

## SBIF Review summary

### Background

The Scottish Biodiversity Information Forum (SBIF) was formed in 2010 following a petition to the Scottish Government to establish integrated local and national structures for collecting, analysing and sharing biological data to inform decision making processes to benefit biodiversity. The objectives set out for SBIF were to review the role, funding and coverage of local record centres (LRCs now called Local Environmental Records Centres (LERCs)) and other local options for biological data management across Scotland as part of the process to ensure that the necessary structures are in place to collect and disseminate biological information across Scotland. While the remit and focus of SBIF is on Scotland the majority of the issues and challenges and proposed solutions are valid for the other countries of the UK. Furthermore, solutions at a UK wide scale may be more appropriate/cost effective than for Scotland alone.

SBIF identified six key issues facing the biological recording infrastructure in Scotland:

- The current system is complex, has low resilience and faces severe funding challenges
- There is an acknowledged lack of easy access to data
- Open Data principles challenge the business models of many involved
- There is a patchy provision or duplication of services
- There is a lack of alignment and degree of challenge between and within sectors and organisations
- There is a lack of certainty, direction and action on localising, nationalising or centralising services

The remit of the group was to:

*“undertake a review of the biological recording infrastructure in Scotland in order to:*

- a) Identify any improvements needed for the infrastructure to be suitable, sustainable and successful, and*
- b) Set out any transition arrangements necessary to achieve this.”*

It also presented a timely opportunity to review the digital infrastructure and ensure that the new technologies for recording, managing, sharing, analysing and using data are being used as appropriate.

### Review Process

To understand how the biological recording infrastructure is currently operating and to seek ideas for improvements stakeholder engagement consisted of three methods:

1. Questionnaire
2. Interviews
3. Workshops

### Questionnaire

The purpose of the questionnaire was to gather stakeholders’ perspectives about what is working well and less well within the biological recording infrastructure and garner ideas for potential improvements to the system. The questionnaire was open to all involved in biological recording and data use in all countries of the UK. Invitations to complete the questionnaire were also sent to key stakeholders and all major interested audiences. The questionnaire covered seven main topic areas:

- the current situation
- ideas and priorities for change
- data flow mechanisms and interactions

- service provision
- funding and facilitation
- Open data
- Motivation and morale

as well as recording the profile for all respondents (e.g. their involvement with biological recording, which sector they belonged to, where they were based etc.)

### Interviews

The SBIF review working group identified 40 key individuals across the sector who were selected for one-to-one interviews. The interviews were asked four main questions;

- What is your role/involvement with the biodiversity sector/data?
- What are your ways of working?
- What problems/issues do you have?
- What is your vision of the future?

### Workshops

The aims of the workshops were to identify and evaluate options to co-create a design for an improved infrastructure for biological recording in Scotland. There were four workshops, each with a different focus and every subsequent workshop built on the outcomes of the previous one(s).

#### *Workshop 1 – Data flow options*

This workshop aimed to understand how technology could facilitate changes in improving data flow from data recorder to data user. The common tools, platforms, processes and user experiences required for effective data flow and areas of duplication or inefficiencies were identified. The attendees compared the effort and value of providing each common element in every possible way in order to produce a preferred data flow model.

#### *Workshop 2 – Service provision options*

This workshop aimed to identify the added value services (e.g. data searches and interpretation for planning applications, statutory reporting etc.) users of biodiversity data required, and, to identify which level (local, regional, national or central) provided the most effective service delivery mechanisms for each broad type of service.

#### *Workshop 3 – Governance options*

This workshop aimed to identify the type and number of people, groups or organisations required to facilitate the preferred data flow and service provision models produced in workshops one and two. Different organisational structures were evaluated and a preferred option for effective organisation and governance of the biological recording infrastructure was agreed upon.

#### *Workshop 4 – Funding options*

This workshop aimed to identify and/or design the sustainable funding mechanisms that would support the preferred data flow, service provision and governance options produced by the previous three workshops.

### **Outcomes**

A brief summary of the outcomes of the stakeholder engagement stage of the review is given here. For more details please see the SBIF Review section of the NBN website <https://nbn.org.uk/about-us/where-we-are/in-scotland/the-sbif-review/>

### Questionnaire and interviews

A total of 290 respondents completed the questionnaire, 209 (72.1%) were from Scotland, 56 (19.3%) from England, 11 (3.8%) from Wales, 6 (2.1%) from Northern Ireland and 1 (0.3%) from a UK Overseas Territory.

Respondents could associate themselves with more than one role (e.g. recorder, verifier, service user, funder etc.). The majority of respondents identified themselves as recorders (242, 83.4%) and just under half as data users (143, 49.3%).

An overall theme from the questionnaires and the interviews was that the current infrastructure was not fit for purpose and that changes were needed. Some of the main issues that were drawn out from the questionnaires and the interviews were:

- Open Data – two thirds of service providers who responded were unhappy at the growing momentum towards open data as it is perceived that it will have a negative impact on their business models
- Training, LERC services, nation schemes and online recording were thought to be working well
- Access to resources, access to data, data submission and verification were identified as working less well

### Workshops

The main outcomes from the workshops were as follows:

1. Data flows (see appendix A for proposed data flow model)
  - a) There is a need for definitive, centralised, data flows. Currently there are a myriad of systems to use to submit data, as such it is difficult to know exactly what data are available and where it is held.
  - b) Early aggregation of data is needed
  - c) Automated verification should be developed further and implemented where appropriate
  - d) There needs to be improvements to the feedback mechanism to recorders
2. Service provision (see appendix B for proposed service provision model)
  - a) Where possible services should be provided at a regional level, not a local level, in order to avoid duplication and increase cost effectiveness. This is with the recognition that there are many services which would still be provided at a local level e.g. support for recorders, local knowledge for interpretation of some data requests etc.
  - b) There should be at least a minimum online presence to enable access to all services
  - c) Planning screening should be automated where appropriate
3. Governance (see appendix C for proposed governance structure)
  - a) A new organisation, or expansion of an existing organisation, is needed to provide governance and standardisation
  - b) 'Super partners' e.g. national schemes and societies, museum and garden collections, invasive non-native species monitors, State of Nature collaboration, are of huge value to the overall biodiversity infrastructure
  - c) A revolution in how the infrastructure is organised is essential, evolution is insufficient
  - d) There is collective belief in the vision of the new structure
4. Funding (see appendix D for proposed funding model)
  - a) Cross sector collaboration is essential to removing competition of funds and creating efficiencies through cost sharing

- b) The level of investment must be sufficient to make change worthwhile
- c) The preferred infrastructure model included centralised (UK wide), nationalised (Scotland) and regionalised (4 regions suggested for Scotland) services
- d) It has been estimated that funding of approximately £3 million for Scotland alone or £13 million, to implement the preferred model across the UK, is required

Discussions following the workshops identified a hypothecated tax e.g. from the current Landfill Tax or the Climate Change Levy, would be the preferred option for funding the biodiversity infrastructure.

The benefits from the proposed restructuring of the biological recording infrastructure include:

- Significant synergies from pooled resources
- Definitive, agreed and championed data flow for all biodiversity data
- Automation removes the need for some manual tasks, allowing staff to be re-deployed to other tasks e.g. taxonomic expertise and support, increased support for recorders etc.
- Secured funding would enable greater levels of Open Data, which in turn would provide greater efficiencies and greater insight
- Stronger relationships with 'super partners'
- Opens up access to academic and commercial data

### **Next Steps**

1. Complete the review stage, produce a business case for the recommended options by 31<sup>st</sup> March 2018. This would include:
  - a) The desired changes – funding/staffing/governance
  - b) Proposing an effective transition phase
  - c) The anticipated level of return of investment, placing a value on the benefits so that the costs are justified
2. An advocacy stage – 2018/19 - priming the Scottish, and potentially other devolved, governments and receiving a decision
3. Implementation phase – planning to start in 2019/20