



Evidence Project Final Report

- Note**

In line with the Freedom of Information Act 2000, Defra aims to place the results of its completed research projects in the public domain wherever possible.

The Evidence Project Final Report is designed to capture the information on the results and outputs of Defra-funded research in a format that is easily publishable through the Defra website. An Evidence Project Final Report must be completed for all projects.

- This form is in Word format and the boxes may be expanded, as appropriate.

- ACCESS TO INFORMATION**

The information collected on this form will be stored electronically and may be sent to any part of Defra, or to individual researchers or organisations outside Defra for the purposes of reviewing the project. Defra may also disclose the information to any outside organisation acting as an agent authorised by Defra to process final research reports on its behalf. Defra intends to publish this form on its website, unless there are strong reasons not to, which fully comply with exemptions under the Environmental Information Regulations or the Freedom of Information Act 2000.

Defra may be required to release information, including personal data and commercial information, on request under the Environmental Information Regulations or the Freedom of Information Act 2000. However, Defra will not permit any unwarranted breach of confidentiality or act in contravention of its obligations under the Data Protection Act 1998. Defra or its appointed agents may use the name, address or other details on your form to contact you in connection with occasional customer research aimed at improving the processes through which Defra works with its contractors.

Project identification

- Defra Project code
- Project title
- Contractor organisation(s)
- Total Defra project costs (agreed fixed price)
- Project: start date
end date

6. It is Defra's intention to publish this form.

Please confirm your agreement to do so..... YES NO

(a) When preparing Evidence Project Final Reports contractors should bear in mind that Defra intends that they be made public. They should be written in a clear and concise manner and represent a full account of the research project which someone not closely associated with the project can follow.

Defra recognises that in a small minority of cases there may be information, such as intellectual property or commercially confidential data, used in or generated by the research project, which should not be disclosed. In these cases, such information should be detailed in a separate annex (not to be published) so that the Evidence Project Final Report can be placed in the public domain. Where it is impossible to complete the Final Report without including references to any sensitive or confidential data, the information should be included and section (b) completed. NB: only in exceptional circumstances will Defra expect contractors to give a "No" answer.

In all cases, reasons for withholding information must be fully in line with exemptions under the Environmental Information Regulations or the Freedom of Information Act 2000.

(b) If you have answered NO, please explain why the Final report should not be released into public domain

Executive Summary

7. The executive summary must not exceed 2 sides in total of A4 and should be understandable to the intelligent non-scientist. It should cover the main objectives, methods and findings of the research, together with any other significant events and options for new work.

The Nature Improvement Areas (NIAs) Programme has been established, as announced in the Natural Environment White Paper (2011). NIAs are large, discrete areas that will deliver a step change in nature conservation, where a local partnership has a shared vision for their natural environment. The partnership will plan and deliver significant improvements for wildlife and people through the sustainable use of natural resources; restoring and creating wildlife habitats, connecting local sites and joining up local action.

The NIA grant scheme was established to promote actions at a landscape scale that improve biodiversity, ecosystem services and people's connections with their natural environment, as identified by the Natural Environment White Paper. The scheme takes forward the recommendations of the Lawton review, *Making space for nature*.

NIAs need to demonstrate measurable ecological, social and economic benefits and outcomes. Natural England's NIA general guidance notes identify what activities and associated direction of change are sought.

Ricardo-AEA, with its subcontractor ICF-GHK, was commissioned by Defra, in collaboration with Natural England, to develop a monitoring and evaluation framework for NIAs. It has been developed to enable NIA partnerships to report on their contribution to meeting local, national and international commitments and objectives. It will also help Defra and Natural England to identify requirements for ongoing support, outreach, and additional research and development. The framework has been developed in consultation with steering group members, government agency experts who are responsible for the development and maintenance of relevant datasets, and NIA partnerships.

An online data-capture system has been built that enables NIA partnerships and other integrated landscape-scale initiatives to register and submit data annually, strictly in accordance with the NIA monitoring and evaluation framework. It allows the public to view indicators selected by each project, reporting in progress and completed reports. It also provides an online national NIA report, which makes it possible for the public to view and compare annual progress against indicators across the initial 12 NIAs.

Project Report to Defra

8. As a guide this report should be no longer than 20 sides of A4. This report is to provide Defra with details of the outputs of the research project for internal purposes; to meet the terms of the contract; and to allow Defra to publish details of the outputs to meet Environmental Information Regulation or Freedom of Information obligations. This short report to Defra does not preclude contractors from also seeking to publish a full, formal scientific report/paper in an appropriate scientific or other journal/publication. Indeed, Defra actively encourages such publications as part of the contract terms. The report to Defra should include:
- the objectives as set out in the contract;
 - the extent to which the objectives set out in the contract have been met;
 - details of methods used and the results obtained, including statistical analysis (if appropriate);
 - a discussion of the results and their reliability;
 - the main implications of the findings;
 - possible future work; and
 - any action resulting from the research (e.g. IP, Knowledge Exchange).

1 Background and policy relevance

1.1 Background

The Lawton review, *Making Space for Nature*¹, concluded that England's wildlife areas are fragmented and do not represent a coherent and resilient ecological network capable of responding to the challenges of climate change and other pressures on biodiversity and ecosystems. The review called for "a step-change in nature conservation [and] a new, restorative approach which rebuilds nature and creates a more resilient natural environment for the benefit of wildlife and ourselves".

Degradation of the natural environment is associated with loss of wildlife, habitats and landscapes, and of economic value that could be gained from their sustainable use. The UK National Ecosystem Assessment (UKNEA)² highlighted that a healthy natural environment is essential for long-term growth and that the economic benefits of protecting biodiversity and ecosystems greatly outweigh the costs (e.g. protected natural areas can deliver economic returns 100 times greater than the cost of their protection and management). Yet it also identified that the financial benefits of 'natural capital' are often underestimated or overlooked and that over 30% of ecosystem services are declining.

Human well-being is clearly linked to the natural environment. Evidence from the UKNEA supports the assertion that regular opportunities to experience nature (e.g. wider landscapes and seascapes, urban green space and public parks) have positive impacts on physical and mental health, and on quality of life. Society, therefore, needs to do more to reflect the economic and social value of the natural environment in its decision-making.

The UKNEA and *Making Space for Nature* identify the need for a more coherent approach to the natural environment; in which working at a larger scale across landscapes and collaboration between sectors are key components.

1.1.1 A new vision for nature

The strategic direction for biodiversity policy in England for the next decade is set out in the Natural Environment White Paper (NEWP)³. Its mission is to "halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people". At COP10 of the Convention on Biological Diversity (CBD)⁴ in Nagoya in 2010, UK Government committed specifically to manage at least 17% of England effectively in order to safeguard biodiversity and ecosystem services, and to restore at least 15% of degraded ecosystems that are important for climate change mitigation and adaptation. These commitments are reflected in Biodiversity 2020: A strategy for England's wildlife and ecosystem services (the England Biodiversity Strategy – EBS)⁵. Whilst government will play a leading role in delivering the EBS, the strategy will also be used to inspire action by the wider biodiversity community and society in general.

There is growing consensus that integrated action at a 'landscape scale' is needed to deliver multiple benefits for the natural environment. The Government is supporting development of Local Nature Partnerships (LNPs) and Nature Improvement Areas (NIAs) to facilitate this new approach.

1.1.2 Nature Improvement Areas

Making Space for Nature identified a range of opportunities for restoring and connecting nature at a landscape scale. The Government provided £7.5 million (2012–2015) to encourage and enable the establishment of an initial 12 NIAs that could build a practical evidence base to inform extension of the approach. Natural England established a competition on behalf of Defra to identify the 12 initial NIAs. A call to submit applications was launched in July 2011.

The national selection panel was chaired by Sir John Lawton. A short-list of applicants was selected in October 2011 to enter the second stage of the competition, and on 27 February 2012, Defra announced the 12 partnerships that were awarded government funding as a result of the NIA competition. The winning NIAs that started on 1 April 2012 are:

- Birmingham and the Black Country Living Landscape
- Dark Peak:

¹ Lawton, J.H., Brotherton, P.N.M., Brown, V.K., Elphick, C., Fitter, A.H., Forshaw, J., Haddow, R.W., Hilborne, S., Leafe, R.N., Mace, G.M., Southgate, M.P., Sutherland, W.A., Tew, T.E., Varley, J. & Wynne, G.R. 2010. *Making space for nature: a review of England's wildlife sites and ecological network*. Report to Defra. <http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf>

² UK National Ecosystem Assessment (2011) The UK national Ecosystem Assessment Technical Report. UNatural EnglandP-WCMC. Cambridge. <http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx>

³ H.M. Government. 2011. *The natural choice: securing the value of nature*. The Stationery Office Ltd. Available for download at: www.official-documents.gov.uk

⁴ <http://www.cbd.int/cop10/>

⁵ Defra (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services. <http://www.defra.gov.uk/publications/files/pb13583-biodiversity-strategy-2020-111111.pdf>

- Dearne Valley Green Heart:
- Greater Thames Marshes
- Humberhead Levels
- Marlborough Downs
- Meres and Mosses of the Marches
- Morecambe Bay Limestones and Wetlands
- Nene Valley
- Northern Devon
- South Downs Way Ahead
- Wild Purbeck.

These NIAs are administered on behalf of Defra by Natural England and are being driven by local partnerships' knowledge and vision.

NIAs are places where:

- The area and scale of opportunities to deliver ecological networks, and the value of their benefits to wildlife and people, are particularly high
- A shared vision for the natural environment exists among a wide partnership of local people, including statutory and voluntary sectors
- Significant improvements to the ecological network can be achieved by promoting connectivity, enlarging and enhancing existing wildlife sites, and creating new sites
- Land uses can be integrated with valued landscapes and restoration of wildlife habitats and underpinning natural processes, and help adaptation to climate change
- An enhanced ecological network will deliver benefits to urban areas and communities
- 'Win-win' opportunities are identified and have potential to provide multiple benefits (e.g. to flood-risk management, or a low-carbon economy)
- People can be inspired by the natural world.

In addition, Natural England has identified that NIAs should contain the following components of an ecological network:

- Core areas - especially existing wildlife sites (e.g. National Nature Reserves, Sites of Special Scientific Interest, Local Nature Reserves)
- Corridors and stepping stones
- Restoration areas - where priority habitats may be restored to provide more core areas
- Buffer zones - that reduce pressures on core areas
- Surrounding land that is managed in a wildlife-friendly way - including for sustainable food production.

The 12 initial NIAs each cover 10,000–50,000ha and vary in character according to local circumstances and requirements. They link with other national, regional and local landscape-scale initiatives, such as:

- 'Living Landscape' - more than 100 Wildlife Trust schemes to restore, recreate and reconnect wildlife-rich rural and urban areas through working in local partnerships
- 'Futurescapes' - RSPB's vision for a thriving countryside and target to recreate 160,000ha of semi-natural habitat by 2020
- 'Biodiversity Opportunity Areas' – identified by the South East England Biodiversity Forum for restoring and creating priority habitats.

1.2 The context of this study

Natural England provided comprehensive guidance to help partnerships assess their eligibility for NIA grant funding and submit applications. Suitable partnerships had to comprise two or more of the following:

- Local government/planning authorities
- Significant private landowners
- Environmental NGOs with land and other NGOs or environmental bodies
- Community and social enterprises, town and parish councils, private sector, with the involvement of the Environment Agency, Forestry Commission and Natural England.

Bidders who entered the second stage of the competition were expected to have in place monitoring and evaluation (monitoring and evaluation) processes and to have budgeted time and financial resources needed for their delivery. Natural England's 'general guidance notes'⁶ identified what was sought from NIAs and associated activities/direction of change (Table 1).

⁶ Natural England (2011) Nature Improvement Areas Competitive Grants Scheme General Guidance Notes. http://www.naturalengland.org.uk/Images/NIA-guidance-notes_tcm6-26959.pdf

Table 1: Examples of what is sought from NIAs and expected activities/direction

What is sought from NIAs	Activities/direction of change
<ul style="list-style-type: none"> • Defined geographical land area greater than 10,000ha, unless smaller obvious boundary with significant ecological enhancement. To reduce risk of effort being spread too thinly, partnerships should avoid proposing overly large areas (in excess of 50,000ha), unless they can convincingly demonstrate significant enhancements likely to be achieved throughout the NIA. 	<ul style="list-style-type: none"> • Demonstrate how NIA is helping to deliver the EBS, and e.g. UK Geo-diversity Action Plan, landscape character etc. • Improve existing wildlife sites, including SSSIs and Local Wildlife Sites (e.g. improving the area in favourable or recovering condition).
<ul style="list-style-type: none"> • Consideration to the integration of different land uses. • Linkages with any existing landscape-scale initiatives in the vicinity and/or with other recognised areas for enhancement (such as biodiversity opportunity areas). • Area of open land with a variety of uses and may include urban. Employ where necessary the introduction of green infrastructure (e.g. green roofs, sustainable drainage and improved access to nature). 	<ul style="list-style-type: none"> • Actions to enhance the local ecological network, such as by enlarging existing sites, creating or restoring new wildlife habitat, and establishing corridors, stepping stones or buffer zones, including urban areas to enhance green infrastructure. • Demonstrate how the project has regard for or makes improvements through the conservation of soils, geo-diversity and valued landscapes. • Link with green infrastructure and landscape-scale delivery plans.
<ul style="list-style-type: none"> • Enhances the functioning of ecological process and wider ecosystem services, including carbon sequestration and water management. • Projects that make a significant contribution to national and local biodiversity, geo-diversity and landscape priorities to enhance natural networks. • Areas of surrounding land managed in a wildlife-friendly way. 	<ul style="list-style-type: none"> • Demonstrate how NIA will contribute to or is complimentary with the objectives of the Water Framework Directive and river water and shoreline management plans. • Improve areas of non-designated wildlife habitat or bring these under conservation management. • Area of priority habitat expanded, restored and under management - as separate restoration areas (new wildlife sites) or as an extension to existing wildlife sites. • Provide opportunities to enhance the functioning of ecological processes. Provide wider ecosystem services and action to facilitate adaptation to climate change.
<ul style="list-style-type: none"> • Provide links with existing landscape-scale initiatives and recognised areas for enhancement (supported by National Ecosystem Assessment and other evidence). 	<ul style="list-style-type: none"> • Enhancement to existing wildlife sites and or other network components, particularly those identified as national or local biodiversity priorities (such as hedgerows and rivers).
<ul style="list-style-type: none"> • Costed and geographically explicit proposals illustrated in the Stage 1 Application Form and developed fully in the Stage 2 Business Plan. 	<ul style="list-style-type: none"> • NIAs visibly providing long-term sustainable benefits after funding ends. • Overall value for money.
<ul style="list-style-type: none"> • Integration of biodiversity and ecological enhancement alongside economic growth. • Innovative approaches to the NIA project (e.g. payment for ecosystem services or piloting biodiversity offsets). 	<ul style="list-style-type: none"> • NIA visibly provides added value through the use of non-public sector resources (i.e. volunteers, landowners, and private sector investment), and through innovative approaches to the NIA project. • Demonstrate how benefits will be sustained after funding ends (e.g. recognition in local planning; fundraising proposals or funding streams identified and funding secured beyond public sector funding, including innovation such as offsets; recognised uplift in economic value). • Demonstrate significant benefits to local communities, integrating environmental enhancements alongside economic growth and/or providing an up-lift in economic value.
<ul style="list-style-type: none"> • Potential for extending or completing the 	<ul style="list-style-type: none"> • Area of habitat or extent of other habitat features,

network, such as identified restoration areas, corridors and stepping stones or buffer zones that reduce pressure on core areas.	additionally created or restored, which increases ecological connectivity and reduces habitat vulnerability to future change and how cost effective this has been.
<ul style="list-style-type: none"> • Projects aiming to benefit wildlife through enhancing ecological processes should also be able to deliver local landscape character and cultural association, demonstrating significant benefits to local communities. 	<ul style="list-style-type: none"> • Community and civil society involvement in the design and delivery of proposed activity. • Demonstrate significant benefits to local communities and people through improved quality of life, enhancement of health and well-being.
<ul style="list-style-type: none"> • The natural world contributes to people's quality of life, enhancing well-being and health. Establishing more robust ecological networks will help to secure benefits for more people, particularly in towns and cities where more than 80% of us live and where disconnect with nature is often greatest. 	<ul style="list-style-type: none"> • Improving the management and viability of our landscapes to support the functioning of NIAs and enhance people's experience and understanding of the natural world. Illustrate how this will be achieved. • New and innovative approaches tested and assessed.
<ul style="list-style-type: none"> • Compliance with standard monitoring and review process supported by the agreed standard mechanisms in the Biodiversity Action Reporting Scheme (BARS)⁷ and/or the National Biodiversity Network (NBN). • Successful partnerships will continue to participate in shared learning and best practice network that will be established to support the 12 NIA pilots. • A well-supported and functioning partnership with key delivery partners committed to action and with a shared vision. 	<ul style="list-style-type: none"> • Projects should be based on sound evidence (supported by Defra agencies) collected and updated using common standards. • Monitoring and evaluation mechanisms to be in place (and set out in Stage 2 Business Plan), to detect and record network improvements at a range of scales. • Successful partnerships will attend shared learning and best practice events, provide regular progress reports on shared learning. Demonstrate how shared learning and dissemination of expertise within and beyond the NIA project will take place.

2 Aims and objectives

2.1 Overall aim

The overall aim of this study was to develop and promote an evidence-based approach to the design, monitoring and evaluation of NIAs that, in the longer term, would enable assessment of the individual and aggregated contributions of the initial 12 NIAs towards meeting outcomes included in the NEWP, EBS, and the international targets agreed in Nagoya, as well as other national and international biodiversity commitments, such as the European Landscape Convention.

2.2 Main objectives

The main objectives were:

- A. Determination of the evidence base for NIA design, monitoring and evaluation
- B. Development of a framework for monitoring and evaluation of NIAs
- C. Development of a data-capture system
- D. Knowledge transfer and communications
- E. Provision of suggestions for further work.

2.3 Specific objectives

Specific objectives are detailed in Table 2.

Table 2: Specific objectives

<p>A. Determination of the evidence base for NIA design, monitoring and evaluation</p> <ol style="list-style-type: none"> 1) Identify and critically assess what information, data, tools and expertise is available and used to design, monitor and evaluate NIAs, including: <ol style="list-style-type: none"> a) Information used by the bidding partners to support the design of NIAs b) Information systems and methodologies for data capture, surveillance, data management, indicators and reporting 2) Make suggestions for easy ways to achieve modifications or developments to existing initiatives and schemes in 1a and 1b, which would improve their utility to support design, monitoring and evaluation of NIAs.

⁷ <http://ukbars.defra.gov.uk/>

<p>3) Provide information and technical advice to the Stage 2 bidders, in a generic style that can be shared by all to ensure transparency and fairness due to the competitive nature of the bidding process, in order to support consistent, evidence-based approaches to their proposals for NIAs</p> <p>4) Provide a review of information requirements, and lessons learnt concerning the accessibility, relevance and application of the evidence base.</p>
<p>B. Development of a framework for monitoring and evaluation of NIAs</p> <p>5) Collaborate with others, including stage 2 bidders, to develop and promote the use of a cost-effective, fit-for-purpose, flexible framework for monitoring and evaluation of NIAs:</p> <p>a) Identify key questions that the monitoring and evaluation framework would answer and the analysis tools that could be applied</p> <p>b) Design the framework based on existing initiatives of monitoring, surveillance and reporting at national and local levels</p> <p>c) Identify potential for development or adaptation of existing user-oriented data capture systems to support monitoring and evaluation of NIAs</p> <p>d) Develop guidance and provide technical advice to the 12 funded NIA projects on implementation of the monitoring and evaluation framework in their project.</p>
<p>C. Development of a data-capture system</p> <p>6) Develop a data-capture and information dissemination system, building on existing initiatives, where appropriate, in such a way that many organisations and individuals are able to contribute data, undertake simple analyses and produce user-specified reports, with capability for extension to NIAs beyond the initial 12 projects.</p>
<p>D. Knowledge transfer and communications</p> <p>7) Provide and implement a communications plan to support the aims of the project that identifies the target audience and methods of reaching the audience, allowing for differences in technical knowledge</p> <p>8) Make appropriate links with other related initiatives</p>
<p>E. Provision of suggestions for further work</p> <p>9) Identify priorities and provide suggestions for further information exchange and outreach activities, technical developments and research to support the design, monitoring and evaluation of NIAs beyond the Phase 1 scoping study.</p>

3 Methods

This phase 1 scoping study ran in parallel with the competition to select the initial 12 NIAs and the early stages of establishing them. Ricardo-AEA, with its subcontractor ICF-GHK, interacted with and supported the bidding partnerships that were successful in reaching stage 2 of the bidding, in order to maximise the potential to learn from the process of creating NIAs and to establish a fit-for-purpose monitoring and evaluation framework which could be implemented within the initial NIAs by the NIA partnerships. The project also identified requirements for ongoing support, outreach, additional research and development to assist monitoring and evaluation of the initial NIAs (that would also be suitable for extension to other NIAs). These will help inform a phase 2 project.

3.1 Key issues prior to selection of the NIAs

Key issues that needed to be considered prior to the initial 12 NIAs being selected included:

- The timing of the study, as the award of contract left very few days to prepare for a workshop on 4 November 2011
- The need to ensure unbiased, fair, open and transparent communication that did not compromise the competitive nature of the bidding process
- The commercial self-interests of bidders, which could have constrained their willingness to provide information of potential assistance to other bidders.

3.2 Project inception

The project inception meeting was held on 4 October 2011 and a final version of the project's inception plan was delivered to Defra on 13 October 2011. The plan was intended for use by the project team, Defra, Natural England and the steering group to ensure that the project's aims and objectives were clear and the methods for delivery and risk mitigation were understood by all.

3.3 Communications

A first iteration of the project's communications plan was delivered to Defra on 13 October. The plan was intended for use by the project team, Defra, Natural England and the steering group to ensure that the strategy for communications was clear and outputs were specified and agreed. The communications plan was a live document that was periodically updated as the project progressed. It identified:

- Key messages (allowing for differences in technical knowledge and understanding)
- The range of relevant target audiences

- Means for reaching and engaging with these audiences (including communication channels and processes).

3.4 Determination of the evidence base for NIA design, monitoring and evaluation

3.4.1 Desk review of evidence base and review of monitoring and evaluation aspects of Stage 1 bids

A desk review was undertaken during October 2011 to establish the extent of the data and information resource relevant to the monitoring and evaluation of NIAs and to familiarise the project team with the scope of each source. It included a review of the monitoring and evaluation aspects of the Stage 1 bids. The review was undertaken in advance of the notification of successful partnerships (31 October 2011) and was used to inform a Stage 2 bidders' workshop (4 November 2011). Outputs were also used in the development of the monitoring and evaluation framework (Objective B). The review:

- Identified relevant policies, measureable policy commitments, existing indicators and associated methods/reporting systems, and other data sources
- Produced contextual statements on each data/information source and categorised each according to potential outcomes (biodiversity, ecosystem service, socio-economic)
- Collated data/information from the Stage 1 bids (objectives, monitoring and evaluation aspects, and policies, indicators, reporting systems and data sources referenced)
- Identified data/information sources that needed to be developed and gaps that needed to be filled
- Identified potential conflicts between local/national monitoring and evaluation requirements.

3.4.2 Log of contacts with Stage 2 bidders

The project team established a methodology for capturing monitoring and evaluation data and information from Stage 2 bidders. This respected the competitive process and, with the exception of the bidders' workshop, required Natural England to be the intermediary for all communication between the project team and bidders. A log of contacts made by Stage 2 bidders with the project team was maintained.

3.4.3 Production of monitoring and evaluation web-pages – including consideration of micro-site

It was agreed that Natural England's NIA website would be used as the main interface with Stage 2 bidders. The development of a monitoring and evaluation micro-site was proposed but not considered feasible. The project team produced draft monitoring and evaluation web-pages for the NIA website prior to the bidders' workshop and worked closely with Defra and Natural England to finalise content for uploading thereafter. The web-pages were also intended to be of value to others involved in the NIA programme going forward, including Defra, Natural England, the initial 12 NIAs and other stakeholders.

3.4.4 Presentation of monitoring and evaluation requirements at Stage 2 bidders' workshop

The project team worked with Stage 2 bidders to identify and critically assess what data, information, tools and expertise were available and might be used in the monitoring and evaluation of NIAs. The bidders' workshop provided the first opportunity to explore the interplay between evidence, action, monitoring and shared learning. The project team participated with Defra and Natural England in planning the workshop and took the lead in the afternoon's monitoring and evaluation session. The range of topics covered were informed by the desk review and agreed with Defra and Natural England, and included monitoring and evaluation of biodiversity, ecosystem services, social and economic benefits, and partnership working.

3.4.5 Analysis of bidder feedback and ad hoc responses and generic advice notes to Stage 2 bidders

Following the Stage 2 bidders' workshop, the project team, worked closely with Defra and Natural England, and provided bidders with information and advice through the provision of generic guidance notes. Feedback gathered at the workshop and in subsequent iterations was used to identify monitoring and evaluation issues requiring further elaboration to help bidders develop the monitoring and evaluation aspects of their proposals. As a result, four guidance notes were compiled: these were made available by email to all Stage 2 bidders and through the monitoring and evaluation web-pages on the NIA website⁸.

1. *Developing monitoring and evaluation proposals for Stage 2 NIA bids* provided a summary of the subjects and issues that partnerships needed to consider when writing the monitoring and evaluation sections of their bids.
2. *Natural England's Integrated Monitoring Programme and information sources for biodiversity and landscape activity and outcomes* provided a summary of the information that is available on five websites supported by Natural England (the National Biodiversity Network – NBN Gateway, BARS, Nature on the Map, MAGIC, and Countryside Quality Counts). The note also summarised aspects of Natural England's Integrated Monitoring Programme that were of potential relevance to the monitoring and evaluation of NIAs.
3. *Data and information sources of relevance to monitoring and evaluation proposals in Stage 2 NIA bids*

⁸ <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/funding/nia/monitoringandevaluation.aspx>

provided examples of data and information sources, including monitoring, surveillance and reporting schemes, that partnerships might refer to when developing the monitoring and evaluation sections of their bids.

4. *Nature Improvement Areas – Monitoring and Evaluation FAQs* provided answers to five key monitoring and evaluation FAQs submitted by Stage 2 bidders following the workshop.

3.4.6 Evaluation of desk review and feedback from Stage 2 bidders and others – including suggestions for improvements

The project team used the desk review and related iterations with key stakeholders (e.g. Natural England, Forestry Commission, Environment Agency, NBN, BARS) to identify gaps in the evidence base (accessibility, relevance and application) and any structural/organisational deficiencies that might detract from the ability of existing schemes and initiatives to support the monitoring and evaluation of NIAs. Together with feedback from the bidders' workshop and on subsequent guidance notes, the results of the review were instrumental in informing the development of the monitoring and evaluation framework, including:

- The availability, compatibility and representativeness of data (national and local)
- The ability to report locally
- Minimising the duplication of reporting requirements.

3.5 Development of a framework for monitoring and evaluation of NIAs

The following issues were significant in the development of the framework:

- **Ensuring that the monitoring and evaluation framework reflected local objectives and targets of individual NIA partnerships whilst also enabling the aggregation of contributions to national and international commitments.** The project team balanced these competing needs by identifying a choice of suitable indicators and providing protocols for each. However, establishing those indicators that should be 'core' and those that should be 'optional' proved challenging. Initially, criteria were used systematically to identify core indicators. Comments on their attribution were received from Steering Group members, NIA partnerships and agency experts. The challenge was to avoid categorising indicators based on the preferences of individual experts, which might otherwise have inevitably led to a plethora of core indicators and a framework that was too constraining. The final selection of core indicators required significant thought and was a subject of discussion and agreement at an interim Steering Group meeting on 3 April 2012.
- **Ensuring compatibility between existing monitoring and evaluation methodologies, initiatives and schemes that might be utilised to minimise reporting requirements and the wider monitoring and evaluation needs of NIA partnerships.** The monitoring and evaluation framework built, wherever possible and appropriate, upon relevant existing methodologies, initiatives and schemes. For example, in relation to BARS, the key challenge was to gain a real grasp of the likely timing of developments, such that aspirations in relation to the monitoring and evaluation framework were realistic and deliverable. Similar challenges were faced on other fronts too (e.g. in relation to Natural England's development of ecosystem service coefficients, Natural England's landscape-scale initiatives database, and the development of the Ecosystems Knowledge Network⁹).
- **Ensuring that the development of the monitoring and evaluation framework accorded with the ongoing development of the wider NIA programme.** The tight timescale for establishment of the NIA initiative inevitably had implications for the monitoring and evaluation project. Accordingly, the project team adopted a flexible approach, which was responsive to changing priorities, and maintained dialogue with members of the Steering Group and agency experts.

3.6 Development of a data-capture system

There was a need to develop a web-based solution to:

- Enable users to register and submit data annually in relation to NIA indicators
- Make data on NIA indicators freely available for viewing on a read-only basis via public web-pages
- Facilitate future development and provision of online reports and evaluation of each NIA and the NIA programme nationally
- Encourage other integrated landscape-scale initiatives to use the NIA monitoring and evaluation framework.

Users entering data will be:

- Associated with individual projects, or
- Undertaking monitoring or analysis in relation to individual indicators for all relevant projects.

3.6.1 Usability

The web-based solution was developed with double 'A' accessibility standards in mind to ensure that it is as intuitive and straightforward to use as possible.

⁹ <http://ekn.defra.gov.uk/>

3.6.2 Administration and permissions

The system was built with different levels of permission and user registration is used to qualify permission levels assigned to individuals and the specific fields to which they are granted access for data entry and review:

- **Administrative-level users** are able to govern the whole site and have the ability to approve or reject registration by potential project-level users
- **Project-level users** register new projects. They can create project profiles on which they wish to report by selecting or proposing indicators strictly in accordance with the monitoring and evaluation framework for NIAs. They can: access all data fields, in relation to their project, for data entry and review; approve registration by potential local-level users; and assign access to individual data fields by national-level or local-level users. Only one project-level user can register to a project.
- **National-level users** are representatives of government agencies and can access fields for data entry in relation to individual indicators for all relevant projects, as approved by project-level users. More than one national-level user can register to a project but only one of them can be granted access for data entry to an individual indicator.
- **Local-level users** are associated with an individual project and can access fields for data entry in relation to a subset of indicators, as approved by the project-level user. More than one local-level user can register to a project but only one of them can be granted access for data entry to an individual indicator.

3.6.3 Data entry

All data entry fields for individual indicators are as described in the indicator protocols¹⁰. Data fields for relevant NIA biodiversity indicators have been aligned with BARS to facilitate future linkage.

3.6.4 Reports

The data-capture system provides online project reports, which allow the public to view indicators selected by each project, reporting in progress and completed reports. It provides an online national NIA report, which enables the public to compare annual progress against indicators across the initial 12 NIAs.

4 Results

Deliverable	Milestone	Description
Inception meeting with Defra and Steering Group	1	Held on 4 October 2011, following 'internal' kick-off meeting for Project Team on 9 October 2011. Frequent subsequent teleconferences involving Steering Group and Project Team to address specific issues (Project Team provided secretariat).
Inception Plan	2	Final version delivered on 13 October 2011. Plan ensured that project aims and objectives were clear and methods for delivery and risk mitigation understood.
Communications Plan	3	First iteration ('live' document) delivered on 13 October 2011. Plan ensured that strategy for communication was clear and outputs agreed.
Desk review of evidence base; review of monitoring and evaluation aspects of Stage 1 bids	4; 8	Both reviews undertaken during October. Used to inform Stage 2 bidders' workshop and thinking behind monitoring and evaluation framework.
Log of contacts with Stage 2 bidders	5	Natural England intermediary for communication between project team and bidders. Log of contacts maintained.
Production of monitoring and evaluation web-pages - including consideration of micro-site	6	Web-pages drafted prior to Stage 2 bidders' workshop and finalised with Defra and Natural England thereafter.
Presentation of monitoring and evaluation requirements at Stage 2 bidders' workshop	7	Project team participated in planning workshop (4 November 2011) and led monitoring and evaluation session with four sub-groups covering different aspects of monitoring and evaluation.

¹⁰ <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/funding/nia/evaluationprotocols.aspx>

Analysis of bidder feedback and <i>ad hoc</i> responses and generic advice notes to Stage 2 bidders	9; 10	Feedback from bidders' workshop and subsequent iterations resulted in production of four guidance notes (see Annex 1). Notes emailed to Stage 2 bidders and posted on monitoring and evaluation web-pages of NIA website prior to bidding deadline (16 December 2011).
Evaluation of desk review and feedback from Stage 2 bidders and others - including suggestions for improvements	11	Results of review and feedback from bidders' workshop and guidance notes informed early development of monitoring and evaluation framework (Objective B).
Additional Steering Group meeting (contract variation)	12+	Held on 23 January 2012. Draft report on Objective A discussed and progress with early development of monitoring and evaluation framework reviewed.
Summary report on Objective A	12	Report finalised by Project Team on 24 January 2012.
Identify and refine questions for framework; propose framework for monitoring and evaluation of NIAs	13; 15	Comprehensive 'work-in-progress' introductory document produced in advance of monitoring and evaluation workshop (13 March 2012), including identification of: draft design principles; proposed elements of framework; draft framework (with 'high-level architecture' and supplementary information to underpin detailed protocols); NIA partnership commitments and ongoing support.
monitoring and evaluation workshop for NGOs etc. (Objective D)	14	Project team developed programme, identified delegates and secured venue for workshop (13 March 2012). Also gave presentations, facilitated breakout sessions and collated feedback for discussion with Steering Group.
Report on potential for adaptation of existing data-capture and analysis tools (Objective C)	16	Revised scoping document (30 March 2012), building on Ricardo-AEA's outline tender proposal and drawing on outputs from monitoring and evaluation workshop and subsequent iteration with Natural England's BARS team.
Interim Steering Group meeting	17	Held on 3 April 2012. Report and discussion on progress with Objective B, including review of monitoring and evaluation workshop outputs. Consideration of revised data capture scoping document.
Interim report on Objective B	18	Interim report finalised by Project Team on 4 April 2012.
Draft final framework report	19	A report entitled ' <i>A monitoring and evaluation framework for Nature Improvement Areas</i> ' was submitted to Defra/Natural England for publication on 17 July 2012. It included sections on design principles, the framework and its elements, indicator protocols, reporting, evaluation, and NIA partnerships' commitments and ongoing support. A revised version of the report ¹¹ was submitted to Defra/Natural England for publication on 31 August 2012.
Final project summary report	20	This report is to be approved by Steering Group by end-of project (31 December 2012), together with an updated version of the draft final framework report (milestone 19).
End of project Steering Group meeting - replaced by NIA protocol workshop on 03/07/12	21	Project team developed programme and facilitated workshop to review indicator protocols for monitoring and evaluation with NIAs. The final indicator protocols ¹² were submitted to Defra/Natural England for publication on 17 August 2012.
Provide data-capture system for monitoring and evaluation framework (Objective C)	22	The data-capture system ¹³ went live on 15 October 2012

¹¹ http://www.naturalengland.org.uk/Images/monitor-evaluation-framework_tcm6-33143.pdf

¹² <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/funding/nia/evaluationprotocols.aspx>

¹³ <http://nia.naturalengland.org.uk/>

Support for use of the data-capture system	23	Project team provided support to users (15 October–31 December 2012).
--	----	---

5 Conclusions

5.1 Key points

Key challenges and issues faced in phase 1 that will continue to be relevant to phase 2 are:

- Achieving a balance between the need for consistent use of some indicators by all NIA partnerships to allow for comparison and aggregation, and the need for flexibility to reflect local needs and priorities.
- Ensuring compatibility between existing monitoring and evaluation methodologies, initiatives and schemes that might be utilised to minimise reporting requirements and the wider monitoring and evaluation needs of NIA partnerships.
- Ensuring that the development of the monitoring and evaluation framework is in accord with the ongoing development of the wider NIA programme.
- Data availability and access.
- Ensuring that the framework is readily understood and has buy-in from all those who will use it or any evaluation arising from it.

5.2 Further work

5.2.1 Monitoring and evaluation framework

Suggestions for further work during phase 2 include:

- Supporting NIA partnerships, so that they follow the published framework and protocols and make best use of the data-capture system
- Using the Natural England Huddle for capturing feedback and sharing information
- Developing, testing, providing technical advice and supporting data access and analysis for indicators and associated protocols (working closely with NIA partnerships, Natural England experts and the Project Steering Group; sharing experience between NIAs and accommodating local approaches already taken for optional indicators) with regard to:
 - Habitat connectivity (including identification of GIS data needs, platforms and licence issues)
 - Supporting and regulatory ecosystem services
 - Social and economic outcomes and impacts associated with NIAs
- Using NIA partnerships online reporting to help analyse and evaluate the outcomes and impacts of NIAs individually and as a whole
- Making links and sharing information with other research initiatives of relevance to NIAs.

5.2.2 Data-capture system and online reporting

NIA partnerships report that they have found the data-capture system fairly straightforward to use. Suggested amendments that would make it more user-friendly and logical or would improve functionality are as follows:

5.2.2.1 Online demonstration

- Creating an online demonstration version of the system that takes users through the full process step-by-step.

5.2.2.2 Creating a project profile

- Enabling users to deselect or edit entries whilst completing their project profiles. Editing may be a particular issue for optional local indicators, where users may want to edit typos or tweak wording
- Maintaining ticks alongside selected indicators during completion of project profiles, so that the user can revisit the themes and subthemes with a clear visual prompt that shows what they have already selected
- Providing a final option for users to edit at the 'Review your profile' page, once the profile is complete, prior to proceeding with submission
- Making each page more individually distinctive to aid orientation through use of colour, photographs, bold headings etc. This could include each theme selection and sub-theme selection having a different appearance.

5.2.2.3 Data entry

- Providing the full list of habitats rather than a fuzzy search for users choosing features under the habitat theme
- An ability for users to be able to edit features once they have been chosen and making it impossible for users to enter a blank feature
- Providing guidance text to make clearer that for BARS-related indicators, users will need to enter each feature three times in order to report actions planned, underway and completed

- Providing links from each indicator entry screen to the relevant protocol
- Providing guidance text for entering caveats and narrative.

5.2.2.4 Reporting

- Developing automated data import/export between the NIA reporting solution and:
 - BARS, as relevant to the five 'habitat-based indicators' where fields have already been aligned with BARS
 - The Conservation Management System (CMS)¹⁴, which is software already employed by a number of NIA partnerships
- Ricardo-AEA cannot predict what this will entail, as it will be determined by what developments BARS prioritises and by a detailed review of CMS
- Developing automated generation of time-series project reports and NIA national reports in the form of data grids, charts and graphs (type to be pre-set by indicator). These could include the following options:
 - Individual indicators for individual projects
 - All indicators for one NIA on one summary screen
 - Individual indicators for all NIAs on one summary screen
- Enabling download of project reports and an NIA national report that collate all information on the system in a standard user-friendly format, with or without time-series data presented as charts and graphs, in a pdf.

¹⁴ <http://www.software4conservation.com/>

References to published material

9. This section should be used to record links (hypertext links where possible) or references to other published material generated by, or relating to this project.

Nature Improvement Areas monitoring and evaluation framework

http://www.naturalengland.org.uk/Images/monitor-evaluation-framework_tcm6-33143.pdf

Nature Improvement Areas monitoring and evaluation protocols

<http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/funding/nia/evaluationprotocols.aspx>

Nature Improvement Areas data-capture system and online reporting <http://nia.naturalengland.org.uk/>