

Our plan to protect and increase biodiversity



Contents

Foreword 3

Part 1: Biodiversity and England's Strategic Road Network

1. Biodiversity – what is it and why is it important? 5
2. Biodiversity – how and why is it declining? 5
3. Is there an issue relating to biodiversity on Highways England's roads? 7
4. The role of Highways England, and what is expected of us? 9
5. Who we will engage with and why? 10
6. What is our approach? 11
7. How will we know we've made a difference? 15

Part 2. The biodiversity plan – detailed delivery

1. Overview 17
2. Annual reporting 17
3. The actions and outcomes 18



Front cover: Guelder Rose

Foreword



Highways England is a new organisation, launched in April 2015. We are responsible for England's strategic road network, and we have an ambitious programme to deliver the Government's Roads

Investment Strategy. This investment is designed to maximise the road network's support to the UK economy, and to support the quality of life of communities up and down the country.

Roads have an essential role to play in the modern British economy, but we also know that they have the potential to compromise the quality of the environment. For wildlife, roads can fragment important habitats, and put pressure on plant and animal populations, particularly where they are already under stress from other factors such as changes in land use and climate change.

But it doesn't have to be this way.

Road verges and associated land can be managed to provide areas of habitat, relatively free from human access, that may be scarce in the surrounding landscape. These road verges can also be used to connect fragmented habitats in the wider landscape, enabling plant and animal populations to move and interact, and so become stronger and more resilient. Roads can be designed to minimise their severance effect, for example using underpasses or green bridges to link habitats under and over our road network.

To be really effective, however, the approach to this type of work must be local, working with partners to recognise what is special and

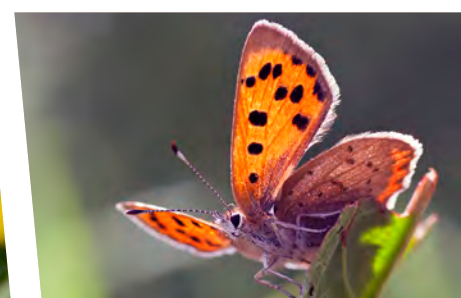
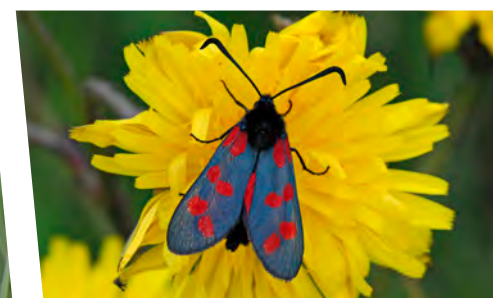
distinctive about the habitats, plants and animals in a given location, and then putting in place measures to best support their health and growth.

The Roads Investment Strategy includes a ring-fenced environment fund of £300 million to cover 2015 to 2020 which includes funds for promoting biodiversity. This Highways England biodiversity plan, as one component part of our forthcoming Environment Strategy, will enable these funds to be effectively used to halt the decline in the vitality of habitats and plant and animal populations on and around our network. Ultimately, this will move us forward to a time when our roads positively support the health of our wildlife.

Mike Wilson,
Chief Highways Engineer,
Highways England



Yellow Hayrattle



Tob to bottom:
Common Blue - Tim Melling
Gatekeeper - Tim Melling
Large Skipper - Ian A Kirk
Orange Tip - Iain H Leech
Six-spot Burnet - John Money
Small Copper - Matt Berry
Courtesy Butterfly Conservation

Part 1.

Biodiversity and England's Strategic Road Network

1.0 Biodiversity – what is it and why is it important?

1.1 Biodiversity is the variety of all life on Earth. It includes all species of animals and plants, and the natural systems that support them. This diversity of life matters in its own right, but it also matters because it supports the vital benefits we all get from the natural environment. It contributes to our economy, our health and wellbeing. It enriches our lives.

1.2 Highways England manages England's Strategic Road Network. This network stretches across England and covers an area of 25,000 hectares, including approximately 8,500 miles of road. The road network contains a range of protected habitats including species rich grasslands, woodlands and wetlands; and supports and impacts upon a number of rare and protected animals and plants including barn owls, peregrine falcons, dormice, rare orchids and other wild plants.

1.3 Because of the linear nature of the road network it has the potential to connect different areas of habitat, creating a more joined up and better functioning ecological landscape. But it also has the potential

to fragment and isolate habitats from each other. Better connected habitats allow species to move around and be more resistant to changes such as those associated with a changing climate. Fragmented habitats are more vulnerable to changes and can lead to species disappearing in that area.

1.4 So, a well managed road network can make a significant contribution to the protection and enhancement of biodiversity in England.

2.0 Biodiversity – how and why is it declining?

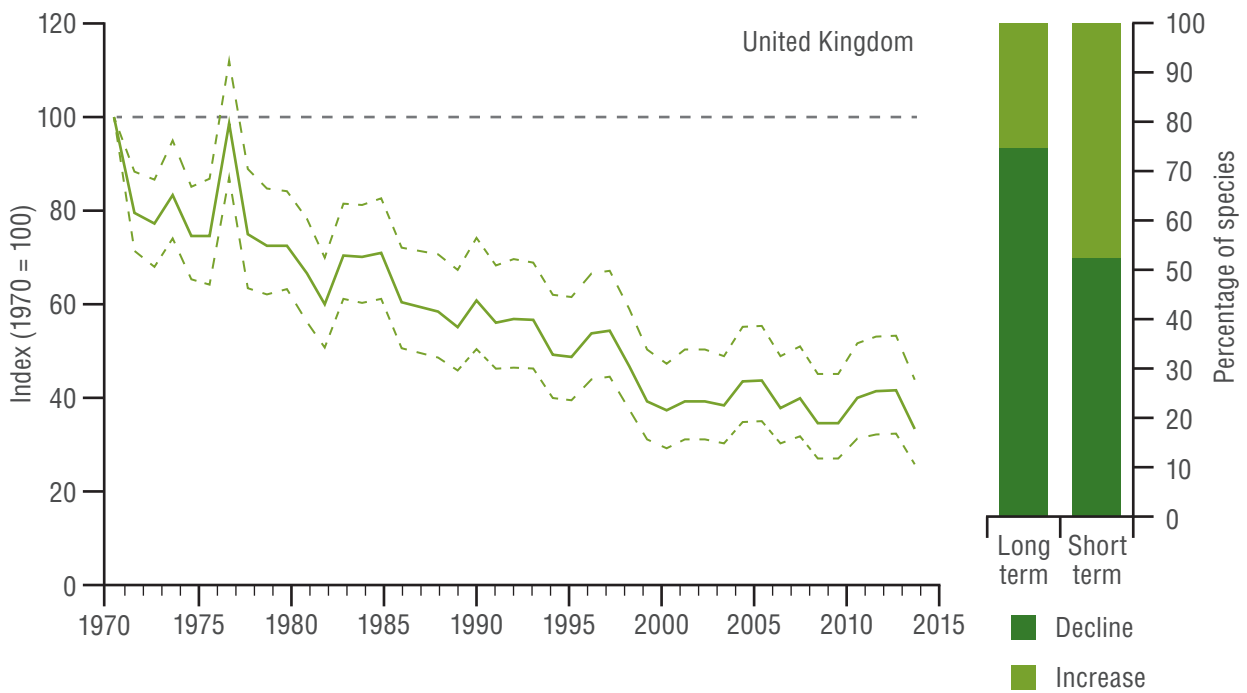
2.1 Many plant and animal species, and their habitats, face pressures including pests and diseases, extreme weather, competition from invasive species, climate change, air pollution, the use of some pesticides and the loss of appropriate land. As a result, a significant proportion of these habitats and species, show long term population and area reductions. This includes large numbers of habitats and species of conservation importance.

2.2 Natural England have identified that over 40% of our most important habitats and 30% of our rarest species were still declining in the most recent analysis. This is despite recognition of the problem and conservation efforts over decades. For example, eight conservation priority species became extinct in the UK between 2002 - 2008.

Facing Page: Six typical butterflies and day-flying moths of roadside habitats, as identified by



2.3 Figure 1 below (Defra, 2014) illustrates the decline in abundance of conservation priority species since 1970.



Notes:

1. Based on 213 species. Dotted lines show the 95 per cent confidence intervals relative to the 1970 reference year.

2. Bar chart shows the percentage of species increasing or declining over the long-term (1970 to 2012) and the short-term (2007 to 2012).

Source: Taken from Biodiversity 2020: A Strategy for England's Habitats and Species (Defra, 2011) and based on data supplied by Bat Conservation Trust, British Trust for Ornithology, Butterfly Conservation, Centre for Ecology & Hydrology, Defra, Joint Nature Conservation Committee, People's Trust for Endangered Species, Rothamsted Research, Royal Society for the Protection of Birds.

2.4 Roads contribute to this declining biodiversity. As an example, roads put pressure on barn owl numbers in certain areas as a result of deaths caused by vehicle strikes. Elsewhere, sensitive songbird species can be inhibited from nesting near to roads owing to disturbance by noise. Bats

can be affected by road lighting at night and insect pollinators are affected by pollution and poor management of grass verges. Species rich, low-nutrient habitats are also damaged by the deposition of nitrogen produced by air pollution from road vehicles.



3.0 Is there an issue relating to biodiversity on Highways England's roads?

- 3.1 Highways England and its predecessor, the Highways Agency, has a track record of investment to protect biodiversity. Large projects undertake detailed ecological assessments, and include comprehensive mitigation to limit the harm to wildlife as far as is practical. We have targeted investment to support key protected species and habitats. This work has resulted in the planting of many miles of new hedgerows, the widespread provision of bat boxes, new areas of wetland, and support for nesting birds amongst a whole range of initiatives.
- 3.2 In addition, we have worked to improve our understanding of how best to mitigate the impacts of our network on wildlife, for example researching and trialing the use of "bat wires" and other methods designed to help bats cross roads safely. We have also worked with Defra, and developed a partnership approach with Network Rail and the wildlife trusts to deliver biodiversity within the Government's Nature Improvement Areas.
- 3.3 However, the restrictions resulting from the 2008 financial crisis resulted in a need to reduce spend. As a result we concentrated our resources on ensuring network safety for both drivers and road workers, and also

on improving technology to understand and improve traffic flows across the network. We were not able to commit significant resources to the management of the network to protect and support wildlife on and around our network, and as a result biodiversity has declined on the road verges and associated land.

- 3.4 A review of how we currently develop our network indicates that we are impacting negatively on biodiversity in the following ways:
- whilst building new roads and upgrading the strategic road network there has been an overall net loss of land available for wildlife;
 - upgrading motorways to Smart Motorways and the provision of verge land for emergency refuge areas, installation of overhead gantries and associated infrastructure has resulted in a loss of land available to support biodiversity;
 - conversion of grass central reservations to concrete has further increased the loss of land available to support biodiversity;
 - upgrading technology has required new transmission stations, and the digging of trenches to install cables, all of which have reduced the area of undisturbed road verges;



- junction alterations have led to greater fragmentation of habitats and loss of vegetation and land; the provision of bypasses has led to an overall fragmentation of the landscape; with the land between the town or village and the new road frequently being zoned for development resulting in further loss of land for wildlife.

3.5 When looking at how we currently manage our network we also see that the network's potential to support wildlife is not being fulfilled:

- Some Sites of Special Scientific Interest on and around our network are in "unfavourable" condition and have not received the funding they require in order to reach favourable status;
- Woodland that has not been managed lacks a diversity in the age of trees, flowering and fruiting shrubs and wildflowers, all of which are beneficial for wildlife;
- Unmanaged grassland verges have been encroached by brambles, scrub and a small number of dominant plants of limited value for wildlife;
- In some areas, road verges suffer from problems with litter and other debris and this detracts from their wildlife value;
- We have only achieved partial success in reducing the number of animals killed on our roads, and need to do more to communicate

effectively to the public our efforts to date;

- Ditches and water bodies have not been maintained appropriately and may be overgrown or encouraging species of low biodiversity value;
- Plant species that are alien to the UK, such as Japanese Knotweed and Himalayan Balsam, outcompete native species and damage habitats, and have not always been effectively managed;
- We have only been partially effective in building up a record of information about the state of biodiversity on and around the network. To know whether changes to management and investment in biodiversity are effective we need to know what our starting position is (known as a 'baseline').

3.6 Some of the impacts from our operation and development are unavoidable, such as the use of verge land for the provision of Emergency Refuge Areas and new technology as part of Smart Motorway schemes. These types of impact can be hard to mitigate directly and result in localised impacts on biodiversity. However, using this biodiversity plan, we will offset these negative impacts, by carrying out better management of our network, undertaking new biodiversity projects and influencing the management of surrounding areas. Overall, we will protect



and increase biodiversity across the Strategic Road Network, and ensure our vulnerable plant and animal populations, and the habitats that support them, are robust and resilient in the face of change.

4.0 The role of Highways England, and what is expected of us?

4.1 Minimising environmental impacts and protecting and enhancing the quality of the surrounding environment are written into the terms of Highways England's licence from the Department for Transport¹. Also, biodiversity is entrenched within the Government's Road Investment Strategy and Highways England's Strategic Business Plan. In particular, the Road Investment Strategy states that by 2020, the company must deliver no net loss of biodiversity, and that by 2040 it must deliver a net gain in biodiversity.

4.3 Highways England has a biodiversity key performance indicator, as follows:

- Key performance indicator - Biodiversity: delivery of improved biodiversity, as set out in the company's Biodiversity Action Plan.
- Key performance target – Biodiversity: the company should publish its Biodiversity Action Plan by the 30 June 2015 and report annually on how it has delivered against the plan to reduce net biodiversity loss on an annual basis.

4.4 In addition, the Government expects us to support the objectives of Biodiversity 2020 (the Government's strategy for biodiversity and ecosystem services) and the National Pollinator Strategy, as well as wider environmental and ecological policy.

4.5 Specifically, we are expected to deliver:

- landscape scale biodiversity projects that reduce habitat fragmentation;

- new projects which enhance biodiversity value of land and therefore reduce their impacts;
- an increased number of Sites of Special Scientific Interest which are in favourable or recovering condition;
- managed woodland areas that are meeting their intended purpose: landscape screening, connectivity or biodiversity;
- grassland areas that are managed appropriately with litter and debris removed;
- 3500 hectares of grassland rich in wildflower species and therefore supporting a wide range of pollinating insects.

4.6 To achieve these requirements we are not just going to have to invest in specific actions on the network, we are also going to change the culture and working processes within Highways England and its service providers. We will recognise the importance and value of biodiversity when undertaking our work to manage and operate the network. We will refresh our contract requirements and our standards and guidance to ensure we mitigate our impacts on wildlife. And, we will look for the opportunities provided by our management and construction work to provide biodiversity enhancements.



¹ Highways England: Licence. Secretary of State for Transport - statutory directions and guidance to the strategic highways company, April 2015 (Section 4.2g).

5.0 Who will we engage with and why?

- Our regulator (the Office of Rail and Road) and the Department for Transport - over our biodiversity performance and the requirements of our licence;
- Other government bodies, particularly Defra and Natural England – as they set national policy to support biodiversity;
- Our service providers – to ensure our commitments are delivered;
- The public – so that they are aware of our work on biodiversity;
- Other infrastructure operators, particularly Network Rail and local highway authorities – to share best practice and explore opportunities for joint working;
- Specific major landowners with conservation objectives, such as National Trust, Woodland Trust, Wildlife Trusts and local authorities;
- National Parks Authorities, Natural England and Historic England - to ensure coordination with landscape and cultural heritage initiatives;
- Existing landscape and conservation partnership projects, such as the Nature Improvement Areas, in order to build upon existing success and develop biodiversity actions;
- Nature conservation organisations, such as the Wildlife Trusts and other potential biodiversity partners – to benefit from their specialist and local knowledge and to identify new actions for biodiversity;
- Local Environmental Records Centres – to explore pre-existing biodiversity data;
- Road users and local communities - to ensure our actions meet local needs and are appropriate and sustainable for their area.



Common Spotted Orchid



6.0 What is our approach?

6.1 To address our biodiversity challenges, we will:

- Embed biodiversity within the business culture of Highways England and ensure that future development and management of the network reflects this;
- Ensure effective internal working within Highways England through the use of the regional programme boards and a biodiversity technical working group;
- Develop criteria against which to assess proposals, to ensure effective spending of monies linked to the Road Investment Strategy and Business Plan;
- Continue to build on existing partnerships, such as those we already have within the Nature Improvement Areas, and work with local partners;
- Develop a programme of works to ensure that more Sites of Special Scientific Interest and other important designated sites are brought into favourable condition;
- Ensure that we achieve the best possible biodiversity performance by more assertive management of existing contracts with service providers who manage road verges and associated land on our behalf;
- Incentivise better biodiversity performance when we renew our service provider contracts;
- Support Highways England colleagues and the service providers through the development of new technical guidance. This will include additional technical advice to support our network management suppliers (to include written guidance on integrating the biodiversity plan into the company);
- Report on the highways biodiversity plan through the Government's reporting tool, the Biodiversity Action Reporting System (BARS);

Tob to bottom:
Garden Bumblebee
Common Carder Bumblebee - Bill Sellers
White Tailed Bumblebee
Red Tailed Bumblebee - Tessa Bramall
Tree Bumblebee - Geoff Hall
Early Bumblebee - Mark Reed
Courtesy Bumblebee Conservation Trust



- Engage the public with our biodiversity work and performance, through effective communications;
- Develop a biodiversity metric that will identify the progress being made towards the target of no net loss of biodiversity on land managed by Highways England by 2020 – including the establishment of a biodiversity baseline;
- Consider the ways in which the management of road verges and associated land contribute to wider ecosystem services;
- Work with Local Environmental Records Centres, and explore data sharing agreements.

6.2 These measures will enable the effective allocation of funds to best meet the requirements of the Road Investment Strategy, and ensure coordination across our various priority areas including safety, vulnerable users, development of innovative technology, and housing and growth. They will enable us to deliver multiple benefits relating not only to biodiversity but also to landscape, cultural heritage, air quality, noise and accessibility, and will ensure works are efficient and act in concert with each other.

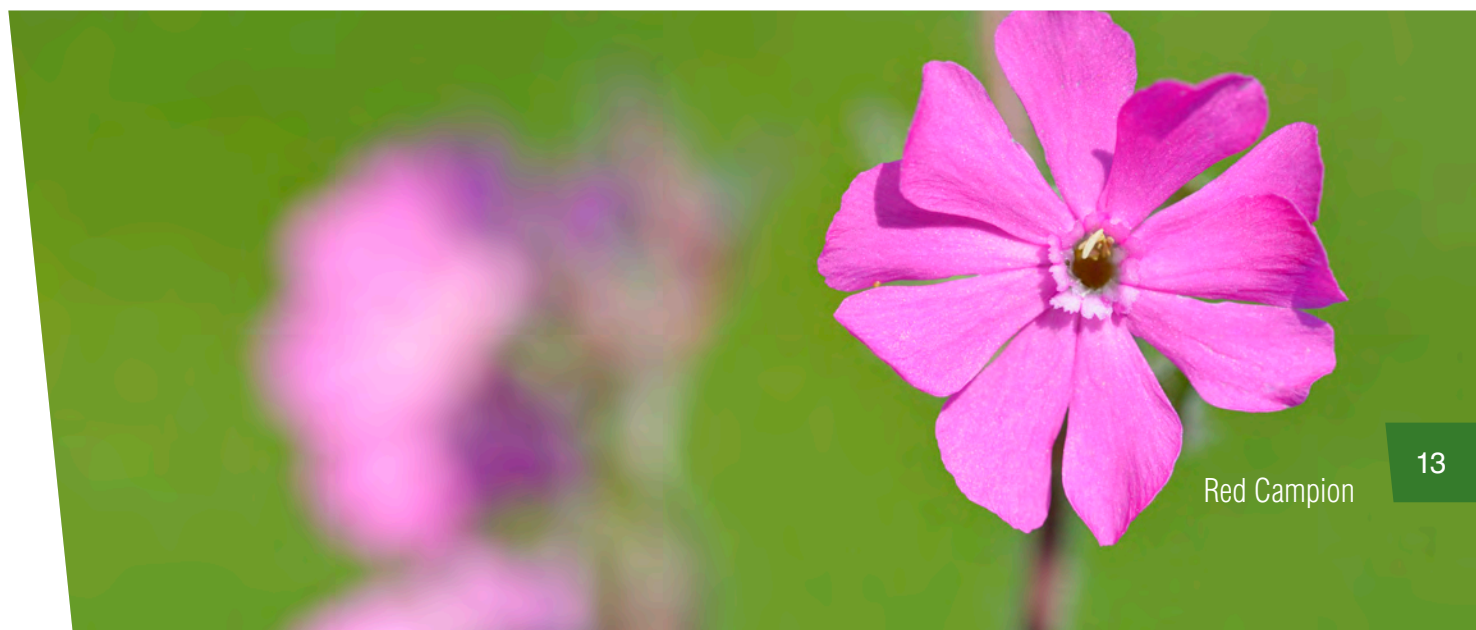
Facing Page: Six typical bumblebees of roadside habitats, as identified by



6.3 Where we are investing in network improvements this may mean that projects will need to budget for additional work to support biodiversity. Where we are investing in network maintenance we recognise that such funds are constrained. The challenge is to make better use of existing funds and leverage new funds to ensure that biodiversity outcomes are improved alongside our other priorities.

6.4 This biodiversity plan contains five specific outcomes, with a series of related actions. These outcomes will provide the most support for biodiversity across our network and will enable us to meet the Road Investment Strategy requirements:

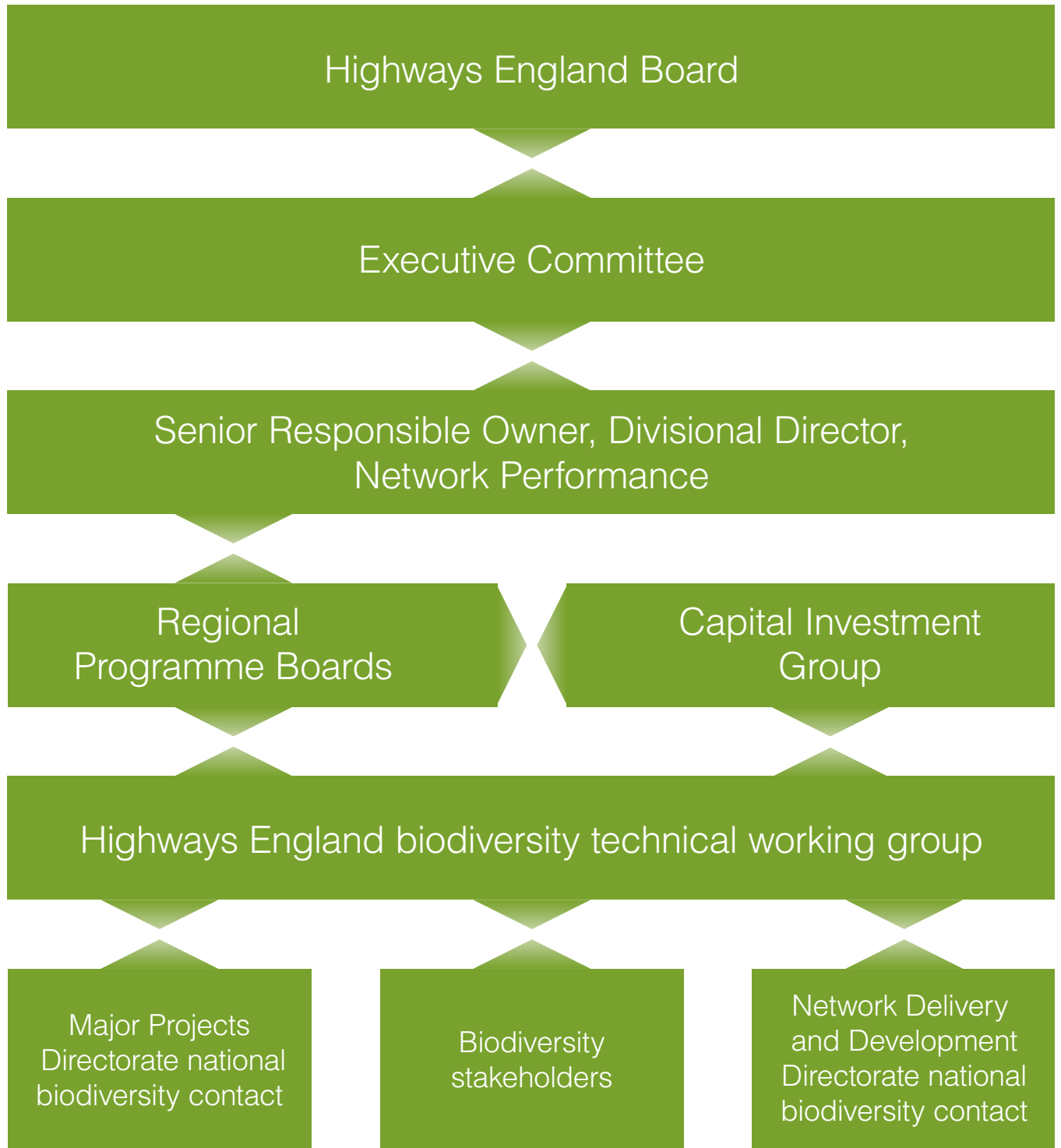
- **Outcome 1:** Highways England and our suppliers are equipped to produce good biodiversity performance.
- **Outcome 2:** The Strategic Road Network is managed to support biodiversity.
- **Outcome 3.** We have delivered biodiversity enhancements whilst implementing a capital programme of network improvement.
- **Outcome 4.** We have addressed the legacy of biodiversity problems on our network via a targeted programme of investment.
- **Outcome 5.** We are fully transparent about our biodiversity performance.



Red Campion

6.5 Figure 2 provides a flowchart to illustrate the governance of the biodiversity plan. More detail on actions and outcomes is provided in Part 2 of this document.

Figure 2: Governance of the highways biodiversity plan



7.0 How will we know we've made a difference?

- We will have a better understanding of biodiversity on the network;
- We will have developed a 'highways biodiversity metric', a system for properly quantifying the status of biodiversity across the network;
- We will have used the metric to measure the effects of improved management and enhancement projects;
- Our suppliers will have demonstrated good biodiversity performance through their contract performance systems;
- We will have reported to government including the Office of Rail and Road on an annual basis;
- We will be able to demonstrate that we have protected and increased biodiversity on our network.





Part 2.

The biodiversity plan – delivery

1.0 Overview

- 1.1 Part 2 describes how the Highways England biodiversity plan will be delivered.
- 1.2 The plan is to be implemented by Highways England and its service providers working together and in partnership with stakeholders and local communities.
- 1.3 The plan takes an outcome based approach starting with identifying the desired biodiversity consequence, termed the outcome, which is then met through the completion of a number of time bound actions.
- 1.4 The outcomes are expanded upon below. In summary each has an associated set of actions required to ensure its delivery. The actions will be implemented by Highways England and its service providers through our road improvement and road management works and the use of designated funds. Some of the actions will be delivered during the day to day performance of duties, and others will deliver enhancements which are above and beyond 'business as usual'. These will be covered by the Road Investment Strategy Environment Designated Fund for which separate application criteria will be used.
- 1.5 The actions allow service providers to identify and contribute to conservation initiatives such as the National Pollinator Strategy, priority actions identified in the Government's 'Biodiversity 2020' strategy, initiatives

associated with Nature Improvement Areas and Local Nature Partnerships, along with locally relevant local Biodiversity Action Plan targets where appropriate.

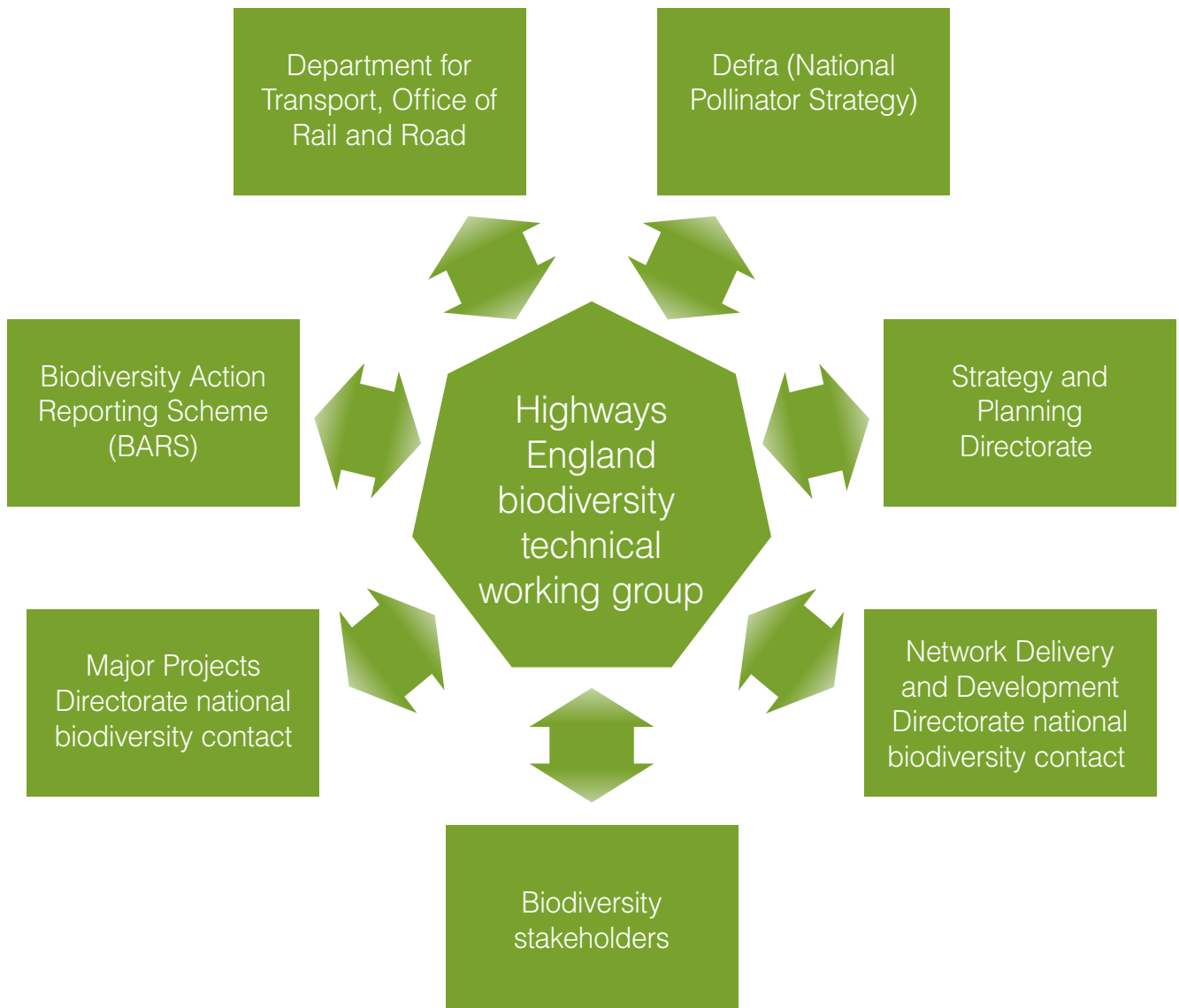
- 1.6 Importantly, the highways biodiversity plan will be supplemented by additional written technical guidance (see Outcome 1) which will provide the mechanism for delivery of biodiversity actions in detail.

2.0 Annual Reporting

- 2.1 The biodiversity technical working group is responsible for collecting evidence to inform annual reporting to the Department for Transport and the Office of Rail and Road on delivery against the biodiversity plan and the biodiversity key performance indicator. The group will also report to Defra on Highways England's action under the National Pollinator Strategy.
- 2.2 The biodiversity technical working group will also report detailed biodiversity information to the Government's Biodiversity Action Reporting System (BARS) to ensure all our actions are recognised as effective.
- 2.3 Lead delivery partners will provide the biodiversity technical working group with the required information in an appropriate and pre-agreed format, to enable this reporting to take place.

2.4 Figure 3 provides a reporting flowchart for biodiversity actions

Figure 3: Reporting of biodiversity actions



3.0 The actions and outcomes

3.1 The five outcomes and related actions that make up the highways biodiversity plan are provided on the following pages. The tiered actions are tabulated together with a target completion date for each.

3.2 Outcomes have been devised to enable Highways England to contribute to the areas for action listed below, taken from the Government's *Biodiversity 2020: A strategy*

for England's Wildlife and Ecosystem Services:

- a more integrated large-scale approach to conservation on land and at sea;
- Putting people at the heart of biodiversity policy;
- Reducing environmental pressures;
- Improving our knowledge.

Outcome 1: Highways England and our suppliers are equipped to produce good biodiversity performance.

Action	Completion date
<p>1.1 Establish a biodiversity technical working group and identify a highways biodiversity plan officer to act as the company's single point of contact. The technical working group will include representatives from across the business, including areas responsible for road improvement projects and road maintenance.</p>	<p>September 2015.</p>
<p>1.2 Develop a set of criteria to guide the allocation of Environment Designated Fund monies through our road improvement and road management works, to develop biodiversity projects based on local priorities.</p>	<p>July 2015.</p>
<p>1.3 Undertake an awareness raising exercise within the business on the biodiversity plan and the associated criteria and undertake a consultation exercise on the forthcoming written guidance (see Action 1.4).</p>	<p>September 2015.</p>
<p>1.4 Develop written technical guidance to embed the biodiversity plan and provide a guide to its implementation for Highways England and its service providers.</p>	<p>March 2016.</p>
<p>1.5 Review the operational requirements given to our service providers, to ensure that biodiversity work is fully reflected in their contracts, as such contracts are renewed.</p>	<p>2015-2020, as contracts are renewed.</p>
<p>1.6 Explore how measures to improve biodiversity can be integrated with Highways England's litter strategy. The key themes of this are: to influence littering behaviour; to improve operational delivery and asset maintenance; to seek and respond to customer feedback; and to improve partnership working.</p>	<p>December 2015.</p>
<p>1.7 Undertake an annual awareness exercise to maintain our staff and supplier knowledge of the plan, and collect and collate reporting evidence from our road improvement and road management works and report back to the company on the level of success against the Biodiversity KPI.</p>	<p>Annually to 2020.</p>

Outcome 2: The Strategic Road Network is managed to support biodiversity

Action	Completion date
<p>2.1 We will use the Regional Programme Boards to work with local wildlife partners for example by establishing local highways biodiversity steering groups.</p>	<p>Each region to demonstrate effective engagement by March 2016.</p>
<p>2.2 Our service providers to liaise with Natural England and local partners to identify actions required to achieve, maintain and/or enhance favourable conservation status of Sites of Special Scientific Interest and other statutory designated sites. Potentially, these actions might include buffering initiatives that contribute to site protection.</p> <p>These actions will meet the national objective of securing 50% of Sites of Special Scientific Interest in favourable condition and 95% of Sites of Special Scientific Interest in favourable or recovering condition by 2020, in line with Biodiversity 2020.</p> <p>Currently there approximately 70 Sites of Special Scientific Interest on or adjacent to the network, of which approximately 40 require intervention to achieve the above.</p> <p>For agreed sites a management plan for 2017-2020 will be submitted to Highways England for review. Each management plan must include a statement on the current condition of the site, actions designed to improve the status of the site and reporting each year.</p>	<p>For agreed sites, a management plan to be in place by December 2016, with annual reporting until 2020.</p>
<p>2.3 Commission, arrange and undertake targeted baseline studies to improve our understanding of the biodiversity status of the network, to monitor the effects of management on biodiversity and to identify opportunities for the enhancement projects required under Action 4.1.</p>	<p>Baseline studies complete by December 2016.</p>
<p>2.4 Using the Regional Programme Boards and local wildlife partner engagement (Action 2.1), service providers to identify and implement revised management activities* to improve biodiversity** and monitor progress against the baseline (Action 2.3), in line with the forthcoming written guidance. Report progress annually to the biodiversity technical working group.</p>	<p>By March 2017 and each year until 2020.</p>

Action		Completion date
2.5	Negotiate with land owners and managers, including motorway service area operators, to identify significant areas of land that could be managed to achieve biodiversity gains. Each region to produce a report that identifies areas of land of potential interest and proposals for revised management arrangements for enhanced biodiversity outcomes.	2015-2020, as contracts are renewed.

* Where practicable, we would expect management to be guided by the principles of Natural England's The Mosaic Approach: Managing Habitats for Species.

**We would expect efforts to target Priority habitats and species (as identified under the Natural Environment and Rural Communities Act 2006, Section 41) however it is understood that in certain environments, for example in urban areas with few protected species, other habitats and species may be more suitable.



Outcome 3. We have delivered biodiversity enhancements whilst implementing a capital programme of network improvement.

Action	Completion date
<p>3.1 We will ensure that the proposals within the biodiversity plan and supporting technical guidance are incorporated within network improvement projects. Project teams will undertake the co-ordination and delivery of all biodiversity reporting and monitoring of their projects, and report to the technical working group.</p>	<p>June 2015.</p>
<p>3.2 As part of normal delivery, network improvement projects will mitigate and compensate their biodiversity impacts in order to achieve no net loss of biodiversity, as far as the projects are reasonably able. In addition, projects will identify biodiversity opportunities and deliver actions that will achieve net biodiversity gain, wherever possible. The identification of such opportunities should be included within the Environmental Assessment Report. If no such opportunities are found then a clear statement explaining why should be provided instead.</p>	<p>Throughout the lifetime of the biodiversity plan, i.e. 2015 - 2020.</p>
<p>3.3 Project teams to liaise with local wildlife partners as part of their project design and development to identify how the project could best contribute towards landscape-scale biodiversity gains. Information on these opportunities to be provided to the relevant regional programme board and technical working group.</p>	<p>At agreed intervals during design stage of major projects.</p>
<p>3.4 Where projects have passed through Action 3.3 and opportunities have arisen within projects for biodiversity enhancement which are over and above that which would normally be undertaken, potential biodiversity investment opportunities that meet the criteria of the Environment Designated Fund, will be submitted to the technical working group for approval and onward funding decision by the Capital Investment Group.</p>	<p>Submission at least 1 year before detailed design committed.</p>
<p>3.5 We will monitor and ensure the delivery of the agreed enhancements (under Action 3.4) during the on-going detailed design and construction phase of the project.</p>	<p>At agreed intervals during construction.</p>

Outcome 4. We have addressed the legacy of biodiversity problems on our network via a targeted programme of investment.

Action	Completion date
<p>4.1 In locations outside of committed network improvement projects, and following on from Action 2.3, we will work with local wildlife partners and other stakeholders to identify a programme, for each of our regions, of potential biodiversity investment opportunities that meet the criteria of the Environment Designated Fund. These programmes will be submitted to the technical working group for approval and onward funding decision by the Capital Investment Group. Potential biodiversity projects could either be within or outside of the land associated with the Strategic Road Network. The programmes identified will:</p> <ul style="list-style-type: none"> ■ identify locations suitable for the enhancement and creation of invertebrate friendly habitats including wildflower rich grasslands of benefit to insects, in line with the National Pollinator Strategy. This will comprise at least 20ha of new or improved wildflower rich grassland per year of the programme in each of our Network Areas; ■ support the objectives of each of the ten Nature Improvement Areas which are adjacent to or form part of our network; ■ consider habitats in the wider ecological context, including the landscape character (e.g. using Natural England's National Character Area profiles) and look to improve links between protected sites or to buffer existing sites (in line with Action 2.2); ■ include projects specifically designed to improve urban environments with low biodiversity; ■ include at least five measures to maximise habitat connectivity, linking road verges and associated land with the wider landscape wherever possible. This will include consideration of measures to improve connectivity across roads, which might include green bridges and/or tunnels; ■ identify synergies with other initiatives being undertaken to address landscape, cultural heritage, cycling and accessibility, noise, air and water quality. 	<p>Programme to be agreed for each region by end April 2017.</p>

Action	Completion date
4.2 All projects to monitor their biodiversity performance (against the baseline established in Action 2.3), post-completion for an appropriate period. Monitoring details will necessarily be project specific and agreed with the technical working group and local wildlife partners.	Appropriate monitoring reports annually.



Outcome 5: We are fully transparent about our biodiversity performance.

Action	Completion date
5.1 We will collate and interpret pre-existing (2015) and new (2016-2020) biodiversity data (see Action 2.3), as part of our road improvement and road management work, for integration with a biodiversity metric.	Annually 2015 – 2020.
5.2 We will develop and/or adopt an appropriate biodiversity metric which uses the ecological baseline on the verges and associated land against which change can be measured and which potentially, captures the wider ecosystem services benefits.	December 2017.
5.3 We will report on the success of the biodiversity plan through the Government's recognised biodiversity reporting tool known as the Biodiversity Action Reporting System (BARS).	December 2015 and annually.
5.4 We will produce an annual non-technical public report on biodiversity and publish this on our website. We will look for opportunities to engage and enthuse the public in our biodiversity work.	December 2016 and annually.



If you need help accessing this or any other Highways England information, please call **0300 123 5000** and we will help you.

© Crown copyright 2015.

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence: visit www.nationalarchives.gov.uk/doc/open-government-licence/ write to the **Information Policy Team, The National Archives, Kew, London TW9 4DU**, or email psi@nationalarchives.gsi.gov.uk.

This document is also available on our website at www.highways.gov.uk

If you have any enquiries about this publication email info@highwaysengland.co.uk or call **0300 123 5000***. Please quote the Highways England publications code **PR34/15**.

Highways England creative job number N150146

*Calls to 03 numbers cost no more than a national rate call to an 01 or 02 number and must count towards any inclusive minutes in the same way as 01 and 02 calls. These rules apply to calls from any type of line including mobile, BT, other fixed line or payphone. Calls may be recorded or monitored.

Printed on paper from well-managed forests and other controlled sources.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ
Highways England Company Limited registered in England and Wales number 09346363