natural processes, landforms, soil types, habitat distribution, land use and landscape character.'*

### **Scotland**

*NPPG 14: Natural Heritage* (1999) was, until recently, the key policy document with regard to natural heritage in Scotland. The term 'Natural Heritage' was used to encompass biodiversity, landscape and geodiversity (the latter being described as geological and physiographical features in NPPG14). The guidance related primarily to formally designated sites, but a wider relevance was also identified. Paragraph 45 of NPPG14 noted that *'natural heritage is not confined to the various designated areas ... but is found throughout the countryside, in coastal areas and in many urban locations'*, whilst paragraph 46 states that *'planning authorities should seek to safeguard and enhance the wider natural heritage beyond the confines of nationally designated areas. The effect of a development proposal on the natural heritage can be a material consideration whether or not a designated area is likely to be affected'*.

Within the newly reformed planning system, the *National Planning Framework for Scotland 2* (2009) does not specifically make reference to either 'geodiversity' or 'natural heritage', but includes the following statement: *'Natural and historic environments help create a sense of place, contribute to the quality of life and are a rich resource for tourism and leisure, our creative industries, education, and national and regional marketing. They can also provide a focus for regeneration. The Scottish Government is committed to protecting, promoting and supporting the sustainable management of*

these key assets.' Within this section, specific reference is made to European Geoparks, coastal landscapes and seascapes.

The *Scotland Planning Policy* (2010) includes a statement that planning authorities should support opportunities for the enjoyment and understanding of the natural heritage and in particular relates this to local nature conservation sites. Those [local sites] *'designated for their geodiversity should be selected for their value for scientific study and education, their historical significance and other cultural and aesthetic value, particularly for their potential for promoting public awareness and enjoyment'*.

There is also recognition that: *'Planning authorities should take a broader approach to landscape and natural heritage than just conserving designated or protected sites and species, taking into account the ecosystems and natural processes in their area. A strategic approach to natural heritage in which wildlife sites and corridors, landscape features, watercourses, and areas of open space are linked together in integrated habitat networks can make an important contribution to the maintenance and enhancement of biodiversity and to allowing ecosystems and natural processes to adapt and respond to changes in the climate'*.

In relation to new development, there is an understanding that: *'Landscapes and the natural heritage are sensitive to inappropriate development and planning authorities should ensure that potential effects, including the cumulative effect of incremental changes, are considered when preparing development plans and deciding planning applications'*.

*PAN 60: Planning for Natural Heritage* (2000) was initially designed to complement NPPG 14 and provides guidance, advice and examples of good planning practice in relation to the natural heritage. The PAN series is being retained in Scotland although some will be merged and others withdrawn to create a more focused technical planning series. PAN 60 is still current and *'encourages developers and planning authorities to be positive and creative in addressing natural heritage issues. Planning for a diverse range of wildlife and habitats, the maintenance and enhancement of landscape character and earth heritage interest, the development of greenspace networks and the provision of opportunities for developing understanding and enjoyment of the natural world are all essential elements of this approach'*.

## **Wales**

*Planning Policy Wales* (PPW, 2002) sets out the land use planning policies of the Welsh Assembly Government. Recently, a consolidated, online version of *Planning Policy Wales* (Edition 4, February 2011) has been published with the intention to further embed the need to tackle climate change into the planning system. In relation to Chapter 5: *'Conserving and Improving Natural Heritage and the Coast'*, limited amendments have been made to reaffirm the need to consider the consequences of climate change on the natural heritage, particularly at the coast and the role of trees in helping to mitigate climate change.

In PPW (both the 2002 and 2011 versions) the opening paragraph of Chapter 5 clearly makes the link between geology, biodiversity, landform and landscape: *'The natural heritage of Wales includes its geology, land forms and biodiversity and its natural beauty and amenity. It embraces the relationships between landform and landscape, habitat and wildlife, and their capacity to sustain economic activity and to provide enjoyment and inspiration. The natural heritage is not confined to statutory designated sites but extends across all of Wales – to urban areas, the countryside and the coast'*. However, the only other direct reference to geology within the chapter is in relation to scientific assessments of the geological value of non-statutory designations.

PPW is supported by 21 topic-based Technical Advice Notes (TANs), including TAN 5 Nature Conservation and Planning (2009). TAN 5 directly uses the term 'geodiversity' within such statements as: *'Biodiversity and geodiversity add to the quality of life and local distinctiveness'* and *'The enjoyment of wildlife and geology provides opportunities for lifelong learning, recreation and tourism'*. Within the TAN, geodiversity within the wider environment is recognised through statements such as:

*'The planning system in Wales should help to ensure that development does not damage, or restrict access to, or the study of, geological sites and features or impede the evolution of natural processes and systems especially on rivers and the coast' and 'Development policies and, where appropriate, supplementary planning guidance, should promote opportunities for the incorporation of wildlife and geological features within the design of development and green infrastructure'.*

There is also a reference in TAN 5 to the need to develop indicators, both to identify change in the geodiversity resource (*'In developing the overall strategy of a plan, local planning authorities should seek to: ensure that the environmental information base is up to date and is linked to indicators for change in wildlife, habitats and geological features'*) and in relation to the effectiveness of the plan (*'the indicators will need to concentrate on the influence of the plan in planning decisions, and the decisions themselves'*).

## **Assessment of Trend**

'Natural heritage' is the over-arching term used within existing planning policy relating to the natural environment in Scotland, Wales and Northern Ireland and appears to be now widely used instead of 'nature conservation'. In each case, 'natural heritage' is used to encompass landscape, biodiversity, geodiversity and the natural beauty and amenity that are given by these aspects of the natural environment. Policy in England does not use the term 'natural heritage'. Instead, it either refers directly to the specific aspect of the environment being considered, such as 'soils' or 'archaeology', or uses the more general term 'natural environment'.

Core planning policy within Wales and Scotland has not, in the past, and still does not explicitly make reference to 'geodiversity' or even 'geology'. This is despite the inclusion of most other aspects of the natural environment, such as soils, biodiversity, landscape, archaeology, and built heritage. It is thus an important omission. Whilst core policy in Wales does include reference to 'geology' and 'land forms' as part of the natural heritage, further inclusion of geodiversity issues is very limited. Within England, core policy does now include the term 'geodiversity' but again inclusion of geodiversity issues is limited. This omission is probably due, in part, to limited legislation and programmes relating to geodiversity on a global scale. The Convention on Biological Diversity and the European Landscape Convention have both heightened the need to develop policies and take action in relation to biodiversity and landscape respectively.

The term 'geodiversity' is becoming more widely recognised within planning policy and/or practice guidance relating specifically to the natural environment. Older planning documents have used terms such as: 'geological diversity' (*PPS9* in England) and 'geological and physiographical features' (*NPPG14* in Scotland and *PPS2* in Northern Ireland). More recent documents all make use of the term 'geodiversity' (*The National Planning Policy Framework* in England, *Scotland Planning Policy*, *TAN 5* in Wales and *PPS 2 (revised draft)* in Northern Ireland) although its use is still very limited within Scotland's policy.

There has been a shift in the emphasis given to 'geodiversity' within planning policy relating to the natural environment. Older policy documents focussed on 'geological conservation' and in particular the protection afforded to designated sites. More recent historical policy documents have referred to the need to consider geological aspects within the wider environment, together with designated sites. Current and emerging policy and guidance is often explicit in stating the need to consider geodiversity alongside other issues relating to the natural environment, rather than focusing purely on designated sites. Greater recognition is given (particularly in Wales and Northern Ireland) to the fundamental role that geodiversity plays in shaping and creating the landscape, soils and ecosystems. There is a strong emphasis on the need for new development that seeks to enhance, and in some policy documents, to add to the geodiversity (and biodiversity) resource, rather than just minimising impacts or maintaining the current situation.

With the exception of Northern Ireland, geodiversity is now discussed alongside a wider strategy for the natural environment, including the need to identify ecosystem services, create green

infrastructure, address climate change, manage natural processes and provide opportunities for lifelong learning and healthy recreation.

However, there is limited reference to the practical measures that can be used to ensure that geodiversity is considered alongside other aspects of the natural environment. This is to a large extent, due to the streamlining of policy and the intention to separate policy from guidance. Since the details of practical measures are fundamentally an aspect of guidance, rather than policy, this trend is not surprising. Despite the now widespread use of GAPs, out of all the documents reviewed, these are only mentioned in *Planning for Biodiversity and Geological Conservation: A Guide to Good Practice* (2006). The use of indicators for geodiversity is only mentioned in TAN 5. By comparison, however, for the subject of biodiversity there is much greater recognition given within both policy and guidance, on the targets that need to be met and the methods and approaches that can be used, including the use of indicators.

### **Future Recommendations**

As the planning system in each part of the UK undergoes further reform and planning policy is streamlined, it will be important to those contributing to the UKGAP to keep responding to consultations and monitoring the understanding given to geodiversity. Ongoing monitoring should consider the extent to which geodiversity is recognised in both policy and guidance as an important part of our natural heritage: both as an invaluable natural resource that underpins and shapes many aspects of the natural environment; and, also as a resource that contributes to society, economy and where and how people live. The extent to which practical methods and approaches for the delivery of geodiversity objectives are identified should particularly be explored since guidance of this nature is vital to getting the right things done.

Over-arching national strategies for geodiversity have been developed, for example: *Natural Foundations: geodiversity for people, places and nature* (2006) and *Scotland's Geodiversity: Development of the Basis for a National Framework* (2011). Both of these strategies concern the need to better integrate geodiversity with other relevant policy areas. In the future, in order to complete a thorough assessment against this indicator, a wider range of policy, plans and strategies would need to be identified and reviewed, including those relating to: the strategic government objectives; sustainable development; economic development; climate change mitigation and adaptation; education; and, health. A simple count of the plans, policies and strategies that reference 'geodiversity' would have to be undertaken.