

## SNH Information Note

# Green Networks in Development Planning



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## Green Networks and Development Plans

Development plans set the context for clear development management decisions which will help deliver high quality green networks and protect and enhance natural heritage assets. This guidance explains the background to green networks, their multi-functionality and provides development planning advice in respect of green networks.

### Introduction

A 'green network', broadly speaking, is a concept that is explicitly concerned with the connectivity of areas of open space. There is no single agreed **definition** of the term 'green network'. The definition used by Glasgow City Council provides a useful reference point for development planning:

***The linking together of natural, semi-natural and man-made open spaces (which may include leisure or recreational facilities) to create an interconnected network that provides opportunities for physical activity, increases accessibility within settlements and to the surrounding countryside while enhancing biodiversity and the quality of the external environment.***

Well-planned and well-designed green networks can create attractive settings for daily life, distinctive local identities for places and can help guide future settlement growth. High-quality green networks can also greatly enhance the perceived value of areas, being attractive to both businesses and homebuyers, to whom they may offer easy access to civic spaces, parks, playgrounds, and natural open space. Green networks can also deliver a wide range of other benefits: improving health and well-being, enhancing bio-diversity, helping to mitigate against climate change, providing business and educational opportunities, encouraging tourism and promoting sustainable use of scarce land resources.

Therefore, green networks are not an isolated or solely an environmental concern but can help deliver better, more sustainable places and address the core purposes of development planning: by forming an integral, cross cutting and spatially defined component of economic, social and environmental change in any particular area.

Some of the potentially wide-reaching benefits derived from green networks are shown in the table below:

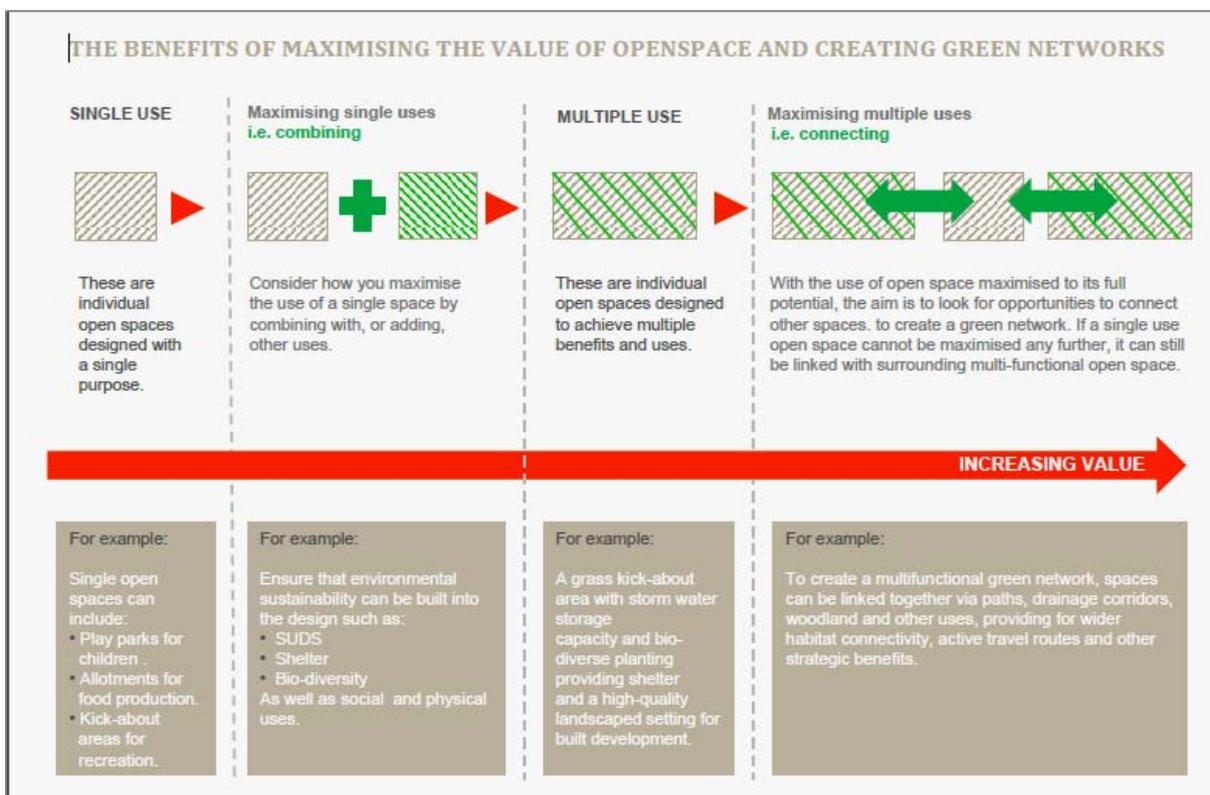
BENEFITS OF A GREEN NETWORK	EXAMPLES OF HOW BENEFITS CAN BE DELIVERED
Improving the perceived quality, identity and connectivity of places	<ul style="list-style-type: none"> <li>• Improving physical connections between places;</li> <li>• Reinforcing landscape character and strengthening local identity</li> <li>• Influencing how settlements should grow in the future.</li> </ul>
Stimulating the economy	<ul style="list-style-type: none"> <li>• Providing attractive settings for business and residents</li> <li>• Increasing perceived property values and employment opportunities</li> </ul>
Adapting places to better withstand the physical effects of climate change	<ul style="list-style-type: none"> <li>• Managing surface water to prevent flooding</li> <li>• Providing shelter and protection from extreme weather</li> <li>• Countering the 'heat island' effect of urban areas</li> </ul>
Mitigating environmental impact through encouraging sustainable lifestyles in terms of resource consumption and travel	<ul style="list-style-type: none"> <li>• Reducing CO<sup>2</sup> emissions through non-vehicular travel routes</li> <li>• Supplying locally sourced timber, biomass or other bio-fuels to replace fossil fuels</li> <li>• Providing carbon storage and sequestration in vegetation</li> <li>• Reducing 'food miles' by providing local food growing facilities.</li> </ul>
Providing recreational opportunities and promoting healthier lifestyles	<ul style="list-style-type: none"> <li>• Reducing health problems through improved opportunities for physical activity</li> <li>• Improving mental well-being by providing access to natural and attractive green spaces</li> <li>• Providing opportunities for growing food and healthy eating</li> </ul>

Maintaining and enhancing bio-diversity	<ul style="list-style-type: none"> <li>• Linking existing habitats or natural features</li> <li>• Providing habitats and wildlife corridors for species movement</li> </ul>
Improving the wider environmental performance of places in terms of micro-climate, recycling and reducing air and noise pollution	<ul style="list-style-type: none"> <li>• Shelter planting for buildings and open spaces from the wind</li> <li>• Improving air quality through filtration of pollutants by trees and other vegetation</li> <li>• Providing for green waste recycling through composting</li> <li>• Providing green structures such as living walls, mass planting or mounding to attenuate noise.</li> </ul>
Providing educational opportunities	<ul style="list-style-type: none"> <li>• Providing engagement with nature to promote horticultural skills</li> <li>• Creating opportunities for community participation/volunteering</li> </ul>
Improving community cohesion	<ul style="list-style-type: none"> <li>• Providing improved connections between places</li> <li>• Creating space for interaction and social events</li> </ul>
Managing surface water run-off	<ul style="list-style-type: none"> <li>• Providing above ground and inter-connected routes for water</li> <li>• Creating areas for flood attenuation or water storage</li> <li>• Slowing water flow and improving bio-diversity value of water bodies</li> </ul>

In terms of delivering on the Scottish Government’s aspirations for development planning (as set out in [Scottish Planning Policy](#) (SPP) paragraphs 10-21) an important element of a green network approach is promoting the multiple economic, social and environmental benefits that individual green network proposals can generate. One positive way in achieving this is by encouraging and linking multi-functional open spaces. Multi-functionality can be defined as:

*The ability to provide multiple or ‘cross-cutting’ functions, by integrating different activities and land usage, on individual sites and across a whole green infrastructure network. (p.70, [Natural England Green Infrastructure Guide](#)).*

The diagram below illustrates the idea of maximising the benefits an individual space can deliver and the value that can be added by connecting them into a green network.



## National Requirement

The National Planning Framework 2 takes forward the spatial aspects of the Scottish Government's policy commitments on sustainable economic growth and climate change. It establishes the Central Scotland Green Network (CSGN) as one of 14 National Developments and recognises the fundamental role that the green network concept can play in delivering a high quality landscape structure to support development plan ambitions for settlement growth, infrastructure and economic development. It describes the CSGN as:

*A strategic network of woodland and other habitats, active travel routes, greenspace links, watercourses and waterways, providing an enhanced setting for development and other land uses and improved opportunities for outdoor recreation and cultural activity.*

As a 'national development' in [NPF2](#), CSGN is a priority for SNH engagement.

## Planning Policy and Advice

SPP is the statement of the Scottish Government's policy on nationally important land-use planning matters and makes several references to the delivery of green networks through development planning. SPP also includes [Designing Places](#) and [Designing Streets](#) which cover the Government's approach to place-making and design and include principles of connectivity, sustainable design and environmental quality.

While the CSGN is a priority national development which spans across 19 Local Authorities, the delivery of green networks in other parts of Scotland is also encouraged by the SPP; for example, paragraph 130 of the SPP states that:

*Development plans should identify and promote green networks where this will add value to the provision, protection, enhancement and connectivity of open space and habitats in the city regions and in and around other towns and cities. Lochs, ponds, watercourses and wetlands also form valuable landscape features, recreational resources and wildlife habitats and should be protected and enhanced wherever possible both as part of developments and green networks.*

Paragraph 150 of the SPP highlights that:

*Green networks which provide opportunities for physical activity and access to the outdoors, and increase accessibility within settlements and to the surrounding countryside, should be promoted and safeguarded through the development plan.*

Planning Advice Notes (PANs) provide further detailed advice of relevance to green networks in planning. [PAN 65](#) is of key importance due to the guidance it offers in relation to open space audits and strategies, which Local Authorities are required to undertake as part of the development plan process. Open space strategies are likely to be of particular significance in informing the development of a green network strategy. Paragraph 39 of PAN 65 highlights the need to also consider supplementary guidance in respect of open spaces:

*Briefs and master plans can identify the type and quality of open space required on a development site and how it should be integrated within the wider network, and highlight specific criteria such as maintenance requirements or access for disabled people.*

The diagram on the next page shows green network strategies within the development plan process and their relationship to SPP and other relevant strategies.

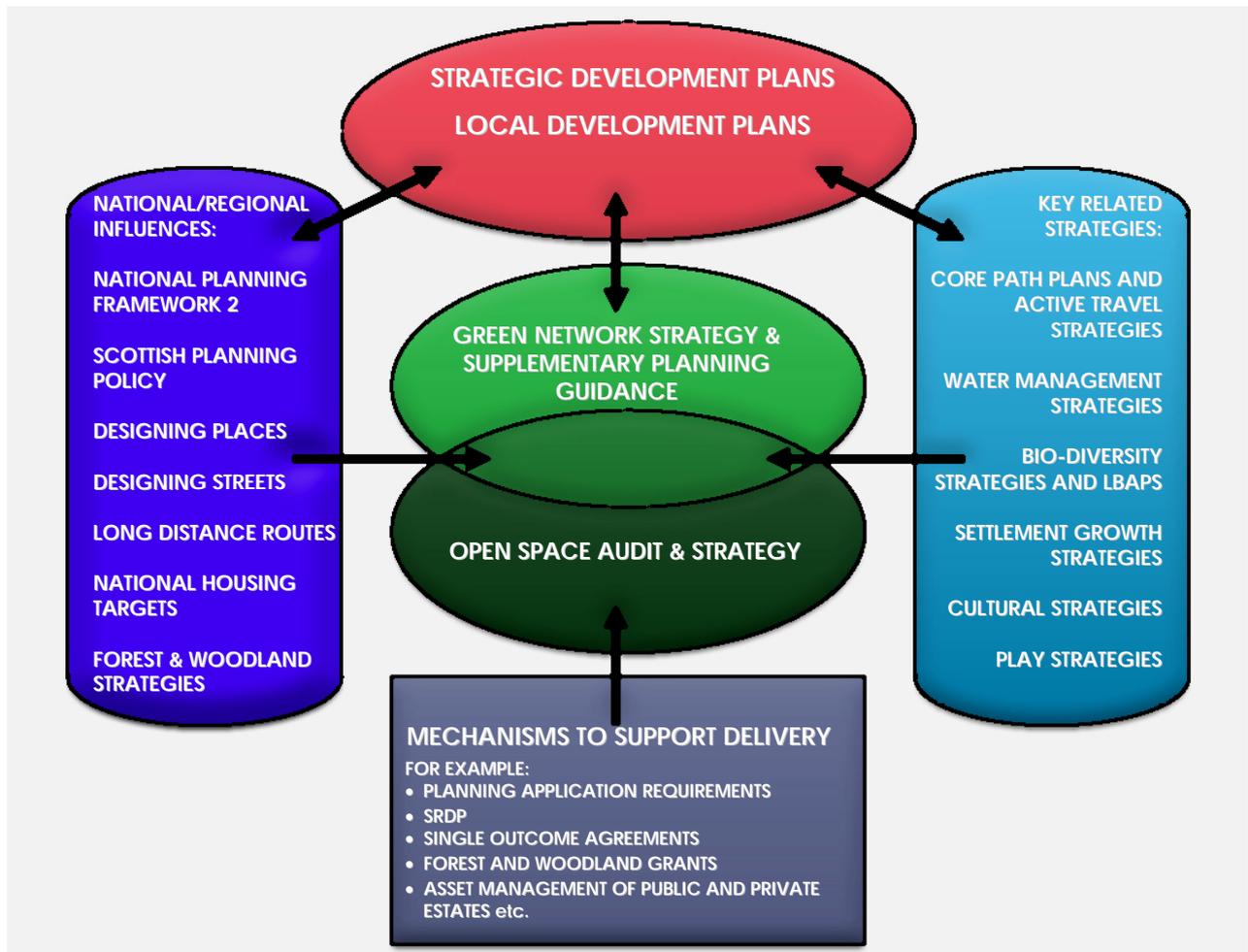


Diagram based on a similar diagram from *Plymouth's Green Infrastructure Delivery Plan: Positive Planning for the Natural Environment* (June 2010: 9).

## Delivery mechanisms

Development planning, and subsequent development management decisions, are not the only route to the delivery of green networks on the ground. Community Planning Partnerships (CPPs), Single Outcome Agreements (SOAs), and the Scotland Rural Development Programme (SRDP) are also important influencing and delivery mechanisms.

Development planning is however, the best mechanism for ensuring that the green network concept is integrated into new development. Moreover, the development plan is a key document in which to portray the over-arching implications of spatial change that are proposed for an area. The Development Plan's role can be especially important in urban fringe locations, to protect or create connections between settlements and countryside.

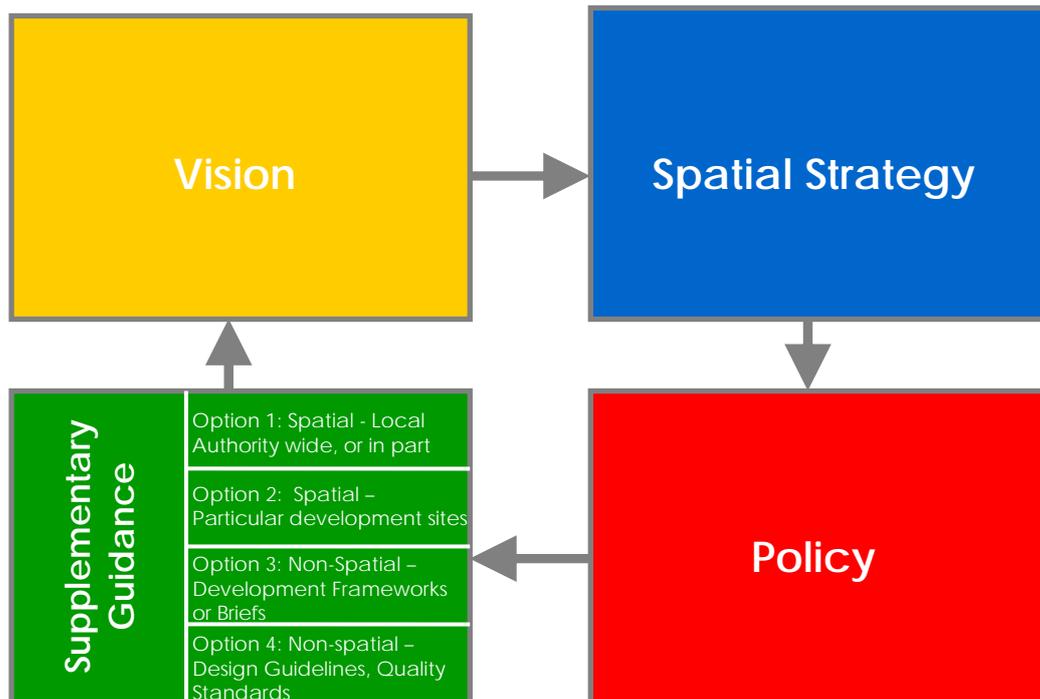
## Green Networks in Development Plans

It is important that green networks are represented at both levels of the development plan system (Strategic and Local). The emphasis on short and sharply-focussed development plans means Supplementary Guidance (SG) is also likely to be of key importance in supporting development plan content for green network delivery.

SPP does not define how green networks should be dealt with at either level of the planning system. This means that it is up to an individual authority to decide how it wishes to address

green network planning. The most appropriate method and means of illustrating the green network is likely to vary according to local aspirations and physical circumstances. For example, the issues for a Local Authority in and around a city are likely to require a different approach to mapping and policy than for an Authority which covers a far larger and predominantly rural area.

The diagram on the following page indicates some of the key opportunities for green network representation in each of the components of the development plan. The make up of each component will be locally specific. The issues are explored more fully in the following sections.



## Strategic Development Plans

At the Strategic Development Plan (SDP) Level, we recommend inclusion of a broadly worded green network vision and spatial strategy to provide the direction for a more detailed approach at the Local Development Plan (LDP) level.

An example of a strongly articulated and locally relevant vision can be found in the [East London Green Grid Supplementary Planning Guidance](#) (page 15):

*A network of open space, river and other corridors connecting urban areas to the river Thames, the Green Belt and beyond to provide attractive, diverse landscapes and green infrastructure managed to the highest standards for people and wildlife.*

*Development and regeneration proposals will be expected to incorporate elements that positively contribute to the Green Grid through:*

- *providing new and/or enhancing existing public open spaces, reducing areas of deficiency*
- *providing public access along watercourse and green areas, linking to the wider path and cycle route network*
- *providing a range of formal and informal recreational uses and landscapes, promoting healthy living*

- *providing new and/or enhancing existing wildlife sites, reducing areas of deficiency*
- *managing water collection, cleansing and flood risk with multi-functional spaces*
- *mitigating and adapting to the impacts of climate change*

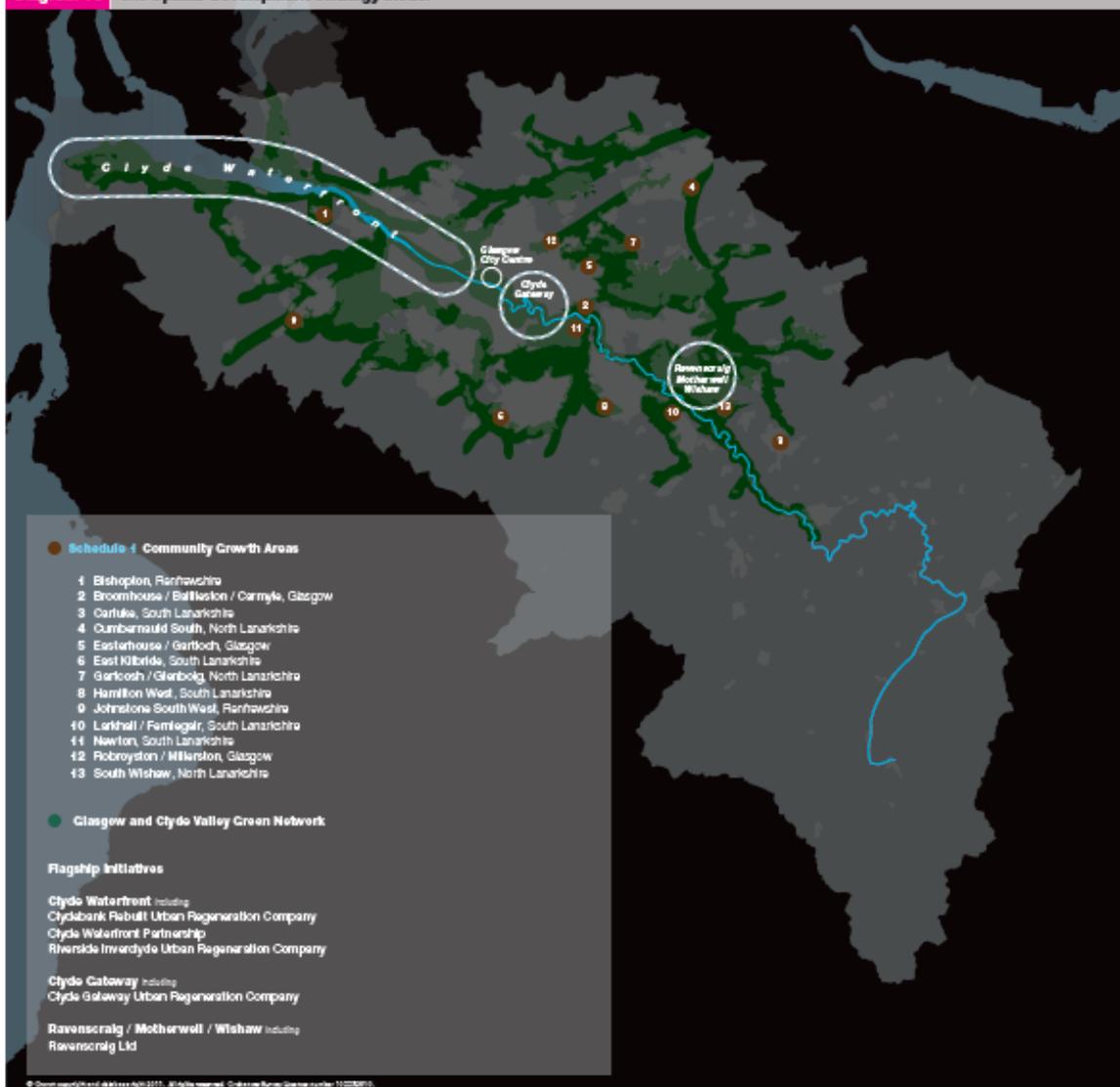
We recommend that an indicative green network is spatially represented at the SDP level: showing key strategic assets and opportunities and highlighting cross-boundary linkages. The [Plymouth's Green Infrastructure Delivery Plan](#) demonstrates how this could look, with the strategic green infrastructure network assets, links and key opportunities illustrated diagrammatically. The diagrammatic representation approach used by Plymouth would also work at the LDP level.



Image source: [Plymouth's Green Infrastructure Delivery Plan: Positive Planning for the Natural Environment \(June 2010: 2\)](#)

The [Proposed Glasgow Clyde Valley Strategic Development Plan](#) provides another example. The image on the following page shows community growth areas identified against a diagrammatic representation of the strategic green network:

Diagram 10 The Spatial Development Strategy model



Source: *Proposed Glasgow Clyde Valley Strategic Development Plan* (June 2011: 21). © Crown copyright and database right 2012. All rights reserved. Ordnance Survey Licence Number 100017908

## Local Development Plans

At the LDP level we recommend that there is a locally-appropriate vision, a spatial strategy, a headline policy and detailed policies or spatial plans for individual development sites. These can be covered by Supplementary Guidance (SG), if they are deemed too detailed or large for the main development plan report or if they are not able to be delivered at the time of the LDP's production. SG should be hooked into the plan by means of a reference in headline policies or spatial plans.

Whatever the spatial representation adopted, we recommend that the LDP provides a basis to fulfil the SPP requirements to protect and enhance the green network, through:

- Policies and spatial proposals that safeguard and avoid fragmentation of existing green networks and identify opportunities to create or enhance existing green network assets;
- Policies and spatial proposals that indicate new or future green network development in relation to other planning matters (for example housing growth, infrastructure

provision, allocation of business land etc). These policies and proposals need to be compliant with paragraph 154 of the SPP which highlights:

*Local development plans or supplementary guidance should set out specific requirements for the provision of open spaces as part of new development and make clear how much, of what type and what the accessibility requirements are. On and off site provision should be considered, depending on the specific site circumstances.*

An example of a green network policy wording and spatially-specific representation on a proposals map is within the [Aberdeen City Local Development Plan](#). Several policies are relevant, however Policy NE1 in particular states:

*The City Council will protect, promote and enhance the wildlife, recreational, landscape and access value of the Green Space Network. Proposals for development that are likely to destroy or erode the character or function of the Green Space Network will not be permitted. Where major infrastructure projects or other developments necessitate crossing the Green Space Network, such developments shall take into account the coherence of the network. In doing so measures shall be taken to allow access across roads for wildlife and for access and outdoor recreation purposes. Masterplanning of new developments should determine the location and extent of the Green Space Network within these areas. Development which has any impact on existing wildlife habitats, or connections between them, or other features of value to natural heritage, open space, landscape and recreation must be mitigated through enhancement of Green Space Network.*

## Supplementary Guidance

The spatial extent of green networks would ideally be shown in the LDP itself and supported by written policies. However spatial or non-spatial information may also be adopted as SG which will help communicate and deliver in further detail green network plan objectives. SG can be developed and adopted at any time during the lifetime of the plan, but it is important that a 'hook' to the SG is included within the plan. For green networks SG could include:

### Spatial SG:

- Local Authority Wide Strategies e.g a detailed green network strategy plan or report could be adopted as SG rather than included within the body of the main plan. This may be a practical approach, for example, due to the scale and detail of the information produced or if the green network strategy is produced after the adoption of the plan;
- Spatial plans for individual development sites e.g. “development frameworks”, “indicative masterplans” or “development briefs” can show more detailed green network proposals. Ideally, these plans or briefs should spatially represent the connections, location, scale of the green network in relation to other pertinent planning issues (e.g. housing, infrastructure, industry, transport etc) while also describing the function of the proposed allocations and the accessibility arrangements. In certain site-specific circumstances off site provision or connections to green networks may be appropriate to portray.

### Non-Spatial SG:

- Written and illustrated Development Frameworks and Design Briefs can also be adopted as SG. Although spatially specific proposals are usually preferable, written development briefs can address the requirements of SPP para 154 and may help to set standards and minimum green network delivery requirements for a particular area or site. This approach is useful where some flexibility is required with regard to the location and design layout of the green network in relation to other aspects of development. The [Craigmillier Urban Design Framework](#) is a clear example of this approach.

- Design Guides or Quality Standards can provide further detail on the issues or standards for green network delivery across the Local Authority area. This approach may also portray how green networks should be designed or delivered in relation to other related policy objectives, e.g open space, drainage, or active travel proposals. The [South Lanarkshire Green Network Quality Design Guide](#) is one example of a detailed guide which enables informed decisions on the quality of green network proposals to be made at the development management level.

## Action Programme

Action programmes for SDPs and LDPs are required to set out a range of delivery options for key policies and proposals. They can contain long and short term actions, record progress and therefore have the potential to contain detailed arrangements for the active management of the green networks.

## Summary

<b>Summary: Green Networks and Development Plans</b>	
<b>Evidence Base</b>	<p>SNH recommends that:</p> <ul style="list-style-type: none"> <li>• an evidence base is established as a first step in the plan's development, identifying key green network assets and components alongside other plan information.</li> <li>• The new plan is developed and informed by the successes of the previous plan in terms of green network delivery.</li> </ul>
<b>Vision</b>	<p>SNH recommends that:</p> <ul style="list-style-type: none"> <li>• The vision for the overall plan is developed through partnership working and should incorporate green networks as an integrated component of existing and proposed development.</li> <li>• The vision for green networks should be shared, forward thinking and deliverable.</li> <li>• The vision and the role of green networks should be tailored to the specific local context and opportunities.</li> <li>• Green networks should be promoted as an opportunity to deliver multiple benefits that can help deliver different social, economic and environmental aspirations of the development plan.</li> <li>• Green networks are part of good place-making and the creation of sustainable communities – their identification and design should help influence the growth, form and layout of places from the outset.</li> </ul>
<b>Spatial Strategy</b>	<p>SNH recommends that:</p> <ul style="list-style-type: none"> <li>• SDPs show an indicative green network which illustrates key strategic assets, opportunities and cross-boundary linkages.</li> <li>• LDPs show proposed green networks as a detailed spatial allocation, clearly defined in the strategy diagrams and proposals maps.</li> </ul>
<b>Headline Policies</b>	<p>SNH recommends the inclusion in LDPs of policies which:</p> <ul style="list-style-type: none"> <li>• Safeguard existing green networks from fragmentation.</li> <li>• Identify opportunities to create and enhance existing green networks, including the potential of retro-fitting green networks in existing areas.</li> <li>• Encourage or require that new development be designed to</li> </ul>

	<p>deliver the growth of green networks through the linking of (required) open space provision within development.</p> <ul style="list-style-type: none"> <li>• Are worded to include reference or 'hook' to the production of supplementary guidance which sets out the green network requirements for individual site-specific development areas; and the design or delivery standards for green network development across the plan area.</li> </ul>
<b>Supplementary Guidance</b>	<p>SNH recommends the preparation of:</p> <ul style="list-style-type: none"> <li>• Spatially defined and descriptive SG to set out requirements for green networks within individual development sites (including business use or infrastructure proposals).</li> <li>• Non Spatial SG to set design standards or define requirements for green network proposals in development management applications.</li> <li>• Other forms of SG as deemed appropriate to support delivery of the green network proposals and policy.</li> </ul>
<b>Action Programme</b>	<ul style="list-style-type: none"> <li>• Action programmes should set out how the green network proposals of the SDP and LDP will be delivered.</li> <li>• They should contain detailed arrangements for the active management of the green network</li> </ul>
<b>SNH Support</b>	<p>SNH will support the incorporation of green networks within development plans by:</p> <ul style="list-style-type: none"> <li>• providing relevant expertise</li> <li>• disseminating best practice examples;</li> <li>• providing information and data and advising on its use and interpretation (e.g. landscape character assessment, integrated habitat networks, national greenspace dataset) ;</li> <li>• collaborating with green network partners on development plan input</li> </ul>

## Further information

### Scottish Government Policy and Guidance:

- SG planning policy (an SNH checklist of relevant SPP policies), [PAN 65 Planning and Open space](#), [Designing Places](#), [Designing Streets](#),
- SG publication [Green Infrastructure: Design and Placemaking](#)
- SG Overview of Development Planning practice – June 2011 (<http://www.scotland.gov.uk/Topics/Built-Environment/planning/National-Planning-Policy/themes/open-space/GreenNetworks>)

### CSGN Information:

- CSGN other information: (<http://www.centalscotlandgreennetwork.org.uk>)