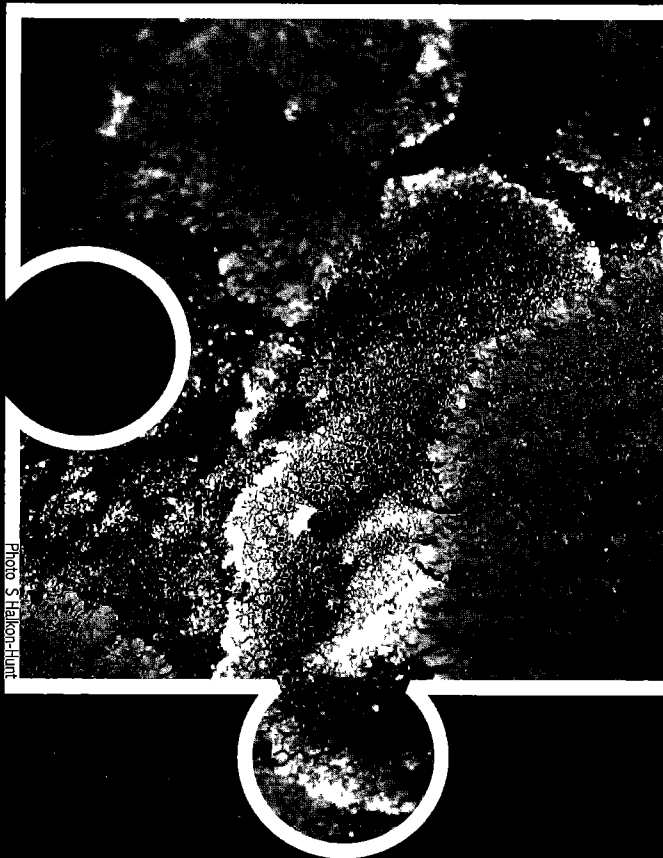


**A Proposal for an
Accreditation System
for Local Record Centres**





A Proposal for an Accreditation System for Local Record Centres

The National Biodiversity Network (NBN) is a partnership of local and national custodians of wildlife information providing access to all within a framework of standards.

This report was prepared as a contribution to the development of the NBN as part of the NBN's Linking Local Record Centres (LRCs) Project. The Wildlife Trusts are leading the Linking LRCs on behalf of the NBN. This project is funded by Countryside Council for Wales; English Nature; Scottish Natural Heritage; The Esmeé Fairbairn Charitable Trust and The Wildlife Trusts.

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During the development of these proposals a series of three workshops were held to gather ideas and provoke discussions. Our thanks go to all those who participated in these workshops and to all those who responded to various consultation papers and helped shape this work. Particular thanks also go to Oliver Grafton (NBN Trust) and Liz Halliwell for helping run the workshops and steer the direction of this work.

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*Sara Hawkswell
The Wildlife Trust
June 2001*

Introduction

This proposal for an Accreditation System for Local Record Centres has been prepared as part of the NBN's Linking LRCs Project. It works from the assumption that the need for accreditation is driven by:

- the NBN to encourage take up of standards and indicate the quality of data and services available from these data custodians
- the LRCs to provide an externally verified statement of the quality of their work and thereby increase the confidence of users and data suppliers
- users and suppliers to provide assurance of the level of service and effective implementation of policies and procedures and, where appropriate, provide comparability between use

The system proposed, therefore, sets out to meet this range of needs within a framework that might be applied, at some level to other data custodians working within the NBN.

The proposal includes background to the need for an accreditation system, consideration of different options and proposes a mechanism for managing and delivering the accreditation system. A draft accreditation workbook illustrates how practically the required standards could be promoted to LRCs (along with other guidance). This is on the coloured pages at the back of this report.

I believe that this proposal is a well considered, practical approach to LRC accreditation designed to meet the needs described above. It could also form the basis for a wider NBN accreditation system. I therefore recommend this report to both the NBN Trustees and to the NBN's Access and Accreditation Steering Committee for further consideration, development and implementation.

I would also recommend this proposal to the management board (or equivalent) of all LRCs. However this is taken forward by the NBN Trust it provides a valuable framework for LRC development and implementing NBN guidelines.

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Proposal for an Accreditation System for Local Record Centres

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1. Summary

Accreditation of LRCs will be one strand within a larger NBN Quality and Accreditation Framework. For various reasons the LRC Accreditation Scheme is being developed in advance of the main framework and is therefore likely to pilot thinking for the whole framework.

The proposal made here is for a simple 'kite mark' scheme which recognises three levels of accreditation. The first is Provisional Registration, a 'working towards' or 'commitment' level appropriate to newly registering and developing LRCs. The second is Full Accreditation for LRCs meeting the benchmarks for chosen standards and the third is Full NBN Node for those accredited LRCs able to integrate fully with the NBN Gateway.

The Accreditation award mechanism proposed draws on a generalised accreditation model adopted by influential national standards such as Investors in People (IiP). This model links an assessment system which includes assessors and verifiers to a sponsoring organisation, an awarding body and external verifiers.

In the case of LRCs, the NBN Trust will be the sponsoring organisation whilst the awarding body would be an Accreditation Committee composed of NBN Trust representatives and representatives of the various accreditation strands (types of organisation) including LRC professionals. The NBN Accreditation Officer will provide the secretariat for the scheme and act as a link between the assessment system and the awarding body. The Accreditation Officer will act as the external verifier for award recommendations, which would be ratified by the Accreditation Committee.

The assessment system will involve LRCs in self-assessment using a workbook approach. The workbook will be a guide to the benchmark standards required for accreditation with boxes to be filled in or ticked that summarise the LRC's methods for complying with standards. The LRC should not have to compile a large portfolio of evidence and the amount of paper involved in the accreditation application should be kept to a minimum. The LRC would still have to have copies of policies and other evidence available for inspection, if required, although the focus of accreditation will be on the outcomes of these policies and standards. The scope of LRC activities and products that will be included in the accreditation scheme will need to strike a balance between NBN national requirements and LRC local factors.

It is proposed that registering LRCs are linked to a mentor who will act as a guide for developing centres and as an objective 'critical friend' for established ones. When LRCs, in discussion with their mentors, believe they have achieved the required benchmarks and standards an independent assessor will visit to verify the application through interview and checks against workbook entries. The assessor will be the person who makes the recommendation for the award to the NBN Accreditation Officer. Their decision will be moderated by the LRC's mentor and ratified by the NBN Accreditation Committee.

The key to success of the system will be the recruitment and training of a network of skilled individuals willing to act as mentors and assessors. It might be appropriate to organise networks on a regional basis although the low number of suitably qualified record management professionals could be problematic in the early stages.

The costs of running the accreditation system will need to be born both by the NBN and participating organisations. It is proposed that LRCs will pay an initial accreditation registration fee and meet the expenses of the mentor and the visiting assessor. Accredited LRCs will also pay an annual registration fee to maintain the award and undergo re-assessment, probably on a three year cycle. Efforts should be made to identify a source of sponsorship or grant aid to defray accreditation costs.

2. Introduction

The process of developing operational standards for data centres is a long-term and evolving one. Provisional standards are becoming available through various NBN projects and these provide some basis for the development of an accreditation scheme. The task of identifying quantifiable measures that can be used for benchmarking and monitoring of performance is a sensitive one that will need to be handled with diplomacy. If the history of the introduction of benchmarking and performance indicators in education is anything to go by, we must be prepared to adapt the accreditation system with time and experience.

It is essential to be clear about the purpose of accreditation and how LRCs are to benefit from it. It will be a long time before there is anything approaching full UK coverage by accredited local and national data centres. In the interim there will continue to be a great variety of local arrangements and range of service provision. The system we set up must, therefore, allow for this diversity but encourage centres to work towards and adopt national standards.

The Accreditation model for LRCs needs to be designed specifically to match their needs and may differ in detail for national and local data centres. There are undoubted differences in requirement between the NBN national perspective and the pressure for LRCs to meet the needs of their local partners and users. This will affect the actual content of the accreditation assessment.

The mechanism for assessment and awarding of accreditation must be simple but credible. It will be necessary to establish who will be the arbiters of accreditation and demonstrate both their qualification and accountability. Where possible the system should reflect the experience of other national standards and quality systems.

3. The Purpose of Accreditation

Accreditation and the NBN

The NBN Trust is not a professional association and currently lacks the staff to support professional qualifications or accreditation of organisations in the manner that the Museums Association and the CMLA¹ do for museums. The NBN will, however, be the sponsor of LRC accreditation and the system will have to take account of both NBN requirements and the support capability of the NBN. It will not be possible to support an over-elaborate system. The Accreditation of LRCs will be one strand within an overall NBN Quality Framework, which will extend to national recording schemes, national data centres, NBN partners and the operation of the NBN itself. The LRC Accreditation Scheme must be consistent with the overall framework.

It is natural that the NBN will be most interested in accrediting activities which are central to its vision but it must not lose sight of the fact that the pressure on LRCs is to deliver products principally of value to local users.

NBN's requirements include

- A system that is easy to manage
- A minimum of staff involvement – for instance, it is unlikely that NBN could employ full-time assessors. It is more likely to rely on LRC self-assessment and peer group moderation.
- A system that contributes to the aims of the NBN e.g. in mobilising wildlife data on a national scale
- A quality standard that ensures participating nodes provide a comparable high level of data quality

Benefits of LRC Accreditation to the NBN

- To encourage the take up of standards
- Provides an indication of the scope and quality of data and services of participating centres.
- Increases confidence in the NBN
- Fosters a greater awareness of the NBN and the national overview amongst LRCs

LRCs and Accreditation

After more than 20 years of concerted effort the LRC movement is still fragile. There is still no formal career structure for LRC staff and managers. There are no recognised qualifications in environmental record management. There is no professional association representing LRC staff or regulating the profession. It is only now that legislators are beginning to recognise the necessity for the provision of reliable wildlife data in support of planning control and conservation. Even so, the new Countryside and Rights of Way Act (2000) still falls short of making LRCs a statutory requirement. Few existing LRCs are financially secure. There are, therefore, a number of key elements missing that would make it easier to create a credible accreditation system.

To ensure involvement of LRCs and advance the take up of accreditation it will be necessary to be clear both about the purpose of accreditation and its benefits. In

¹ Council for Museums, Libraries and Archives formerly the Museum and Galleries Commission (MGC)

particular we must be able to demonstrate that the benefits will justify the investment of time and expense necessary to prepare for and undergo the accreditation process.

LRC Requirements

Typically, LRCs do not have the staff or the financial resources to undertake arduous, expensive or time-consuming activities that divert them from essential work. The accreditation process must, therefore, become integral to the work of the LRC, both supporting that work and supporting long-term improvement. Their principal needs include:

- A simple process with clear targets.
- Good documentation relating to the Accreditation Standard and how to achieve it.
- Good support to help take them through the preparation process.
- The process of preparing for accreditation must contribute to the work of the LRC.
- Low in cost, not requiring the participation of expensive accreditation consultants. Centres should be able to undertake the development and preparation work themselves perhaps aided by a mentor from the LRC peer group.
- Real value - a demonstrable advantage for LRCs that are accredited.
- Accreditation must add to the professional standing of LRCs and their staff.

Benefits of Accreditation to LRCs

- Promotes confidence amongst both data providers and users that records are valid and well managed
- Provides justification to host and partner organisations that their investment is well placed
- Professional recognition; both peer recognition and as a means to participating in the NBN
- May be helpful in obtaining funding from grant sources². Sources might include HLF, EN or funds channelled through NBN.
- Development work towards accreditation provides an element of training for LRC staff
- Maintaining quality by regular reassessment
- Working towards accreditation provides a guide for improvement.

Users and Data Suppliers

Benefits of LRC Accreditation to Users

- Comparability for customers – they have some indication that data and services provided are comparable between centres
- Provides an assurance of a quality service backed by clear policies and procedures
- Users will be more likely to trust data provided by an accredited centre that is able to supply clear metadata and can demonstrate effective quality control standards
- Funding partners have an external assessment of LRC quality. This can be particularly important where an organisation is funding more than one LRC.

Benefits of LRC Accreditation to Data Providers

- Reassurance that their data will be properly managed and their interests protected

² Some sources such as HLF or EN could eventually make accreditation a prerequisite for some types of funding.

4. The NBN Quality Framework

The accreditation of LRCs must be set within an overall Accreditation Framework for the NBN. The framework must be flexible enough to cover the needs of LRCs, National Schemes and Societies, National data centres and the NBN Trust. Accreditation needs to be part of a larger Quality System that will include reference to other existing excellence standards where applicable. The most appropriate external standards are the Business Excellence Model, Investors in People and National Vocational Qualifications. Elements of the ISO 9000/9001 Quality Assurance Standards may also be applicable.

The LRC Accreditation Project has started in advance of progress in the overall NBN Accreditation Framework and will probably be influential in the development of that framework. An NBN Accreditation and Access Officer has been appointed and that role will be central to managing and coordinating the Accreditation Scheme, once developed.

LRC Accreditation within an NBN Quality System

The NBN will be supporting LRC accreditation in many ways. LRC practitioners in association with the NBN Trust will be setting the standards by which LRC activities will be benchmarked. The NBN partners have already sponsored the development of essential data standards and through the work of the Linking LRCs Project is close to delivering new supporting products including a handbook for LRC management ('Running an LRC'). These developments will serve to create a context within which the accreditation system can operate.

The NBN Quality System for LRCs includes the following elements, some of which are already in place or under active development:

Enabling Products

- Published (revised) guidelines e.g. handbooks on establishing LRCs and best practice in running LRCs
- NBN data standards (NBN Data Model, dictionaries & Data Transfer standard)
- Recorder 2000
- Lists of recording schemes and taxonomic referees
- Database of LRCs including geographic coverage
- NBN Index of data holdings
- Guides and assistance for obtaining grants and funding

Influencing LRC Activities

- Pilot LRC projects
- Models for policies
- Standard or model SLAs³ used by NBN national partners to cover relationships with LRCs (e.g. EN funding of LRCs)
- Model SLAs for local use (e.g. between the LRC and local authorities or LRC and data suppliers)
- Principles for Data Exchange

³ Service Level Agreements

Accreditation

- Sponsoring and supporting the LRC accreditation system
- Maintaining a list of provisional and fully accredited LRCs, schemes and data centres.
- Support of self evaluation with Accreditation workbook and supporting examples of best practice
- Help with linking developing LRCs to mentors providing peer support and guidance
- Assessment and validation of applications through peer review and accreditation committee.

5. Accreditation of LRCs

Accreditation Models

The LRC accreditation scheme must follow the needs and interests of the various parties (LRCs, users and suppliers, NBN) and take into account the resources available for managing and taking part in the system. Accreditation must be an inclusive and encouraging process. An elitist or exclusive system would defeat the aims of the NBN

A number of models for accreditation have been reviewed in the process of developing the current proposals. Details of some of these schemes are provided in Annex 1. It is clear that the system should not seek to duplicate or replace any existing national standards such as the ISO Quality Standards, IiP, BEM or NVQs. The NBN system may, however, incorporate aspects of these standards where they are relevant to NBN aims and LRC needs. The BRISC and Museums Registration Systems also provide valuable models to work from.

There is still need for debate on the emphasis of the NBN Accreditation Scheme. To date there has been a difference of opinion in how far the system should concentrate on management and how much on product. It also needs to be established whether the system follows an ongoing improvement model or follows a 'kite mark' pass or fail model.

The outcome of the debate so far has identified the following characteristics;

- The overall framework of the NBN Quality System should be in line with the Business Excellence Model
- The accreditation mechanism should be accountable and clearly moderated in line with other well-established accreditation schemes such as IiP.
- The LRC Accreditation Scheme should not have numerous tiers of accreditation but be restricted to two basic classes of 'working towards' and 'fully accredited'. A further level of fully integrated NBN node might be applicable.
- Accreditation will be a kite mark award, although to achieve it LRCs will have to demonstrate business and development plans that include a commitment to maintaining or improving standards.
- The accumulation of large portfolios of evidence is not required although a work book approach is likely to be the best format to aid self-assessment.
- Assessment forms and associated documentation should, where possible, be jargon free.
- The award will be assessed and externally validated through a peer network of mentors and assessors-. Assessors will need to be trained and work to recognised standards.
- The award will be ratified by an NBN Accreditation Committee whose membership should include LRC professionals and NBN Trust representatives
- Reassessment – Accreditation should be periodically reassessed to respond to changes in the LRC. The accreditation cycle is best linked to the likely periodicity of funding arrangements e.g. to fit in with three Service Level Agreements.
- Continual improvement should be part of the business ethic of LRCs but not part of the accreditation system

- Accreditation will refer to national standards such as NBN technical standards (data model, exchange format, dictionaries etc.).
- For LRCs, local standards will be relevant to the delivery of products. Local partners might well wish to see the range of data holdings and products as part of accreditation. Nationally the range of LRC products may not be important – known quality and availability are more relevant.
- Ability to demonstrate potential continuity of service is an important prerequisite of accreditation

Proposed Accreditation Framework

Based on the above factors and the requirements listed in section 3, the following accreditation model is proposed.

The Accreditation Framework will be based on a combination of self-assessment, independent verification and external ratification. It is likely that the proposed framework could be applied throughout the NBN although the concept will need to be tested with different types of organisation. The framework as it would be applied to an LRC accreditation system is described below.

LRCs will use a workbook to record evidence of compliance with NBN standards and other benchmarks. They will be assisted in this by a mentor who will probably be another LRC professional or advisor with appropriate expertise. Some LRCs (e.g. newly established ones) might need considerable assistance whereas long-established ones might need only one or two visits. It is seen as important that all LRCs applying for accreditation have a mentor to ensure objectivity in completing the workbook and also to act as a 'critical friend'. The mentor will also act as a moderator in the external assessment.

The LRC's self-assessment will be checked and validated by an independent assessor taken from the same network of LRC professionals as the mentor. It will be important to establish this network early and to ensure that assessors and mentors receive appropriate training (e.g. as NVQ units⁴). In similar accreditation systems such as Investors in People (IiP) applicant organisations previously had to compile large portfolios of evidence which were submitted to the awarding body. As these systems have matured it has been found that the portfolio approach creates work and provides nothing that cannot be elucidated by a skilled assessor through interviews and simple forms. The role of the assessor (or verifier) has therefore become very important and relies on a high level of skill.

The independent assessor (or Internal Verifier in the jargon) will report to the Accreditation Officer who will validate the submission (acting as External Verifiers in the jargon) and who will submit the recommendation (supported by the workbook) to the NBN Accreditation Committee who will ratify the award.

Like other accreditation schemes the award should be time limited. It is proposed that participating LRCs should make a basic annual return to NBN to update the register and notify of any material changes. Re-registration should take place at regular intervals e.g. within three to five years and LRCs should agree to allow visits from an external verifier (e.g. the NBN Accreditation Officer) if requested.

⁴ Typical NVQ units relevant to assessors include D32 – Observation, D33 – Diverse evidence, D34 – Internal Verifier, D35 – External Verifier. Other LRC specific NVQs could be developed in association with the National Training Organisation.

The model is summarised in Table 1 and Figure 1 below:

Table 1: Roles within the proposed LRC accreditation System

Entity	Role
NBN	In the context of accreditation the NBN is the sponsoring organisation for the award. It is not, however, the professional association for LRCs.
NBN Accreditation Committee	The Accreditation Committee is the awarding body. The Committee will be made up of representatives of the NBN Trust and the Records Management Community chosen for their recognised expertise. The Accreditation Committee, which will receive the recommendations of the independent assessors via the Accreditation Officer, will consider the evidence and ratify or defer the award as appropriate.
NBN Accreditation Officer [External Verifier]	The Accreditation Officer (AO) will provide the secretariat for the accreditation system. The AO will maintain a database of provisional and fully accredited LRCs. Provide workbooks and guidance to LRCs and help them find a suitable mentor to take them through the accreditation process. The AO will deal with the necessary paperwork and take cases to committee for ratification.
Independent Mentor	LRCs will be linked to a mentor drawn from a network of mentor/assessors, perhaps organised on a regional basis. The mentor can act as both guide and 'critical friend' to the LRC depending on need.
Independent Assessor [Internal Verifier]	The assessor will be drawn from the network of mentor/assessors and their role will be to interview staff, partners and users of the LRC to verify the workbook information and establish that the LRC meets the standards required for accreditation.
LRC	The LRC uses a workbook to guide it through the process of development or checking that it meets the required standards in all areas.

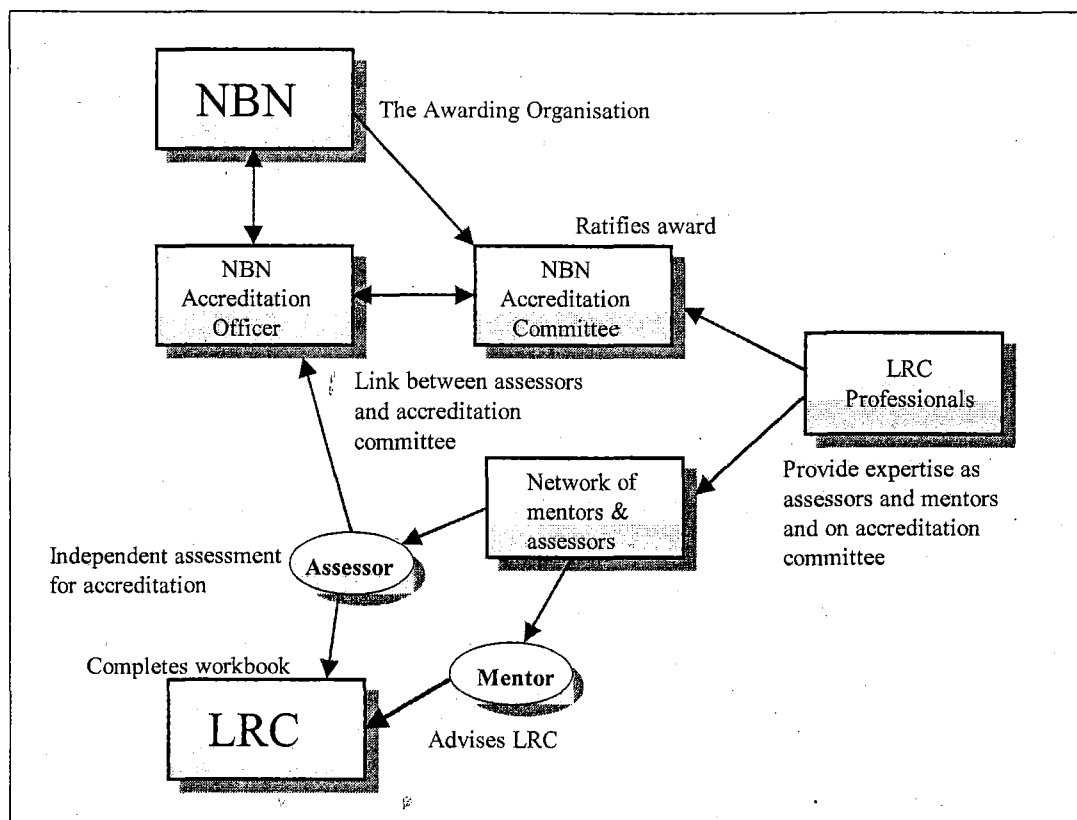


Figure 1: Outline of Proposed LRC Accreditation System

Proposed LRC Accreditation Levels

The system of tiered accreditation that has been proposed for BRISC⁵ was examined and thought not to be appropriate for a national kite mark system. Users, in particular, are only interested in whether the products they want meet an acceptable standard. Data providers are concerned that data are well managed in an ethical way. Therefore, the proposed accreditation system for LRCs (and other similar NBN schemes) includes two basic levels of accreditation plus a third award of full NBN node open to fully accredited LRCs.

These are:

1. **Provisional Accreditation (Commitment Level):** Provisional accreditation equivalent to a base level of commitment to NBN principles and standards applicable to new and developing LRCs. Applicant LRCs must have or be working on development and business plans. This would make them eligible for development grants from NBN partners or possibly HLF.
2. **Full Accreditation:** An LRC addressing local issues⁶ and general national issues. Essentially this is a level that guarantees a professional service with known quality data.

⁵ Biological Recording in Scotland

⁶ A list of issues is given in Annex 3

3. **Full NBN Node:** an accredited LRC fully integrated into the NBN Gateway and able to participate as an internet linked node in the NBN. (Meets all issues listed above).

Management of the Accreditation Framework

The NBN Accreditation committee will be the awarding body for accreditation although the work of assessment will essentially be done within the ranks of the LRC 'profession' both by self-assessment and independent verification. The process will be facilitated by the NBN in the various manners discussed in section 4 and some of the necessary building blocks are already in place.

The NBN has appointed an Accreditation and Access Officer who will be the key link between the various parts of the accreditation system. His work should include facilitating the establishment of the national network of mentors and assessors drawn from the profession. The Accreditation Officer would therefore also need to be involved in organising training and development of training materials both for LRCs and for mentors and assessors. The Accreditation Officer will act as the external verifier for accreditation and advise the Accreditation Committee who will ratify accreditation as recommended by the assessor network. Provision will also need to be made for moderating the accreditation system including a mechanism for appeal in the case of dispute.

The situation might arise where the Accreditation Committee feels that there is some aspect of the LRC application that does not meet the standard for accreditation. In this situation the award might be deferred and the LRC invited to address the issue and reapply within a given time limit. In the case of dispute the case should be submitted to a separately convened appeals committee. Deferral will need to be handled sensitively and confidentially, as the purpose of the accreditation is to encourage the take up of standards and a culture of continual improvement. Any applicant LRC (or other organisation within the overall framework) stigmatised as failing will not be encouraged to participate further and any unresolved dispute could damage the credibility of the whole system.

Gathering of Evidence

LRCs will be involved in establishing policies, procedures, business and development plans in the normal course of their work. Effective LRCs will have mechanisms in place for consulting with their suppliers and users and will invest in staff training. In particular the accreditation system will be more interested in outcomes rather than the methods (providing they are ethical!) and the evidence gathering should concentrate on outcomes. This means that the accumulation of a huge portfolio of copies of policies and procedure manuals is not an appropriate format for assessment.

The accreditation system should not detract from the essential work of the LRC but should draw upon it. Accreditation assessment should be regarded as part of the development and improvement process and not something later and separate from it.

It is proposed that the best way to achieve this is through a process of self-assessment verified by a skilled independent assessor. The LRC can be helped through the process of self-assessment through the use of a workbook which would include guidance notes together with tick or comment boxes for briefly recording what procedures are in place and how issues are managed. The workbook will act as a guide to ensure that LRCs are addressing all aspects of their activities covered by accreditation.

It can be difficult for any organisation to be fully objective about its own activities and some newly established or developing LRCs may need some help to take them through the development required to achieve accreditation. For these reasons, it is suggested that each LRC be linked to an independent mentor from the LRC peer group who can act as guide and 'critical friend'. The questions and prompting of the mentor would form a valuable part of the evidence gathering process as they help the LRC in their self-assessment

When an LRC, with the backing of their mentor, feel that they meet all the required standards this will be assessed and verified by an independent assessor also from the LRC peer group. The aim of assessment will remain as keeping paperwork to a minimum and therefore the skill of the assessor will be critical in elucidating that the LRC does indeed fulfil the requirements of accreditation. The verifier will focus on outcomes by interviewing staff and users and checking that products do meet requirements and that policies are understood and followed. The verifier's report will be the key evidence along with the workbook that will be submitted to the Accreditation Committee for ratification.

The Cost of Accreditation

It is unlikely that funds will be available to maintain a complex or costly system of accreditation but there will be significant costs involved whichever model is chosen. Cost centres include; salary of the Accreditation Officer, Accreditation Committee expenses (where concerned with LRCs), costs of writing and distributing guides and work books, expenses of mentors and assessors, costs of attending training courses and the actual time and staff costs for LRCs to participate in the scheme. To achieve accreditation LRCs may have to invest in a wide number of areas of operation including equipment and training.

Some of the above costs may be met from NBN funds especially where they affect the whole NBN Quality Framework, others will need to be met by LRCs. LRCs may, however, be able to apply for grant aid (if a sponsor can be found) to support these costs. If enough LRCs are to participate, then obtaining sponsorship for the accreditation system should be high on the NBN agenda.

The most likely costs to LRCs will be:

- Application fee for initial registration (Includes provision of work book and guides)
- Expenses of the mentor (who most likely will be a professional from another LRC although some specialist consultants could also act as mentors)
- Expenses of the assessor who will verify the LRCs self-assessment
- An Annual registration fee to remain on the register and receive NBN services (e.g. access to training courses, advice etc.)
- Involvement in other supporting Quality Systems e.g. obtaining NVQs
- Training costs

6. The Accreditation Process

The following table outlines the main features of the proposed accreditation system which would take LRCs through from their first contact with the Accreditation Officer to recognition as a full NBN node.

Table 2: An Outline of the Proposed Accreditation Process

Stage	Process	Documents
1. Preliminary Enquiry	<ul style="list-style-type: none"> LRC requests information booklet from NBN Accreditation Officer (AO) or through NBN website. 	Information booklet Web pages
2. Initial Application	<ul style="list-style-type: none"> LRC decides to commit to accreditation and obtains initial Registration forms Registration forms returned to AO with registration fee LRC is added to register of applicants and application is notified to Accreditation Committee LRC sent workbook and detailed guidelines 	Registration forms Detailed guidelines Accreditation workbook Register of applicants
3. Appoint Mentor	<ul style="list-style-type: none"> LRC liaises with AO over choice of mentor Mentor approached and if willing is appointed to LRC application 	List of available assessors and mentors
4. Prepare LRC Accreditation Action Plan	<ul style="list-style-type: none"> LRC meets with mentor and sets up action plan for accreditation 	LRC Accreditation Action Plan
5. Apply for Provisional Accreditation	<ul style="list-style-type: none"> LRC makes formal commitment to NBN principles and standards LRC submits initial evidence, business and action plans to assessor Assessor confirms application AO forwards papers/recommendation to Accreditation Committee 	Provisional Accreditation Application LRC Business Plan LRC Accreditation Action Plan
6. Grant Provisional Accreditation	<ul style="list-style-type: none"> Accreditation Committee approve application and award status 	Register of Provisionally Accredited LRCs Award certificate
7. Development work for Full Accreditation	<ul style="list-style-type: none"> LRC addresses issues in Action Plan and gathers evidence. Record evidence in workbook Mentor involved as necessary and advises when application for full accreditation will be successful 	Accreditation workbook
8. Apply for Full Accreditation	<ul style="list-style-type: none"> LRC notifies AO that it wishes to be assessed for full accreditation 	Full Accreditation Application Accreditation workbook

9. Application Assessed	<ul style="list-style-type: none"> Independent Assessor approached and if willing is appointed to LRC application Assessor and Mentor visit LRC to confirm application External Assessor's recommendation forwarded to AO 	List of available assessors and mentors External assessor's Report
10. Application for Full Accreditation goes to Committee	<ul style="list-style-type: none"> AO verifies assessors report and other evidence AO forwards papers/recommendation to Accreditation Committee Committee consider application and recommendations 	Full Accreditation Application Accreditation workbook External Assessor's Report
11. Award Full Accreditation	<ul style="list-style-type: none"> Committee awards Full Accreditation Or if there is a problem Accreditation is deferred and LRC is notified of issues through AO. LRC can address issues in deferral notice within a given time limit and re-apply or has a right to appeal. 	Award Certificate Register of Accredited LRCs Deferral Notification
12. Appeal Process (if necessary)	<ul style="list-style-type: none"> LRC submits appeal to AO Accreditation Committee appoints an Appeal Panel (of LRC professionals and NBN Trust representatives) Application and appeal considered by Appeal Panel Result conveyed to Accreditation Committee and LRC 	Appeal Documents Appeal Panel Ruling
13. Annual Update	<ul style="list-style-type: none"> Each year: LRC pays NBN an Annual Registration Fee Sends a questionnaire return updating details of staff, services and any material changes LRC updates NBN Index with revised data holdings 	Annual update questionnaire Register of Accredited LRCs Database of LRCs NBN Index of data holdings
14. Re-registration	<ul style="list-style-type: none"> Every three (or possibly 5) years: LRC visited by external assessor to confirm LRC eligibility for maintaining registration Report to AO who passes recommendation to Accreditation Committee In cases where re-registration is not granted then LRC is informed and either invited to address issues or an appeal is initiated 	LRC Re-registration forms Re-registration or Deferral Certificates List of available assessors and mentors
15. Advancement to Full NBN Node	<ul style="list-style-type: none"> An accredited LRC may become registered as a full NBN Node if it can demonstrate that it has the technical and professional capacity to provide a fully integrated on-line link to the NBN Gateway. Application form sent to AO Assessor visits LRC and reports to AO AO reports to Accreditation Committee Accreditation committee ratify status 	List of available assessors and mentors Application Form Assessor's report Award certificate

7. NBN Accreditation Criteria

Accreditation will be judged on an assessment of how an organisation meets the requirements of a number of base-line criteria. It is proposed that a number of broad category base-line criteria are used, which are applicable throughout the NBN Accreditation Framework. Each criterion would be defined and may be subdivided into more detailed criteria. Within this framework each strand of Accreditation (e.g. LRCs, National Schemes and Societies etc.) would have its own detailed benchmarks and criteria suitable to their work and resources.

The ten first level criteria proposed for the accreditation framework are:

- 1. Eligibility**
- 2. Commitment**
- 3. Constitution**
- 4. Public benefit**
- 5. Resources**
- 6. Viability & sustainability**
- 7. Data collection & holdings**
- 8. Responsible handling of data**
- 9. Data management**
- 10. Products and services**

These are further described below. A full expansion of the criteria and the development of sub-criteria suitable for the accreditation of LRCs is given in the accompanying draft LRC Accreditation Workbook.

For LRCs it is proposed that the ten criteria are divided into two sections. The first four criteria above make up section one, which covers the base standard to achieve provisional accreditation. Section two covers the first four criteria plus criteria five to ten and includes extra levels of information that LRCs will need to supply to achieve full accreditation. Note that full accreditation requires the LRC to meet all 10 criteria and some further evidence may be required for criteria in section one. For instance, provisional accreditation is looking for a commitment to public benefit whereas for full accreditation the assessor will be looking at how this is achieved in practice. More details are given in the draft LRC workbook.

8. Details of Accreditation Criteria

1. Eligibility

1.1 Are you eligible?

To qualify for NBN accreditation organisations or individuals must demonstrate that they meet the definition for a particular accreditation strand (e.g. organisation type) within the NBN framework.

1.2 Legal compliance

The Accreditation process will not be a ratification of an organisation's standard business administration but accreditation will be predicated on the expectation that each applicant complies with all UK and EC legislation, codes, and regulations applicable to its facilities, operations, and administration.

2. Commitment

2.1 You support the seven NBN principles for biodiversity data exchange.

An organisation must be able to demonstrate that it has considered and has a formal commitment to the NBN principles for biodiversity data exchange.

2.2 Commitment to the Network

The accreditation scheme is sponsored and organised by the NBN Trust and therefore, participants should be able to demonstrate a commitment to the NBN and the principles that it represents. Accreditation to the NBN means a commitment to contributing to the flow and wider use of information outside of one's own parochial area.

3. Constitution

3.1 Clear Purpose

No organisation can be successful if it has no clear purpose on which to focus. This is normally concisely expressed in a mission or purpose statement.

3.2 Acceptable constitution

A constitution is a written document that covers the means and principles according to which an organisation is governed. The constitution may be a formal constitution (in the manner of a trust or society), a memorandum of agreement or other formal agreement which partners sign up to.

4. Public Benefit

4.1 Public Benefit

Implies that the organisation provides a service to society, beyond the promotion of its own self-interests or those of its immediate funding partners. Participation in the NBN and recognition of the seven NBN principles for biodiversity data exchange are primary evidence of a commitment to public benefit.

5. Resources

5.1 Adequate manpower

All organisations that collate or manage records of wildlife and their habitats with a view to providing a service to others should endeavour to have sufficient manpower to ensure the care of records and continuity of service.

5.2 Training

The provision of good quality biodiversity information relies on high levels of knowledge and skill. All organisations involved in the collection, management and

dissemination of biodiversity data should invest in ongoing training to ensure the continuous development and maintenance of their skill base

5.3 Equipment and materials

Organisations should be properly equipped to meet their stated missions.

6. Viability and Sustainability

6.1 Sustaining and developing the organisation

The objectives of the NBN include improving the quality of available biodiversity information and building a computerised network of data custodian 'nodes' that can be accessed through a national index and gateway. These objectives call upon participating organisations to seek ways in which to continually improve their data and find ways to ensure continuity of service. Measures to protect the viability and sustainability of an organisation are therefore essential criteria for accreditation

6.2 Planned approach to management

Organisations need to take a planned approach to management with documented systems for budgetary planning and control. Management systems must be in place to ensure quality of service and products. Development plans should set out clear targets with a mechanism for evaluating success.

7. Data Collection and Holdings

7.1 Strategic data collection

An organisation must have a clear and strategic view of what data it is collecting, what its holdings are, how it intends to maintain the acquisition of new data and fill the gaps.

8. Responsible Handling of Data

8.1 Ownership

An organisation must know the origin and ownership of the data it manages and supplies to others. The recording of metadata including ownership or source of data is an essential prerequisite of full accreditation.

8.2 Ethical management and supply of data

Organisations managing data on behalf of others have a duty to manage the data in a responsible way. This includes observing the copyright and intellectual property rights of data suppliers, observing requests for confidentiality, not derogating the data by altering it purposefully or accidentally in the management process and not selling the information on for personal or organisational gain without the permission of the supplier. The provision of data to others must be done responsibly, neither withholding data unnecessarily to disadvantage a user nor wantonly supplying information that could lead to the loss or destruction of sensitive species or habitats.

8.3 Confidentiality

Organisations should recognise the desirability of freedom of access to information but should also operate within the constraints of confidentiality and copyright that may be stipulated in data transfer agreements. Confidentiality may also need to be observed where the conservation of threatened species or habitats might be compromised.

9. Data Management

9.1 Data Standards

Data within the NBN must be accessible and transferable by electronic means. The movement and re-use of data can only be successful if the data conform with documented standards. Where possible organisations should conform or be compatible

with the NBN standard data model and use the NBN taxon, biotope and administrative area dictionaries.⁷ Where non-NBN-standard formats are used, these should be properly documented. Contributors to the NBN must observe the metadata standard.

9.2 Control of Data Quality

The credibility of the NBN is dependent on partners supplying data of known quality. Quality not only includes high standards of identification and validation but also procedures that ensure data are not derogated in any way through the management process.

9.3 Paper records and archives

The majority of field recording continues to use paper format either in notebooks or on recording cards. There is a vast archive of historical records which may never be computerised and also collections of record cards that remain the 'vouchers' for data entered into computer systems. Although paper records and archives cannot be accessed directly through the NBN computerised network (unless digitised) their care and security remains essential.

9.4 Computerised data management

The NBN functions through a computer network utilising an index and gateway system on the Internet. Contributing 'nodes' to the network must, therefore, endeavour to hold the bulk of data on a suitable computer database. Where databases that are not compliant with NBN standards are used, the structure of the database and meaning of attributes must be available.

9.5 Security

All data custodians have a duty to ensure the security and long term safety of the records in their care. Security includes protection from unauthorised access or editing, theft, physical damage through fire, flood, accident and neglect. Procedures must be in place to ensure the regular archiving of original material and the copying or backup of data. There must be a recovery plan in the event of loss of data.

10. Products and Services

10.1 Dissemination

Contributors to the NBN are committed to document their data holdings and make them available. The principle is that, where possible, the data or products derived from the data should be freely available to users, although a charge may be levied as a contribution towards data management and product development costs.

⁷ The NBN has not yet officially adopted a GIS standard or standards for digitised boundary data. Other dictionary standards may also be developed.

Annex 1 - Examples of Accreditation Systems

There are many available models for accreditation and standards systems that have elements of value to LRC accreditation. Existing systems include prescriptive models which lay out specific targets or levels of service to be achieved and essentially open-ended developmental models which put emphasis on the process of improvement. 'Kite-marking' systems are customer focused ensuring quality and reliability of products. Developmental systems are organisation focused and assume that product quality will arise from well-managed organisations.

Systems have different means of assessment. They may include either a single pass or fail level or be tiered to reflect either the diversity of participants or stages in a developmental process. Some accreditation systems, such as the ISO 9000 series are complex and are expensive to achieve, often requiring the participation of external consultants. Most systems demand a high level of commitment from participating organisations.

Museum Accreditation & Registration Schemes

Two good examples of Museum Registration schemes are the UK Museums & Galleries Commission⁸ Museum Registration Scheme and the American Association of Museums Accreditation Scheme. Both schemes are voluntary and aimed at promoting quality standards in all aspects of museum management and service. The UK scheme is limited to organisations or institutions meeting the Museums Association of a museum⁹ (essentially collections of inanimate objects or works of Art) whilst the American scheme also extends to planetariums, zoos and botanical gardens. Neither scheme covers biological or environmental records.

American Association of Museums (AAM) Accreditation Scheme

The AAM Accreditation Scheme was founded in 1971 and now incorporates some 800 organisations of all sizes including museums, arboreta, planetariums and zoos. The aim of the scheme is to promote excellence and accountability and the award is regarded as an 'Oscar' for the museums world. The scheme is seen as a way of encouraging museums to develop standards and demonstrate an ongoing commitment to change.

The typical process to achieve accreditation takes three years and accredited organisations are reviewed every ten years. The process includes an extended period of 'self-study' validated by peer review. The application is in the form of a questionnaire which must be supported by appropriate documents. Applications are submitted to the Accreditation Commission for Interim Approval. The application is then validated by a specially appointed two member team called the 'Visiting Committee' who will pass on their recommendation to the Commission for Final Accreditation.

The AAM scheme is voluntary and funded through a non-refundable application fee charged to applicants. Applicant organisations must also meet the expenses of the 'Visiting Committee'. Accredited organisations pay an annual subscription to retain their accredited status.

⁸ Now called the Council for Museums, Libraries and Archives

⁹ "A museum is an institution which collects, documents, preserves, exhibits and interprets material evidence and associated information for the public benefit" – UK Museums Association 1984

UK Museums & Galleries Registration Scheme

The UK Museums Registration Scheme is sponsored by the government funded Council for Museums, Libraries and Archives (CMLA). The scheme works in close cooperation with the various Area Museums Councils (AMC) and the Museums Association (the Museums Professional body). To be eligible for registration a museum must meet the definition of a museum as laid down by the Museums Association and must also be a member of their local AMC. The AMC receives money from CMLA and financially supports museums through grants, professional advice and training, all of which may be necessary to achieve the registration standard.

The UK scheme started in 1988 but was revised to include higher standards in 1995. At present there are some 1800 registered museums. There is also a further scheme for Designation of museums with collections of national or world importance. The main attraction of registration is that it makes museums eligible for substantial grants through their AMCs and various CMLA purchase funds. Registration can also effect the outcome of bids to HLF and similar grant sources. Registered museums can also receive subsidised services and professional advice through their AMCs.

Registration in the UK Scheme is applied for through the AMCs and conferred by a national committee made up principally of museum professionals. The aims are to encourage the take up of standards (such as the Museum Documentation Association's Documentation Standard), to foster confidence in museums amongst both collection donors and funders and to advance a shared ethical basis for all bodies involved in the preservation of heritage.

There are two classes of registration, Provisional and Full. The scheme is voluntary and not restricted by size of museum. The Registration process is tailored to the scale of the museum and its operations by judging if services are appropriate to the size, aims and resources of the museum. All museums must have or demonstrate;

- An acceptable constitution
- Clear purpose
- A planned approach to management
- Acceptable provision for the care of collections
- Services appropriate to the scale of the organisation
- Access to professional curatorial advice
- An acceptable financial basis for the longer term continuity of the organisation

The application process includes self-evaluation supported through documents and curatorial advice available through the AMCs and CMLA. The application is subject to peer assessment and validated by the Registration Committee.

Classes of registration include;

- Provisional Registration
- Full Registration
- Deferred (Committee defer registration pending further information or implementation of change)
- Ineligible (not a museum or failed to achieve standards)

All registered museums must make an annual return to update a national database of museum statistics and are also invited to re-register every five years.

Proposed BRISC¹⁰ LRC Accreditation Model

BRISC has had an accreditation scheme running for several years. More recently they have been considering adopting a multi-tiered classification system for organisations and individuals involved in biological recording in Scotland. The proposed BRISC scheme covers three accreditation types, Record Centres, Recording Schemes and Projects. Within each type the accreditation is tiered (e.g. 4 levels for record centres) with the level being set according to performance or services under 7 criteria headings. The BRISC system would include elements of product quality, management and commitment to development.

The 7 BRISC criteria are

- Management: Staffing, Policies, Planning, Expertise
- Funding: Financial sustainability, budgetary control and charging policy
- Linkages: Network of data suppliers and users. Ability to support biological recording. Reference fora.
- Data: Number, quality and coverage of wildlife records including species and habitats. Active survey and site documentation.
- Data Management: Emphasis on ability to collate and store records in electronic form. Back-up and security. Record coverage.
- Resources: Housing, equipment, maps and reference works. Use of volunteers and IT support.
- Service Provision: Levels of service and facilities for access to records. Use of maps and GIS. Ability to provide analysis of data. Policies on data provision.

The BRISC system uses self-assessment either by paper questionnaire or using a CD-based program (ACCREDIT) which collects details about a centre or scheme. Returned submissions are assessed by the BRISC accreditation officer and accreditation awarded by a separate Validation Committee. Each of the 7 criteria are separately assessed and used to determine the overall level. BRISC recognises that the process of development is not always equal across all criteria and the overall assessment takes this into account. The highest levels of accreditation are difficult to achieve and are set as ideal targets for LRCs to work towards.

There is a minimum level of service and activity for entry into the BRISC accreditation system. This includes

- Membership of BRISC
- Active participant in a recording network
- Involvement in active surveys
- Collection and storage of biological data
- Defined geographical boundary
- Secure data storage
- Facilities for storage of paper and original data
- Access to maps or map bases
- Access to reference books.

¹⁰ Biological Recording in Scotland

Business Excellence Model

The Business Excellence Model (BEM) is a non-prescriptive framework that supports a variety of approaches to achieving 'excellence' within business organisations. There are a number of models including one for the public and voluntary sector. The BEM is customer focused although it recognises the need to balance the interests of all stakeholders in a business. It is based on the premise that the key to good business is good management and that organisations should develop a culture of continual improvement.

Like other systems described in this paper the BEM uses a number of criteria within its framework. In the BEM there are five enablers and four results criteria. Each of the criteria are accompanied by definitions and examples of the evidence that can be used to benchmark performance.

The enabling criteria are

- Leadership
- People
- Policy and strategy
- Partnerships and resources
- Processes and procedures

The results criteria are

- People results
- Customer results
- Society results
- Key performance results

Gordon McGlone¹¹ has produced a number of papers on the value of the BEM to the NBN and LRCs. He has provided a set of draft criteria and evidence headings to demonstrate its applicability. He has usefully pointed out that the model could require compliance with NBN technical standards without actually defining the details of standards, thus enabling standards development to continue without need to revise the accreditation model.

The application of the model to accreditation would be three-fold.

- Committing to NBN standards and protocols
- Achieving NBN standards relevant to the organisation
- Continuous improvement

Accreditation would be based on self-assessment and peer review of gathered evidence. The recognition of a commitment stage is valuable because it could act as a route to funding for LRCs (or other projects) in their early development stages.

There is no doubt that the model could be used and would be a valuable tool for LRCs working at developing their effectiveness and services. In essence the Model would be used as the means whereby LRCs achieve and maintain standards, some of which the NBN will recognise as relevant to NBN accreditation.

One of the features of the BEM is that it is widely recognised and a strong support and training network is already in existence that could be of value to LRCs. The argument

¹¹ Gloucestershire Wildlife Trust

remains whether the NBN wishes to accredit good business practice or is only interested in delivered products.

PQASSO

The Practical Quality Assurance System for Small Voluntary Organisations (PQASSO) is sponsored by Charities Evaluation Services (CES), a charity providing services related to monitoring, evaluation and quality systems in the voluntary sector.

PQASSO takes the work pack and self-assessment approach and is essentially a developmental system, leading organisations through to better performance. It has a strong emphasis on meeting the needs of users. Organisations can take the work at their own pace and do not need to employ outside consultants. The PQASSO documentation is essentially a guide to good business practice for small voluntary organisations.

PQASSO concentrates on 12 quality areas each of which has three achievement levels. These are

- Planning for quality
- Governance
- Management
- User-centred service
- Staff and volunteers
- Training and development
- Managing Money
- Managing Resources
- Managing activities
- Networking and partnership
- Monitoring and evaluation
- Results

One of the features of PQASSO is the collection of 'evidence' to demonstrate levels of achievement.

Investors in People (IiP) Model

Investors in People (IiP) is not directly applicable to NBN accreditation although the system of preparing for and achieving recognition through development and the collation of a portfolio of evidence is a useful model. In particular the requirement of IiP for regular re-assessment to maintain the award is directly relevant to LRCs.

The IiP system includes an initial level of committing to work towards the award. This level of 'working towards' would be a valuable one for LRCs in their developmental stages particularly in seeking financial support from organisations such as English Nature or the HLF.

Working towards the IiP award normally includes the participation of a mentor or trainer who can help organisations through stages such as setting a mission statement, preparing and acting on policies and advising whether organisations are ready to achieve the standard. IiP has a widespread network of support and funding can sometimes be available to support registration, training and mentor fees.

Annex 2 - NBN Principles for Data Exchange

Principle 1

Making biodiversity data available should reduce the risk of damage to the environment. If it is likely to have the opposite effect, availability may need to be controlled.

Principle 2

Biodiversity data should be easily accessible to enable their use for decision-making, education, research and other public-benefit purposes.

Principle 3

Biodiversity data suppliers should make available sufficient metadata to allow biodiversity data users to assess the scope and potential uses of their information holdings. When biodiversity data are supplied, accompanying information (metadata) on its ownership, methods and scale of collection and limitations of interpretation, should be provided.

Principle 4

A clear transfer of authority should be made when a biodiversity data resource is put together, to allow biodiversity data managers to act on behalf of the biodiversity data owners.

Principle 5

Managers of biodiversity data should make their framework of terms and conditions publicly available, allowing biodiversity data owners to have confidence that control will be exercised in the management and use of their data.

Principle 6

Personal data must be managed in accordance with the principles of the Data Protection Act 1998 and/or any subsequent legal provisions.

Principle 7

A:

Managers and funders of biodiversity data should make basic facts freely available (except for handling charges if needed) for not-for-profit decision-making, education, research and other public-benefit purposes.

B:

Biodiversity data suppliers should try to arrange resourcing of information provision so that charges for not-for-profit uses are minimal and charges for commercial uses are realistic but do not prevent the use of biodiversity data.

C:

Biodiversity data users should expect to contribute to sustaining the provision of biodiversity data through contributing either in kind or financially to the collection, collation and management of biodiversity data, or at the point of use.

Annex 3 - Issues related to LRC Accreditation

Locally Determined Issues

The scope of LRCs and the organisation of the local network varies considerably between areas. Some are very centralised and others are developing more as distributed local networks. There is frequently division of labour between organisations. These aspects are therefore difficult to build into an accreditation system.

Local issues are those aspects of the local network and operation of the LRC that are subject to local arrangement. Procedures may be affected by guidelines on best practice or example from other areas but are essentially down to local determination. For NBN purposes it is enough to know that they are being addressed. Local issues include:

1. Management structure
2. Reference structure e.g. user panels and recorder reference groups
3. Funding relationships with partners e.g. use of SLAs
4. Budgetary control
5. Staffing levels and staff pay and conditions
6. Business and development plans
7. Charging policy
8. Geographic coverage
9. Taxonomic and habitat coverage
10. Strategic overview of data needs and surveys
11. Time range of data sets
12. Public outreach and service provision. E.g. enquiry service, recorder training, public participation surveys.
13. Use of volunteers
14. Ability to provide an ecological advisory service (may be handled by others)
15. Analysis of data
16. Range of data products for partners
17. Housing and workspace
18. Involvement in survey
19. Site documentation
20. Archival of paper records, cards and notebooks
21. Storage and care of voucher specimens
22. Access to reference works
23. Publication programme
24. Security arrangements

Local issues that affect national issues

LRCs are essentially self-regulated and without a significant financial hold on them it would be difficult to enforce accreditation standards related to their management. Some locally determined factors do, however, have a direct influence on how the LRC performs and on what it can provide through the national network. The NBN would, therefore have an interest in these issues although I am not clear how they could be incorporated into the accreditation system. These include;

1. Staff qualifications and expertise
2. Quality assurance policies and procedures for data validation
3. Quality assurance policies and procedures for data products
4. Relationship with local and national specialists/referees
5. Sustainable funding
6. Database management
7. Use of GIS
8. Data ownership and confidentiality
9. Data backup and security
10. IT support
11. Disaster recovery plan
12. Web site

National issues relevant to any data manager

There are clearly a number of factors which are common to any individual or organisation wishing to make data available through the national network. These factors can form part of the overall accreditation framework for any participant in the NBN.

1. Commitment to NBN principles on data¹²
2. Catalogue of data holdings
3. Metadata referring to coverage, quality, validation
4. Clear policies and procedures for availability, ownership and charging
5. Demonstrable commitment to sustaining the service e.g. through development and business plans
6. Be able to respond to requests for data and services. For local scheme recorders this may be an arrangement to update an LRC at regular intervals.

¹² See Annex 2

National issues relevant to main NBN nodes

Organisations that wish to be on-line nodes in the National Biodiversity Network will need to follow stricter rules in relation to data management and availability. These factors include:

1. Majority of data managed in electronic format
2. Data in or easily map able to NBN Data Model format
3. Use of NBN Dictionaries
4. Metadata in NBN Index
5. Data available in NBN Transfer format
6. Internet Access and link to NBN Gateway.