An Assessment of Scotland's Sites and Monuments Records

for the Royal Commission on the
Ancient and Historical Monuments
of Scotland

in conjunction with the
Association of Regional and Island Archaeologists

HISTORIC ENVIRONMENT
CONSERVATION

Report 98/25
April 1999

An Assessment of Scotland's Sites and Monuments Records

David Baker
Historic Environment Conservation

Historic Environment Conservation
Report 98 / 25

David Baker MA FSA MIFA IHBC Evelyn Baker NDD FSA MIFA

3 Oldway Bletsoe Bedford England MK44 1QG
Phone / fax +44 (0)1234 781179 *e-mail* davidbaker@histencon.freeserve.co.uk

Contents

Abstract iv

Acknowledgements iv

Executive Summary 1

Recommendations 3

SMRs and local archaeological services
Policy
Implementation of policy

A Introduction 7

1 The SMR assessment project
2 The historic development of SMRs in Scotland
3 The framework for the present situation
4 The organisation of this report

B Assessment 11

1 Management context 11

Organisational location
Areas of responsibility
Staffing resources
Budgets
IT support
Training
Accommodation
Strategic context

2 System organisation 14

Information media, general
Cartographic
Photographic
Digital
Primary material
Publications
SMR archive
Data structure
Input and output

3 Information content 17

Space
Time
Subject
Process
Detail

4 System links 20
Local systems
National organisations

5 Users 22

Volumes and types of user
User access
Outreach

6 Data / system quality assurance 23

Overall state of development
User access
Outreach
Existing records and unaccessed material
System security
Quality control

7 Each and all SMRs 25

Table 1: 10% bands of attainment
Table 2: Individual SMR attainment by Sections 1 - 6 above

C Discussion 31

1 What is an SMR ? 31

2 The uses of SMRs 33

General
Management uses
Research
Education
Access and outreach

3 How is an SMR most effectively managed ? 37

Organisational context
Scotland-wide SMR coverage
Human resources
Financial resources

4 How should SMRs develop in the future ? 41

Status
Local and national roles
A national records forum and its agenda
Unaccessed material or 'backlog'
SMRs and other environmental databases

References 51

Appendices

1 Brief 53

2 Official documentation 59

3 Method statement 63

Development of the questionnaire
Selection of SMRs
Visits to SMRs
Processing the results of questionnaires and visits

4 Summary of responses to the SMR questionnaire 67

1 Management context
2 System organisation
3 Information content
4 System linkages
5 Users
6 Data / system quality assurance

5 Scotland's Sites and Monuments Records 89

Aberdeen City
Aberdeenshire & Moray
Angus
Scottish Borders
Dumfries & Galloway
Dundee City
City of Edinburgh
East Lothian
Falkirk
Fife
Highland
Orkney Islands
Perth & Kinross
Shetland
Stirling
Western Isles
West Lothian
West of Scotland Archaeological Services

Abstract

An assessment of Scotland's eighteen SMRs and other local records systems in late 1998 considered six inter-related aspects of functionality, *Management content*, *System organisation*, *Information content*, *System linkages*, *Users*, and *Data / quality assurance*. Most systems are seriously or significantly under-developed; two Council areas have no cover, and three of the eighteen are not full SMRs. Quantification of selected responses to a questionnaire showed thirteen scoring between 39% and 58% of a notional comprehensive standard. Nonetheless, the leading SMRs are showing their potential as local environmental information management systems, capable of providing a wide range of services directly to their communities and to research as well as to the planning process, which is the primary, and in many cases almost the sole active function. Critical to the future of effective conservation, understanding and enjoyment of Scotland's historic environment is completion of full national coverage through making SMR maintenance to a defined standard a statutory duty of local authorities. As part of this, and working in a standing forum, RCAHMS and ARIA need to develop distinctive functional links that are mutually supportive and non-duplicatory, so that they can jointly move towards what would amount to a national - local distributed network. Essential resource underpinning must come from improved continuity of local core funding supported by a continuation Historic Scotland's three-year development grants. Perhaps the greatest opportunity for SMRs rapidly to reach maturity as part of a full service to the nation and its communities comes with the proposed project for grant-aid by the Heritage Lottery Fund, *Accessing Scotland's Past*. Provision of envisaged new access facilities and outreach services will depend upon being able to take data preparation for the project beyond the immediate needs of day-to-day planning advice.

Acknowledgements

The approach to this assessment was based on a similar exercise carried out for the English SMRs six months earlier. I am grateful to an eminent Scottish SMR Assessment Steering Group - Diana Murray and Jack Stevenson for RCAHMS, Ian Shepherd and Crispin Flower for ARIA - for helping me modify it so that it took full account of Scotland's distinctive character and situation.

All SMRs were visited, and it is pleasant to record the positive response to appearances which in many cases must have seemed to represent yet another demand on time that was anyway insufficient for what has to be done. Everyone was helpfully open about the strengths and weaknesses of their own situations, and few spared me observations on the wider world as they saw it.

The impressionistic analyses of individual SMRs in Appendix 5 have benefited from cross-checking by holders of record systems, and a draft of this report was improved through discussion with the Steering Group. It remains, however, the independent report of an outsider who retains responsibility for any residual errors of analysis or interpretation.

Executive Summary

A Sites and Monuments Record (SMR) is a definitive permanent general record of the local historic environment in its national context, publicly and professionally maintained, whose data is accessible and retrievable for a wide range of purposes. It is the core element of a local public archaeological service, and, generically, a local environmental information management system. It has a crucial role in documenting the management of the local archaeological resource – landscapes, settlements, historic buildings, sites and artefacts – through the planning process and all kinds of land management that might threaten survival or provide opportunities for conservation. These needs of management have driven the development of local archaeological services in Scotland, but SMRs have an equally important role, recognised explicitly by official guidance, in helping local communities understand, enjoy and care for their cultural roots in the historic environment. Access to that heritage is the underlying democratic justification for the management constraints applied through the planning system.

Scotland's SMRs have developed more slowly than those of England. Some 25 years after the first were created, coverage is still incomplete and there is a spectrum of arrangements. Nine established SMRs cover single Council areas, but fifteen Councils are served by agency arrangements variously vulnerable to continuing cuts in local government finance and inadequate ownership by client Councils. Two lack a service and three Councils have record systems that fall critically below recognised minimum standards of functionality.

This assessment used interviews, visits and a 44-page questionnaire, covering fifteen SMRs and three other record systems. The questionnaire embodied the standard of a fully operational SMR undertaking the range of functions indicated in PAN42 and other official documents, represented through six aspects of functionality, Management Context, System Organisation, Information Content, System Links, Users and Data / System Quality Assurance. Application of a simplified scoring system showed that, as a group, the eighteen systems achieved an average of only 47%, with thirteen in the range 39% - 58%, only two over 65% and four below 40%.

That *Information Content* is as high as 62% reflects the basic input of RCAHMS' NMRS to most of the post-1970s systems, and several subsequent survey programmes. But at under two-thirds of an adequate level for effective local understanding and stewardship, it is also evidence of weaknesses in the record systems at both levels. Problems are compounded by SMRs lacking the resources to fill the gaps and make any systematic check on the condition and survival of what is already known. It is good that most systems now come up to at least 1945, though the coverage of 22 major subject topics drew disappointing overall response percentages of 'all' at only 31%, 'some' at 44% and 'none' at 23%. Depth of detail is also an issue, with only six SMRs feeling that they could retrieve systematically and comprehensively at the level defined as intensively detailed.

The half-score of 51% for *Users* reflects the difficulty of most SMRs in providing services other than to the planning process, and even that for two of the three non-SMRs. Only six keep registers of users, and there is a heavy overall predominance of planning over educational and community uses. SMRs have only a limited involvement in the conservation management of sites and landscapes and for grants schemes (outside the Countryside Premium Scheme).

The poverty of staffing provision is represented in the score of 46% for *Management Context*. In many Councils SMR system maintenance and development has to be done as part of many other duties in one-person archaeology services. There is no full-time (90%+) SMR Officer in Scotland, and only six have 50% or more of a staff member; eight could not identify any formal provision at all. Essential dedicated clerical or technical assistance is entirely absent all but two cases. Budgets, generally or for training, are weak or non-existent, though some corporate IT support is usually available. Limited accommodation in open-plan offices inhibits external public use. Only two SMRs figure explicitly in any form of corporate planning, and there is hardly any business planning.

The score of 42% for *System Linkages*, shows poor contacts with cognate local services such as museums, local history collections and various kinds of documentary archives, though links with the work of Field Units are relatively good. Involvement as record systems with controllable works to historic buildings is limited, and the situation regarding ecclesiastical buildings obscure. Only four SMRs enjoy systematic links with local societies. Only ten

have any kind of contact or arrangement with other environmental records.

The similar level of *System Organisation* (41%) reflects inadequate resources amidst rapid developments in information technology. Access to modern maps is good, but less satisfactory for historic OS and other maps. Five SMRs have no slide collection, which is bad for outreach, and aerial photographic holdings are poor. Most have a general-purpose archive as indicated in PAN42. Progress into the digital revolution is slow and patchy; the 'none' response was over 50% across six categories of potential holdings. Variety in data structures will need to be tackled through the collaborative development of a Scotland-wide thesaurus by NMRS and by consideration of the emerging data model of 'event - monument - archive' (EMA). There are difficulties in finding resources for inputting new data. Output capability is limited: not all yet have relational databases and only seven have ones linked to GIS.

Data / system quality assurance came bottom by a short head at 40%. Uneven and incomplete survey coverage of areas make it difficult to deliver authoritative desk-based responses to some queries. This is exacerbated by the amount of material with a record system but not yet accessed on to it, and therefore not yet retrievable: quantification of this 'backlog' requires further work. Basic system security was good for digitised material, but security copying for paper records rare. Quality control for data-inputting is intrinsically difficult in single-person archaeology services, and linked to the lack of technical manuals for recording and inputting.

From this assessment flows a series of recommendations, some technical and others about the wider contexts within which SMRs operate. They reflect that all Scottish SMRs are still in the developmental stage, so need additional resources, above the requirements of an adequate day-to-day service provision.

The most important is that the Scottish coverage of SMRs be completed, and to an adequate standard. Government guidance about this is clear in NPPG5 and PAN42. Consequently, if local Councils are still unwilling or unable to respond nearly five years later, then the duty should be made statutory and funded accordingly. It would be a timely move for the new parliament to fill these gaps in the infrastructure of national and local identity, with added value in promoting existing government policies by helping local communities gain access to the multiple values of their cultural heritage.

An essential prerequisite is the development of stable working relationships between NMRS and SMRs. This would enable the discussion and confirmation of distinctive roles and strengths at each level, pursuing the mutual nation-wide interest through collaboration without duplication. The mechanism should be a properly resourced standing forum for RCAHMS and ARIA, positively supported by Historic Scotland and COSLA. As a first action it should agree the broad outlines of the distinctive roles, including the operational implications of RCAHMS' leading role. These should be consolidated and kept under review as various outstanding issues are discussed, including data exchange, copyright, data structures, systems development, unaccessed material, and aerial photography.

Such a forum will be essential for managing current opportunities associated with the Heritage Lottery Fund. By themselves, many of the local archaeological services based around SMRs seem too under-resourced and too under-developed to make significant use of grants if eligibility is limited by narrow interpretations of 'additionality'. However, proposals for access and outreach, delivered by a collaborative system of distributed record systems embodying distinctive national and local roles, open up new possibilities for joint service of country and communities in ways that could not be achieved by action on one level only. Both the collaboration and the benefits envisaged for the draft '*Accessing Scotland's Past*' (ASP) project would be new: this newness justifies the data preparation (upon which a recent study suggests success will depend (ADS 1999) as falling largely outside the scope of 'additionality'.

Recommendations

SMRs and local archaeological services

1 An SMR should be defined as a definitive permanent general record of the local historic environment in its national context, publicly and professionally maintained, whose data is accessible and retrievable for a wide range of purposes (C1.4).

2 SMRs should be recognised as at the core of a local archaeological service, and generically as a local environmental information management system (LEIMS) (C1.3).

3 An SMR should be recognised as comprising both a records system and a professional records manager (C1.4).

4 Within a multi-functional local archaeology service having several staff, the duties of enabling public access to / outreach from SMRs should normally be attached to those of SMR management, with planning advice and conservation management generally handled by a separate post (C3.14-15).

Policy

5 The maintenance of a Sites and Monuments Record, directly or through an acceptable form of agency arrangement, should be made a statutory duty of local authorities (C4.1-6).

6 In furtherance of its leading role, RCAHMS should work jointly with ARIA to define the functional inter-relationships and patterns of service delivery for national and local record systems, embodying them in a general statement of principle about co-operation and practical working arrangements. This statement should have the joint support of Historic Scotland for the Scottish Office Development Department and the Convention of Scottish Local Authorities (C4.13).

7 The Cooperation Statement should be prepared in a properly resourced standing forum of RCAHMS and ARIA, subsuming existing liaison meetings and the ARIA SMR Working Party. This forum should provide a regular means of communication and deal with issues of common concern (C4.12).

8 The partners to a Co-operation Statement should consider adopting a publicly expressed user-driven goal for Scottish records systems, along the lines of *'to make information on the historic environment available to all who require it in the most appropriate forms and by the most effective means'* (C4.13).

9 Bids for support from the Heritage Lottery Fund should aim at such a user-driven goal through a coordinated use of local and national record systems (C4.20-22).

Implementation of policy

Statutory role

10 In full consultation with Historic Scotland and COSLA, the forum should prepare operational guidelines, setting standards and procedures for ensuring SMRs are used properly (output and input):

- in scheduled monument casework
- in situations where there are agency arrangements (C 3.10)
- in strategic and local planning and the control of development (C2.8)
- by Public Utilities and the Forestry Commission with consistency between different Councils, companies and area offices (C2.9).

11 In furtherance of its statutory role each local authority should assess the types and levels of public services it expects from its SMR against the accepted definition of an SMR, and take steps to remedy deficiencies, especially over public access and outreach (C1.5.8,10).

12 Local authorities that contract out the provision of SMR services to private organisations should accord those services the same status, resources and planning-related contacts as if they were based within the authority (C1.5.6).

Work of the Forum

13 The agenda of the proposed forum should include topics such as data exchange, copyright, the development of records systems in Scotland, implications of the 'event-monument-archive' data

model, aerial photography, and an overview of progress and need for record-stocking survey programmes (C4.15-19).

14 The forum should make a special analytical study of unaccessed material and how to deal with it as efficiently, effectively and economically as possible (C4.27-31).

15 Regularly reviewed arrangements for data exchange between NMRS and SMRs should ensure that material not accessed at one level of record system because it is already on the other is available to the former in agreed formats and timescales for accessibility (C4.23-27).

16 The forum should devise and agree common data standards for NMRS and SMRs, and a programme of implementation (C4.20).

17 The forum should monitor the new Western Isles SMR's use of the exeGesIS software together with its EMA capability and links to GIS, with a view to considering the benefits of wider adoption (C2.16).

18 Training programmes should be devised by the new forum for the staff of NMRS and SMRs, perhaps liaising with England and Wales, to ensure an up-to-date appreciation of professional developments and technical skills in the management of record systems and the provision of services from them (B1.15).

19 The forum should organise a regular exchange of information on successful projects for using the SMR to increase community awareness and interest in the historic environment (C2.17-18).

20 The forum should encourage the Heritage Lottery Fund to accept that data-preparation for the collaborative national-local ASP project is directly related to its potential for providing new services to Scotland and its communities. Such a scheme expands significantly beyond existing funded tasks and roles, and its support for preparation is therefore not adversely affected by considerations of 'additionality' (C4.23-27).

SMR management

21 SMRs should be staffed appropriately for the nature and size of their area and the work of its archaeology service (C3.11-15).

(a) Council areas of any size should have at least one full-time SMR Officer together with clerical and technical support.

(b) Single multi-functional posts managing SMRs in smaller areas should have a proportion of time ring-fenced for SMR maintenance and development against a defined programme of work (C2.10).

(c) The extra demands of large or multiple Council areas should be recognised in appropriate levels of staffing.

22 SMRs should have access to adequate budgets for materials, security copying, storage, equipment, specialist advice on information technology, training and outreach programmes (B1.12).

23 Each SMR should define and review its policy for data collection, making explicit what it includes and excludes, temporally and in terms of subject, against an ideal scope that is all-inclusive for all archaeology, and preferably for all aspects of the historic environment (C1.5.3).

24 An SMR should compile and maintain a history of its development, together with a list of the main contributory projects of survey, mapping and research, including assessments of their value (B6.2).

25 All SMRs should undertake properly resourced Data Audits as the basis for forward planning and grant applications for developing systems and enhancing holdings (C 3.6,21).

26 All SMRs should prepare regularly reviewed Business Plans (C3.6,21).

27 All collections of images should be fully cross-referenced within SMRs (B2.4).

28 In order to improve retrievability and the manipulation of data, all SMRs should acquire relational databases linked to GIS systems as soon as possible, and include historical mapping for their area (C1.5.9).

29 All SMRs should extend security copying procedures to non-digital material (B6.8).

30 All SMRs should have technical manuals covering recording policy, inputting procedures and disaster recovery planning (B6.10-11).

Uses

31 Managers and parent organisations should ensure adequate and accessible accommodation for SMR management and associated storage, together with proper working space for the public and for using maps and other large documents (C2.21).

32 All SMRs should keep records of the main classes and quantities of users (B5.1).

33 All SMRs should ensure that those designing projects using or generating SMR information include provision for returning enhanced material in formats suitable for accessioning. (C2.15).

34 SMRs, or the record-keeping and reference principles they represent, should become an integral part of managing environmentally sensitive land, through accumulating holdings of management documentation or index information to such material securely held elsewhere (C2.12).

35 Surveys to bring the coverage of SMR holdings to a level of completeness and consistency suitable for the compilation of non-statutory registers should be completed as soon as possible (C2.13).

36 Consistent policies for access and charging should be documented and applied by each, and, as far as possible, all SMRs. Charges for access to SMRs should normally be restricted to commercial enquirers. Core funding should be so arranged that it is never directly dependent upon charges for services whose normal fluctuations could reduce that funding below a viable level for maintaining an SMR (B5.5).

Links

37 SMRs should establish operational linkages, preferably involving GIS, with other local record systems for the historic built and natural environment and with adjacent SMRs (C4.28-29).

38 SMRs should hold information on historic buildings (including ecclesiastical ones exempt from listed building controls) or be adequately networked with parallel databases holding information of the same kind and to similar standards (B4.5-6).

39 All SMRs should maintain two-way contacts with active individuals, local societies and other organisations interested in the historic environment (B4.7).

40 All SMRs should maintain or contribute to a local 'web' site, and keep statistics of 'hits' (App 4 1.1.4).

A Introduction

1 The SMR assessment project

1.1 The Brief for this project (**Appendix A**) required a rapid quantitative and qualitative assessment of the state of SMRs in Scotland based on agreed criteria. This included a quantification of resources needed to bring SMRs up to a consistent standard, and an evaluation of their future development and potential.

1.2 For this future development, however it is to be funded, the Brief identified a need to define the "differing roles of SMRs and NMRS respectively" in order "to avoid unnecessary duplication of records and harmonise the databases". It also required consideration of "the definition of an SMR and its ideal scope" together with "an assessment of the NMRS in the context of its relationships with SMRs". These tasks referred specially to "identifying and testing means of data exchange to build an archaeological information network facilitated by rapidly advancing technology." This network would allow "SMRs to concentrate on managing their own data but providing access to a wide range of data, not just that held in SMRs and the NMRS but also other on-line services (eg ADS, SCRAN) both for professional and public use". This ought to aid best use of scarce resources and improve remote access, the latter a distinctively Scottish issue. The Brief asked what linkages at local or national level might be valuable for these purposes. The Brief also asked for comparisons with the results of a similar assessment the writer has just completed for England.

1.3 The challenging nature of this task become apparent as the project proceeded. 'Rapid' assessment of the SMRs was relatively straightforward, aided by a high level of constructive co-operation. The population surveyed was eighteen SMRs or other record systems, nearly all visited, unlike the 75 English SMRs which were only sampled in this way. The insights gained from talking to individuals in their localities entirely justified the more intensive approach, but its 'rapid' nature still precluded analyses deeper and more detailed than could be obtained from a 44-page questionnaire. Analysis of its results provides soundly-based generalisations about the whole body of SMRs, but cannot probe more deeply to discover things about individual record systems not even knowable by their officers without undergoing something like the English RCHME Data Audit. In this context, another questionnaire recently (March 1999) sent to SMRs as 'a preliminary audit to assess global requirements for ... the (HLF) bid', repeated several key questions presumably not answerable for the same reasons.

1.4 The Scottish assessment also has two unique 'political' dimensions.

(a) One is continuing but fluctuating tensions between the national and local interests, which confirms the need to work out stable and productive functional inter-relationships. Tensions are exacerbated by relative local weaknesses, collectively and in many individual cases, over resources and continuity of development, and by the uncertainties associated with imminent change in Scottish political arrangements. The creation of a Scottish forum is suggested as a way of managing these tensions productively (**C4.12-13** below), and also as the way to 'identify and test the means of data exchange to build a ... network', a technical task largely outside the scope of this project.

(b) The other is the development of a bid to HLF by RCAHMS for a project entitled *Accessing Scotland's Past (ASP)*, with SMR participation. At the time the Brief was drafted the HLF seemed a potential source for the "enhancement of SMRs in Scotland to an agreed level", but subsequently it was clarified that the principle of 'additionality' largely restricts eligible work to the improvement of access and outreach. Consequently, SMRs with inadequate levels of core funding already inhibiting the attainment of minimum levels of service feared the loss of an opportunity for active participation in community-orientated work, and that its provision through a different kind of national-level remote access would cut them off from developing such services. The way in which the ASP proposal has been evolving during the currency of this assessment project suggests a positive way forward of benefit to all parties (**C4.23-27** below).

2 The historical development of SMRs in Scotland

2.1 The Brief indicates that the history of SMR development in Scotland has been characterised more by "local authorities (having) to seek their own solutions" than by the systematic drive which completed English coverage by the early 1980s. Writing that history is outside the scope of this project but some observations and reference to past studies can help explain why Scotland, alone of the three mainland 'home countries', still has significant gaps.

2.2 Scottish SMRs generally post-date the local government reorganisation of 1974, many commencing with the aid of MSC schemes. A survey of 1987, when there were still several gaps, reported that most had come into existence after 1980, deriving some impetus from the 1983 transfer of the Ordnance Survey's archaeological records to RCAHMS (WGSMRS 1987). The Brief indicated that while the early SMRs tended to grow organically, the later ones were generally formed around downloads from NMRS.

2.3 The role of SMRs as part of local archaeological services received their strongest boost with the issue of NPPG5 and PAN42 in 1994. A year later, on the eve of local government reorganisation, Historic Scotland surveyed the provision for archaeology and planning made by the then two-tier system of 49 local authorities. 38% held their own SMRs and a further 12% "held at least some of the records". 67% said they had ready access to records of sites and monuments though only 48% held those records themselves and a further 13% held at least some of the records. Reading between the lines of a short report there seemed to be variations between authorities as to how they used what information, and most saw the 1994 guidelines as not having significantly affected the situation (Historic Scotland 1996).

2.4 On the prospects for local government reorganisation in 1996, respondents to this survey could only express uncertainty and natural foreboding about any exercise that required resources to be reallocated when most services consisted of single posts only. Observers of the scene after April 1996 have commented on three tendencies:

(a) a growing acceptance of the need for archaeological advice at least in the planning process, leading to the continuation of existing arrangements, often with jointly-held services (or one authority agreeing to provide it), and to the major advance of filling the gap represented by the ***Western Isles***

(b) a counter-tendency caused by successive annual cuts to local authority budgets together with dis-economies of scale caused by the move from regional / district to unitary authorities, cutting or preventing the creation of effective local environmental services perceived as 'soft' targets

(c) in a few areas, reinforcement of these budgetary pressures by continuing dislike of new administrative neighbours making it more important politically not to receive a service from them than to have the service itself, notwithstanding the clear guidance of 1994 and its reiteration by Historic Scotland in its Circular HS1/96.

2.5 This assessment looked at eighteen SMRs or other record systems within the following categories, but not at the Council areas of **East Dunbartonshire** and **Mid Lothian** which have nothing operating as a recognisable SMR.

(a) full SMR dealing exclusively with its own administrative area: ***Aberdeen City***, ***Dumfries & Galloway***, ***Falkirk***, ***Fife***, ***Highland***, ***Orkney Islands***, ***Scottish Borders***, ***Shetland***, ***Western Isles*** (new)

(b) full SMR dealing exclusively with its own administrative area and also providing a service to a neighbouring area (federal) or running a neighbour's separate SMR for them: ***Aberdeenshire*** combined with ***Moray*** and providing a service to ***Angus***, ***City of Edinburgh*** also providing a service to ***East Lothian***, ***Stirling*** combined with Clackmannanshire

(c) full SMR providing a joint service to eleven Councils: West of Scotland Archaeology Service (***WoSAS***)

(d) potential SMRs lacking appropriate staffing and / or recognition by the planning process within their Council area: ***Dundee City***, ***Perth & Kinross***, ***West Lothian***.

3 The framework for the present situation

3.1 Recently issued key official documents provide a framework for dealing with many of the issues raised in the Brief. These include:

- **NPPG5 - Archaeology and Planning** (Scottish Office Environment Department - January 1994)
- **PAN 42 - Archaeology - the Planning Process and Scheduled Monument Procedures** (Scottish Office Environment Department - January 1994)
- **Historic Scotland Circular 1/96 on Local Government Reorganisation** (March 1996)
- **Historic Scotland Archaeology Paper 6 - Archaeology and Planning,** (November 1996)
- The government Green Paper **Protecting the Built Heritage** (May 1996)
- A discussion paper from ARIA, on **the Role of Scotland's SMRs** (March 1998).

Brief summaries of their main relevant points are in **Appendix 2.**

3.2 The framework has four main components, each of which is incomplete or needs further discussion for satisfactory resolution.

(a) **Coverage**: all local authorities should be served by an SMR, but there are examples of arrangements other than one SMR per Council, as well as partial or total gaps in the overall system.

(b) **Content**: an SMR should consist of a professionally qualified curator, a list and description of all known evidence, a map record and an archive of detailed supporting material, but many fall short of this definition in one or more respects.

(c) **Functions**: SMRs exist for multiple purposes: in addition to their leading role in planning and environmental conservation, they should also communicate understanding and enjoyment of the cultural heritage, but many are unable to serve other functions in the community, such as research, education, tourism.

(d) **Linkages and liaison**: the existence of an active and developed NMRS, upon whose holdings many SMRs were initially based, raises issues about collaborative effort and the avoidance of duplication in managing information and providing services.

4 The organisation of this report

4.1 **Appendix 1** reproduces the Brief for this project in full, and **Appendix 3** describes the methodology employed.

4.2 **Section B** contains an assessment of Scotland's SMRs as at 1 August 1998, based upon questionnaires and visits to all ARIA members. The tabulated information upon which it is based is in **Appendix 4**, and brief selective commentaries on each individual SMR or record system are in **Appendix 5**.

4.3 The discussion in **Section C** seeks to address the major issues raised by the Brief, drawing upon material from the Assessment and relating them to wider contexts of organisation and information management. The **recommendations** at the front of this report are largely drawn from that discussion.

B Assessment

This section provides a rapid quantitative and qualitative review of the current state of eighteen SMRs or other record systems, arranged by the six main functional headings used in the Questionnaire, followed by a final one dealing with the results of scoring selected responses to the questionnaire.

1 Management Context

(Average SMR score = 46%)

Organisational location

1.1 Scotland's 32 Unitary Councils, reorganised in 1996, have six different types of arrangements for obtaining SMR services (see Table). Types of SMR give slightly different categories, as follows.

(a) Nine are established SMRs covering single Council areas

(b) One is a new SMR covering a single Council area (***Western Isles***)

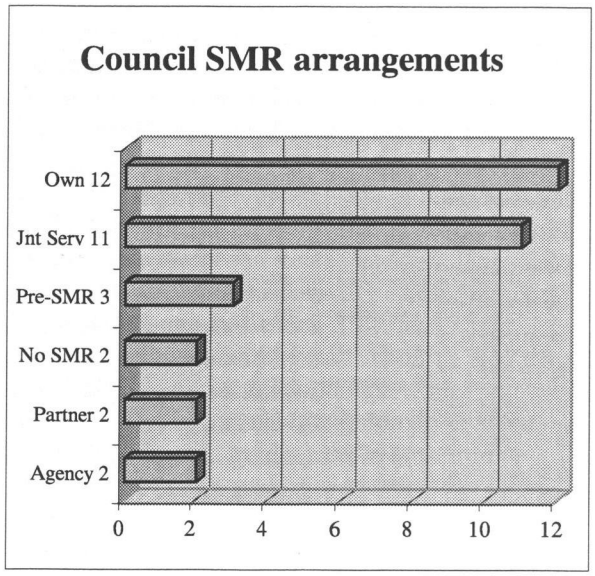
(c) Three are 'federal' SMRs, covering more than one Council area (***Aberdeenshire & Moray***; the eleven Councils covered by ***WoSAS***; ***Stirling*** and Clackmannanshire)

(d) Two are separate but non-local SMRs managed by a neighbour (***East Lothian*** by ***City of Edinburgh***, ***Angus*** by ***Aberdeenshire***)

(e) Three are record systems not yet achieving the definition of SMR to varying degrees (***Perth & Kinross***, ***West Lothian***, ***Dundee City***).

1.2 All systems but two (Trusts for ***Shetland*** and the ***Orkney***s) are located within local government, and it seems to be accepted that they fulfil a public function. The gaps in the coverage are caused more by low political priority and lack of resources rather than a direct outright rejection of archaeology or historical conservation. Joint arrangements and arms-length business units (such as in ***Dumfries & Galloway***), however vulnerable, seem to be ways of trying to manage difficult situations rather than a positive rejection of responsibility.

1.3 **Departmental location** is split evenly between planning-related (planning / environment / development) and non-planning (museums / arts / recreation / leisure / environmental or amenity Trusts), despite the drive for the establishment of



SMRs having been essentially based upon a primary role in the planning function. There are mixed feelings amongst ARIA members, some regarding the planning location as crucial, and others considering a non-planning location potentially equally effective as long as the relationship with planning is managed properly. Significantly, though, in at least one of the areas without current ARIA membership, getting an existing pre-SMR adopted by the planning service is seen as the key to making effective progress.

Areas of responsibility

1.4 Virtually all record systems regard themselves as an information resource and the provider of planning advice for their areas, with only ***Dundee*** and ***Perth & Kinross*** not being able to make the necessary contacts. ***WoSAS***' formal role relates to a planning service only. Where one Council holds a record system for an adjacent Council, the service it provides tends to be limited and specific, as mentioned by ***Aberdeenshire*** for ***Angus***, and ***Stirling*** for Clackmannanshire. There may be difficulties over Public Utilities, contacts with which ***Stirling*** describes as only patchy, certainly as far as the Water Authority is concerned. The National Trust for

Scotland has its own record system for dealing with the archaeology of its own properties, but this is not seen as conflicting with SMRs.

1.5 Arrangements were reported as generally accepted and understood in Councils with recognised SMRs, but with degrees of uncertainty in ***West Lothian***, ***Dundee*** and ***Perth & Kinross***. The rather complex relationships in ***Orkney*** between Archaeological Service, Trust, Heritage Society and Islands Council need clarifying. In the ***Western Isles*** the necessary links with all relevant departments and other organisations were in process of being established at the time of visit.

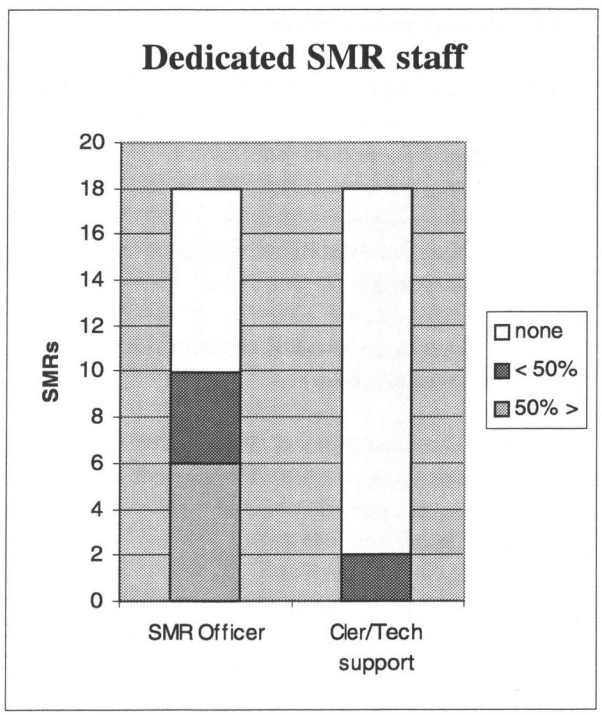
1.6 Arrangements tend to be documented with Service Level Agreements or at least an exchange of letters where one Council serves another, or a Museum-based SMR serves planning functions. ***WoSAS'*** arrangements with its Councils are formalised through the Joint Service Committee in relation to planning advice only.

Staffing resources

1.7 The questionnaire suggested categories of SMR Officer (SMRO), Archaeological Planning Adviser, Regional / District / City Archaeology Officer, Technical Officer, Clerical Officer and Research Officer. Percentages of full-time equivalents (FTEs) were requested. Though an attempt was made to restrict the question to primary professional SMR responsibilities and SMR-dedicated roles, in most cases they were blurred and hard to separate, being combined in single posts.

1.8 The headline is that no Scottish Council has a dedicated SMR Officer, defined as spending 90% or more on the SMR. Only one third or six record systems have 50% or more of an FTE (***Aberdeenshire & Moray*** - 80%, ***Shetland*** - 75%; ***Fife***, ***Highland***, ***WoSAS***, ***Orkney*** - 50%). Four have less than 50% in the form of two temporary posts at 25% (***City of Edinburgh*** and ***East Lothian***) and two at 15%, the latter temporary (***Angus*** and ***Aberdeen City***). The remaining eight gave NIL returns, meaning that the SMR role was effectively subsumed within other archaeological duties, principally those of giving advice to the planning process.

1.9 As far as other staff are concerned, there is direct input from the Council's Archaeology Officer or equivalent in sixteen cases, three of them at 25% or more, and two of those in situations where there are no other staff. The other thirteen report input at 10% or less. Generally, there are few separate Archaeological Planning Officers, and none are involved in SMR work. Other staff with some involvement are largely temporary or mainly concerned with other matters. These include: two temporary 50% assistants, a Conservation Officer at 5% (***West Lothian***), a Human History Officer at 5-10% (***Perth & Kinross***), a one-off non-statutory register project officer at 100% (***Highland***), and 10% of a part-time lecturer for ***Shetland***.



1.10 Dedicated clerical or technical staff are absent in sixteen of eighteen cases. ***Aberdeenshire & Moray*** have IT and graphics support at 35%, and ***Scottish Borders*** 10% of a technical assistant.

1.11 This low level of staffing for SMRs - indeed for the whole archaeological conservation function - should be seen against the background of a general perception that demand for services has increased as a result of the publication of NPPG5. This is difficult to quantify because local government reorganisation changed the sizes of Councils, and local factors are involved.> Responses to a question ranged from ***Orkney***'s "massive increase" (but ***Shetland***'s "not significantly") through ***East Lothian***'s "considerable - without it the SMR would not exist" to ***Falkirk***'s "not significantly".

Budgets

1.12 As might be expected in small services that are usually part of larger groups, the majority (11) do not have separate budgets. Prominent amongst the minority are the longer-established operations such as ***Aberdeenshire***, ***Fife***, ***Highland***, ***Shetland*** and ***WoSAS***. The question of adequacy of budgets was not probed directly, but clear indirect evidence of deficiencies in staffing and facilities is noted elsewhere. At a time of recurrent annual cuts in local government expenditure there may be equal vulnerability in having a separate budget, even for non-staff costs, as in being part of the financial provision for a larger group or department.

IT support

1.13 There are several kinds of arrangements for IT support, split about equally between in-house and external. Permutations include:

(a) what is handled internally (by archaeological or IT staff, and if by IT staff whether departmental or corporate) and what externally

(b) how labour is divided between system design and maintenance, and between database and GIS

(c) whether SMR IT is part of a wider system, as at ***Falkirk*** Museum and partly at ***Highland***, or standalone as with the systems designed and partly supported on contract by Mike Rains of the York Archaeological Trust (***Orkney***, ***Fife***, ***Scottish Borders***).

1.14 It is encouraging that sixteen of eighteen see arrangements as likely to continue. ***Dundee***'s uncertainty reflects the general situation there, and ***Shetland*** has help from two local expert retired volunteers. At existing low staffing levels, it would be purely fortuitous to possess in-house IT capabilities beyond operating a system devised by someone else. The post-holder responsible for the SMR at ***WoSAS*** also has planning advisory duties yet has been able to fulfil a contract to supply ***Dumfries & Galloway*** with a new Access-based system.

Training

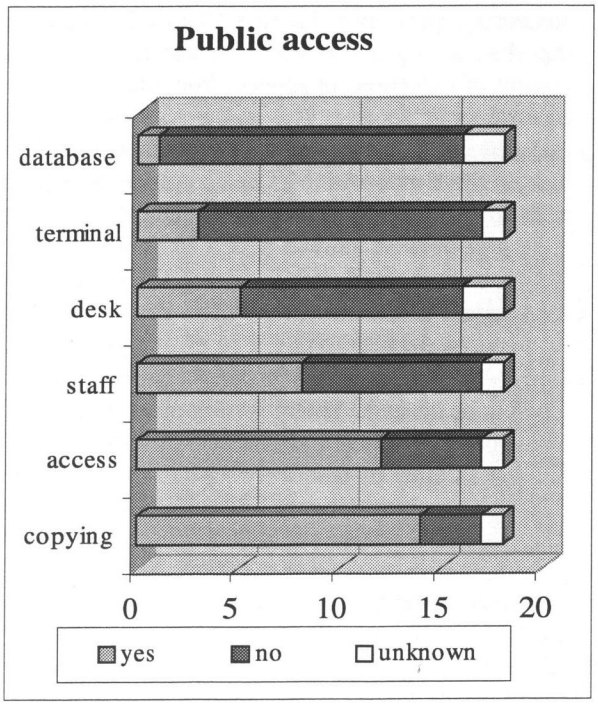
1.15 Exactly half have a provision for training in SMR-related skills, split almost equally between a team / group and a departmental source. ***Shetland*** commented that it was sometimes possible to vire something from a travel budget; ***WoSAS*** commented that the training budget would be amongst the first victims of reductions in support from their contributory Councils. The lack of focus on this topic may reflect the lack of focus about the role of SMR manager in Scotland due its enforced combination with other roles in most cases.

Accommodation

1.16 The usefulness of accommodation leaves much to be desired. Though seventeen of eighteen respondents regarded it as shared with other relevant functions, rather than entirely separate, visits showed this concealed a wide range of situations. ***Aberdeenshire*** is firmly ensconced in an open-plan planning office, but the ***Angus*** SMR which it also administers is therefore physically separate from the planners of ***Angus*** Council. There is a similar situation in ***City of Edinburgh*** which administers the ***East Lothian*** Record from a base in Museums or Leisure rather than Planning.

1.17 SMRs were asked whether they can provide five kinds of facilities for external physical access. Amazingly, three could not supply copying facilities, and, perhaps prudently, fifteen could or would not give direct access to the database. Only five had a dedicated desk for enquirers, and only three a separate computer terminal, but it is encouraging that, despite other pressures, eight were prepared to provide some staffing support, and only two were forced by the nature of their accommodation to restrict the volume of enquirers. Excluding photo-copying, the proportion of 'yes' to 'no' was 17 to 49.

1.18 The accessibility of accommodation for external enquirers is limited by its otherwise useful location usually in local government offices. There are difficulties about unrestricted public access to open plan offices, especially in planning departments that hold sensitive material. This has been recognised through the installation of often forbidding security apparatus. Several offices lack adequate wheelchair access. The opening hours of fourteen respondents correspond with the working week, and all but four required appointments. This was less likely to be caused by bureaucracy than to be a safeguard ensuring someone who also had other sets of duties to perform would be present.



1.19 Twelve SMRs have a benchmark time for responding to external queries, and eleven of them meet it 'always' or 'usually'. It is unclear whether the others exist in environments outside the influence of the Citizens' Charter, or are so under-valued that they are not thought worth including in such high profile activities.

Strategic context

1.20 An indicator of SMRs' credibility as a permanent tool in environmental conservation is the extent to which their existence has been recognised in organisational and managerial thinking. The Brief asked how far SMRs had gone towards acquiring **Business Plans** or whether there was any other provision for review of their strategic direction. Business planning is likely to be either imposed from above or developed from within as part of a broader historical conservation strategy. Only two SMRs (***Aberdeenshire*** and ***Shetland***) figured explicitly in any form of corporate planning, though another seven are mentioned in Local or Structure Plans. There is hardly any SMR Business Planning as such, perhaps reflecting the generally low level of resources and activity. Formal adoption by the Council has happened in only five cases, despite the opportunity of reorganisation in 1996.

2 System organisation

(Average SMR score = 41%)

Information media - general

2.1 The first SMRs held their material in five blocks of different media, Primary Record Cards, maps, photographic holdings, files with supporting information, and a manual retrieval system. During the 1980s, it became possible to combine the Primary Record Card and the retrieval system on computerised databases, first in flat-file format and later in the more complex and flexible relational format. During the earlier 1990s, it became possible to digitise maps on Geographical Information Systems (GIS) and embed direct links to information stored in the databases. During the later 1990s, storage capacities have continued to increase dramatically; the technology for scanning images and text for the purposes of digital storage and use has also been developing. According to circumstances, some SMRs have been better placed than others to take advantage of a fast-moving situation, but most are in some kind of transition. All, however, seem to be moving towards holding an increasing proportion of their material digitally, which ought to facilitate SMRs outputs to a wide range of customers.

Cartographic

2.2 SMRs are generally equipped with hard-copy modern mapping at the appropriate scales, given the different requirements between urban and rural areas. The transition from paper- or film- based maps marked up in pencil or ink to material on layered GIS systems has begun, but it will be some time before all SMRs have access electronically to a modern map-base at whatever scale they need.

2.3 Other sources are less satisfactory. Only two-thirds of SMRs have access to all historical Ordnance Survey maps, and to copies of historical maps and surveys: nearly all are on paper or film, with hardly any yet scanned. Virtually everyone had access to the Pont / Bleau and Roy surveys.

Photographic

2.4 A question on **colour slides** was asked because they are a standard source of information within an SMR and can be used for talks to schools and other groups. Surprisingly, five out of eighteen

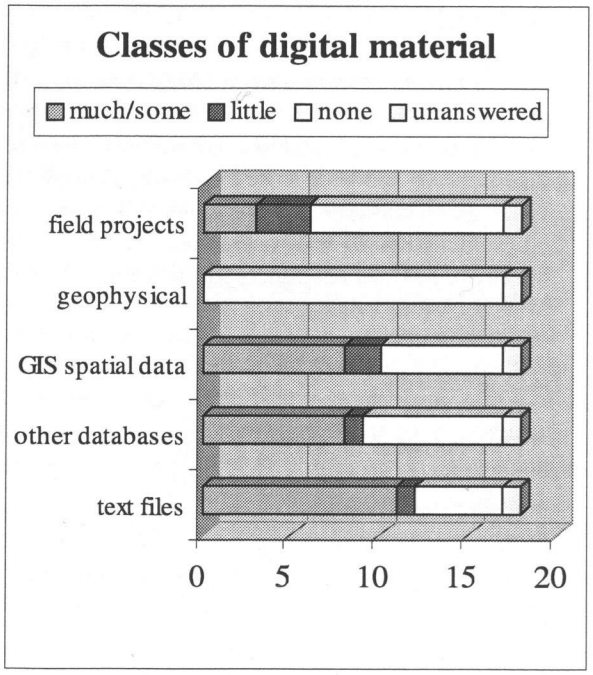
had none. The thirteen collections are variously systematic and in varying states of cross-reference with the main system, largely reflecting the lack of clerical or technical assistance in maintaining and indexing material on the SMR. Examples of good practice are ***Highland***'s slides database linked to the SMR database, and ***Falkirk***'s ability to call upon 30,000 slides in a common museum database.

2.5 **Aerial photography** is a key data source for any SMR except perhaps those covering exclusively urban areas. An indication of holdings was obtained by listing six general sources and asking whether the SMR held an index to relevant material in each (i.e. awareness if not pictures) and whether prints were held and if so how selectively. The sources were RCAHMS NMRS, the Cambridge University collection, post-War RAF cover, locally commissioned vertical coverage of the administrative area, the MLURI 1987-88 cover, and any special programmes. The usefulness of indexes / prints was assessed through the extent to which the SMR had scanned them and generated plots of specific elements identified from the air. Holdings of aerial photography are generally poor, but NMRS and special local programmes are the strongest. The 'none' responses are conspicuous, for Cambridge index / prints 10 / 9, and local administrative area cover index / prints 10 / 8. Sketch plots as a substitute for prints were equally disappointing, with only ten SMRs having 'some'.

2.6 Few SMRs held copies or references to other specialist photographic collections. Eight reported 'none', and a total of only ten collections were spread amongst the remainder.

Digital

2.7 The extent to which the digital revolution had swept across SMRs by 1 August 1998 could be judged from responses to questions about the digital content of holdings in text files, databases other than the main SMR database, spatial data on GIS systems, geophysical survey outputs and field project outputs and 'other'. Responses for all types in quantitative categories were 'much' (12), 'some' (20), 'little' (8), 'none' (56), unanswered (12), and there is clearly still a long way to go. The leaders, at seven responses each, were 'much' spatial data on GIS systems, 'some' text files, and 'some' databases other than the main SMR database. No geophysical survey output was reported.



Primary material

2.8 Received wisdom is that SMRs should not hold original material in the form of artefacts and 'finds', fieldwork project paper archives, or original historical documents, but instead this task belongs to others, namely museums, field units (temporarily) and local authority Archive Offices. The situation in Scotland is clearer than in England; there is a broad consistent approach to ensuring fieldwork project archives go to NMRS with only copies of reports retained, and finds to museums. The only exceptions are those SMRs based in museums where another part of the same institution had the primary role of handling the material.

Publications

2.9 The archaeological knowledge and skills of SMR officers ought to be supported by good reference material, especially in those parts of Scotland where getting access to good libraries is difficult. In the not-too-distant future it may all be available on-line through the Internet, but until then, the existence and extent of an **SMR Library** is an important index of past development and present functionality in depth. The question asked about three categories, namely published reports, periodicals, and standard works. thirteen have a library, but the responses about quality were 'comprehensive' (4), 'selective' (21), 'patchy' (19) and 'none' (2).

SMR Archive

2.10 Fifteen of the eighteen SMRs have an SMR Archive as defined in PAN42, virtually all arranged in box-files by map-sheet or SMR number. Few of these archives appeared to be extensive, as might be expected in situations mostly lacking full-time dedicated SMR staff and without long-running extensive SMR-building survey programmes.

Data structure

2.11 Answers in this section show how the eighteen record systems have existed for varying lengths of time, and were created in different sets of circumstances. Three responses to the question about the set of thirteen core fields employed in the data exchange between SMRs and NMRS c 1989 asked what they were.

2.12 Under **general classifications**, only half the respondents report use of a thesaurus, and little information was provided about their application retrospectively to material acquired before one was adopted. Comments made by some of the 'no' respondents with computer systems indicate the use of automatically controlled terminology for data entry; though these are 'flat' wordlists rather than proper thesauri, they are a step along the road to a thesaurus.

2.13 Given these results it is perhaps unsurprising that only two SMRs (***Dumfries & Galloway*** and ***Highland***) have **standard documented requirements for accepting material for accession** from field survey projects, excavation projects and building recording.

2.14 Attitudes to **information schemes** are changing with the advent of exeGesIS, the MIDAS standard and extensive discussion of the EMA data model; some ARIA members have seen the software demonstrated and participated in related discussions. About half are aware of the principles behind the EMA data model and most about the principle of grouping monuments and their components hierarchically. Only three (***Aberdeenshire & Moray***, ***Angus*** and ***WoSAS***) claimed to have worked through the practical implications of applying these principles to their own systems, and only six expressed an interest in migrating their data to an EMA structure given the resources. Some of the comments were significant or encouraging. One relatively new SMR is "open to ideas". Another expressed a lack of interest in the 'event' concept but also wants to be able to manipulate data in a way that effectively incorporates it. A third noted the tremendous opportunities offered by EMA structures for using SMR information and modelling archaeological landscapes, while observing that they would have to be adopted nationally and locally for the full benefit to be obtained. Overall, awareness and understanding of these issues is likely to increase as more SMRs obtain GIS systems linked to their databases.

Input and Output

2.15 Answers to questions on **inputting procedures** confirm a pressured situation, with only one doing it regularly, and ten when they could find time. Six use students or volunteers under supervision.

2.16 A question was asked about what **units of record** are used, for what purposes, and how they are represented on maps or digitally, whether as points or polygons. The units are land parcel, unit of archaeology or 'monument', and unit of information or 'event'. It was prompted by comments from the English Monuments at Risk Survey (MARS) team that they saw the use of different units of record for inputting as a major obstacle to ease of retrieval across SMRs for comparative data about site management. The table in **Appendix 4** shows the complexity of responses, with some SMRs using more than one type of unit.

2.17 **Retrieval systems** sit between input and output. The way in which data is input depends to some extent on the flexibility of the system receiving it, as does the complexity of questions that can be asked for obtaining outputs. Types of system show transition and under-resourcing at the bottom end. Nine card indices were reported, all except ***Dundee City*** in combination with more sophisticated systems, though ***Perth & Kinross*** could only stretch to optical coincidence cards (possibly the only surviving example of the *genre* in Britain). The future is with the seven who have relational databases linked with GIS. That Scotland has eleven systems incorporating a relational database and only one reported flat-file (though on software capable of relational use) reflects avoidance of a 'Superfile' phase, which their English counterparts enjoyed when it was the only thing available, and endured long after better alternatives became possible. There is encouraging evidence of convergence in types of database, with nine on Access, and only one on each of Dbase4 (***Scottish Borders***) and DataEase (***Stirling***), both hoping to

move to Access. The Access-users include ***Western Isles*** which is pioneering exeGesIS in Scotland.

2.18 **Output** functionality is difficult to assess because there is the risk of confusing data quality, system effectiveness and the amount of time available to the person acting as the SMR officer. A good test of a retrieval system is whether there are any limitations on its ability to deal with 'bespoke' searches for one-off queries. Given the kind of software generally in use, it is not surprising that most saw the only limitations in the data as the time available to query it. For similar reasons, the test of ability to generate index or summary outputs for 'off-the-shelf' use pivoted more on having time than the actual capability.

3 Information content

(Average SMR score = 62%)

3.1 The Brief required the assessment to analyse the content of SMRs for scope or breadth of information, and depth or levels of detail. This was to be done within particular periods, for variable spatial quality and by theme. Again, at this level of investigation, only broad general indications could be sought as to how much ground needs to be made up by the less complete SMRs. For any individual SMR a detailed audit would have to be carried out, in conjunction with assessing what available material still needs inputting.

3.2 Questions were asked about the number of entries on each SMR, the number awaiting entry, and a projected total for accessing what is known at present. **Appendix 4** shows the results in tabular form together with the notional relative size of the SMR area. Sorts (excluding ***Western Isles***) were carried out on all four elements, with approximate figures treated as actuals. There is a close correlation between notional size of area and total of records on the SMR, with only two marginal overlapping cases. No particular conclusions emerged from a sort on numbers of records awaiting entry, though four of the stronger SMRs were unable to provide a numerical quantification.

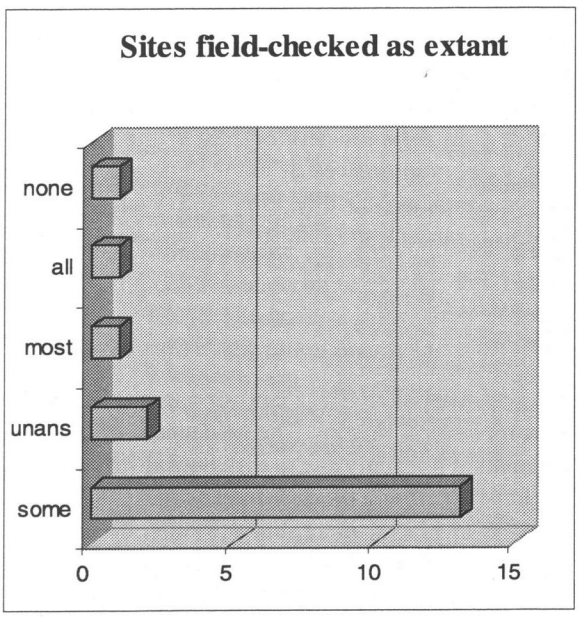
3.3 Responses to the question about patterns of accumulation for records in SMRs brought out some factors of interest. Positive internal restructuring or gaining new posts has obvious benefits, with significant increases reported by ***Highland*** (9,700 entries in 1974 now about 28,000) and ***Orkney*** (significant increase with regularisation of post of Orkney Archaeologist and some continuity in temporary assistance). Local government reorganisation has contributed to several gaps in SMR coverage. Separation of ***Aberdeen City*** from Grampian Region may have been a factor in doubling the number of its records since 1996, but sustainability is uncertain in the face of continuing cuts. Because its area is so small, ***Falkirk*** is able to do what most SMRs cannot yet contemplate, namely selective enhancement of holdings on a thematic basis. ***Shetland*** reports that systematic survey on selected areas produces returns in large quantities. ***Stirling***, one of the oldest SMRs, reports new material originally came from individual entries or through *Discovery and Excavation*. Through the 1980s, this changed towards data from RCAHMS aerial photographic catalogues and pre-afforestation surveys. Through the 1990s, there has been a shift in data sources to private contractors and a considerable increase in quantities of data from environmental assessments associated with both planning and forestry. In ***Fife***, the development of the SMR has been notably influenced by planned data acquisition projects such as Maritime Fife, ASSIS survey, Historic Gardens and Industrial Archaeology.

Space

3.4 Spatial coverage can vary across an SMR area for several reasons. The evidence itself may be distributed unevenly due to differential intensities of settlement through time. It may be more difficult to see sites in places where subsoil is unsuitable for remote detection. Some land may have a history of inaccessibility or of favour by an active local society, or have been investigated more thoroughly due to development pressures. Several of these factors are exacerbated in Scotland by the size and remoteness of some SMR areas, the difficulties of access in the islands, and by coverage of RCAHMS and the historic burghs surveys, themselves varying in quality and intensity depending upon when undertaken. A question sought to identify any parts of the SMR area for which spatial coverage is either consistently higher or more detailed, or lower but in principle remediable. Only ***Falkirk*** felt there were no such areas, while eleven were in the 'higher and lower' category. Some details are given with the selective sketches of individual SMRs in **Appendix 5**.

3.5 **Verification of survival** relates to spatial coverage. A question asked what proportion of sites

or monuments entered on the SMR as visible and extant had been satisfactorily field-checked. Thirteen out of eighteen could do no better than 'some'. ***Falkirk*** was the only 'all', and for most respondents, checking was unable to go any further than on an 'as needed' casework-driven approach. ***West Lothian*** found significant discrepancies between what was on their recently supplied database and what casework revealed on the ground, an inevitable drawback of an essentially desk-based system without professional staffing and reliant upon information collected some time ago by NMRS. ***WoSAS*** commented that some checking in some areas was being achieved by surveys related to specific types of development, such as open-cast mining and wind-farms. However, a recent quantification of last visiting for field monuments in three of its Council areas came out with an average of the year 1968.



Time

3.6 Most SMRs seem to have near-present cut-off dates for data collection, going well into the 20th century, whether sharp or tapering. The influence of the Defence of Britain project is clear in the number that come up to 1945.

Subject

3.7 This was tackled by asking SMRs whether they record data (in practice rather than in principle) on 22 listed topics. All might be expected on any well-stocked SMR, apart from maritime archaeology in inland areas and essentially rural topics like historic parks and gardens and historic landscapes in built-up urban areas. Totalling responses as overall percentages gave 'all' (31%), 'some' (44%), 'none' (23%) and unanswered (2%). By individual subjects, the top five scores for 'all' were scheduled ancient monuments (18), important unscheduled Historic Scotland non-statutory monuments (16), stray finds / artefact scatters (13), historic towns as entities (11), and registered historic parks and gardens. The top five scores for 'none' were field names (14), off-shore maritime archaeology (10), unregistered historic parks and gardens (9), historical ecology (9), and urban deposits tying with place names at (8). Apart from scheduled and important unscheduled ancient monuments, the highest scores generally were in 'some', with important unlisted buildings in use, inter-tidal maritime archaeology and industrial archaeology each with (15). The large proportion of responses in the 'some' category shows many record systems not yet succeeding in achieving full coverage of their areas, though interestingly the English overall percentage was 11 points higher at 55%.

Process

3.8 Most SMRs retain documentation on conservation - 16, planning history - 17, and previous interpretations - 16.

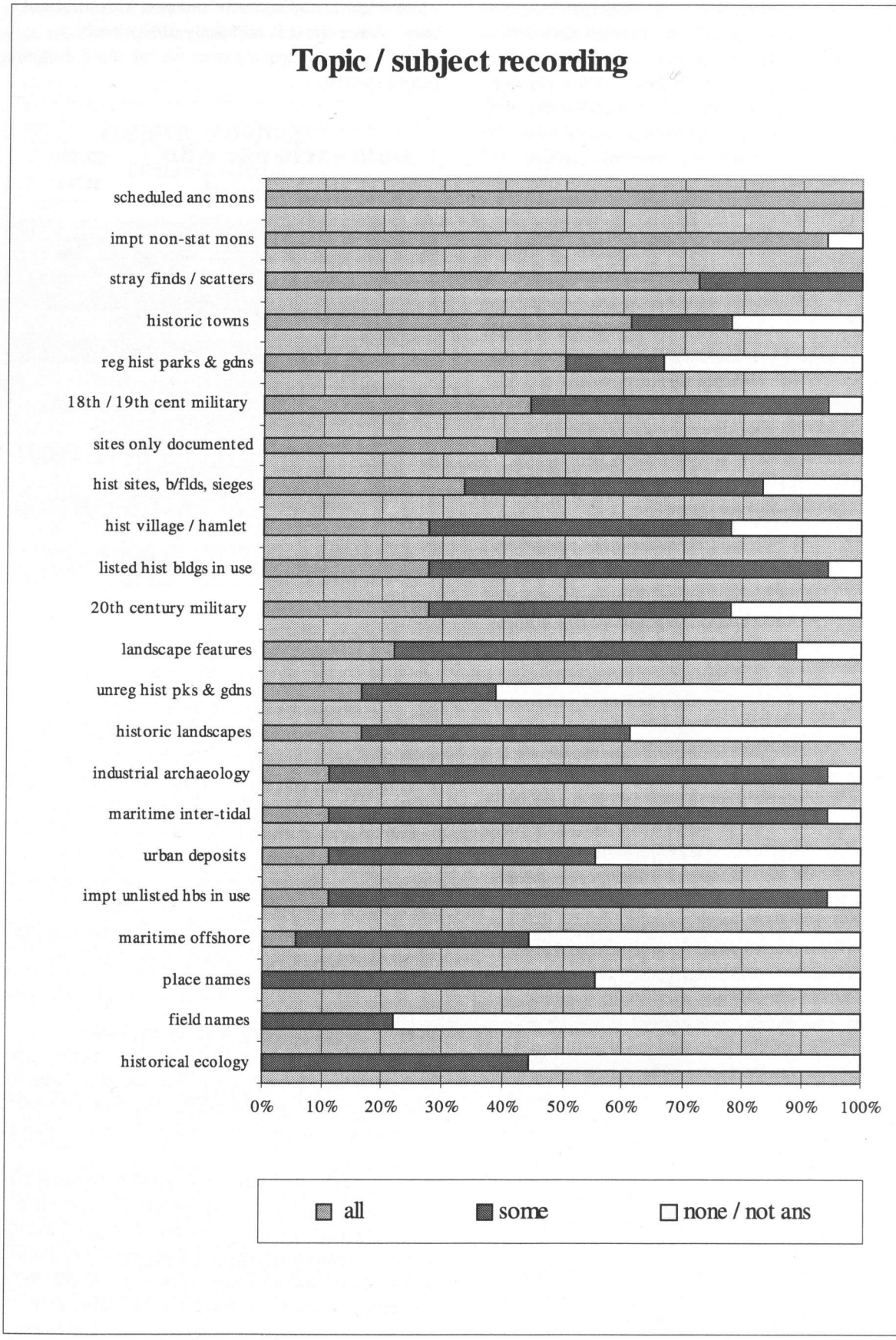
Detail

3.9 It was not practicable to undertake any intensive analysis by looking at samples of records against a set of standards. Depth of detail therefore had to be approached indirectly. SMRs were asked to estimate the proportions of records that could be easily retrieved under three progressively more detailed categories, defined as:

(a) extensive minimal: basic field index key-words only: name-subject-date-location: no text

(b) extensive comprehensive: basic field index key-words only: core fields or own selection consistently applied + a text summary

(c) intensive systematic: basic fields index key-words + references to available data from general periodical searches and other standard local and national sources + a text summary.


Topic / subject recording
scheduled anc mons
impt non-stat mons
stray finds / scatters
historic towns
reg hist parks & gdns
18th / 19th cent military
sites only documented
hist sites, b/flds, sieges
hist village / hamlet
listed hist bldgs in use
20th century military
landscape features
unreg hist pks & gdns
historic landscapes
industrial archaeology
maritime inter-tidal
urban deposits
impt unlisted hbs in use
maritime offshore
place names
field names
historical ecology
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
all
some
none / not ans

3.10 Responses were sought under the categories of 'all', 'most' and 'some', and whether retrieval would be digital from a database, manual from back-up files, or a combination of the two. This question was predicated on the thesis that record systems with a long developmental history, whose qualitative fluctuations had not been smoothed by a recent recasting, would find it more difficult to deliver 'all' or 'most' at the greater levels of detail. It was also another test of output capabilities and types of retrieval system.

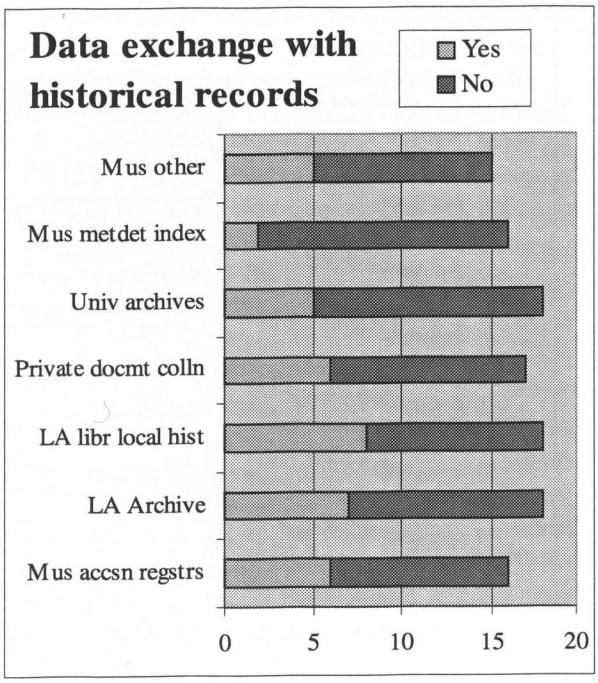
3.11 The total of those able to retrieve 'all' dropped from eleven for extensive minimal through ten for extensive comprehensive to six at intensive systematic. This confirms anecdotal evidence that depth of detail is an issue, capable of more precise quantification through exercises such as the RCHME Data Audits, and resolvable through familiar measures such as recasting, backlog inputting and recording standards.

4 System linkages

(Average SMR score = 42%)

Local systems

4.1 The structure of Unitary Authorities in Scotland has its own distinctive set of problems about contacts and interrelationships between local SMRs (including record systems seeking to develop that role). There is none of the overlap produced by the complexities of the English structure, part two-tier, part Unitary and with National Parks. But there are some SMRs - ***Aberdeen City*** and ***Falkirk*** - that have recently obtained full 'independence' having previously been the equivalent of a 'district' record system within a wider area covered by a Regional SMR. Also, there are some SMRs which by agreement have held on to parts of a former wider Regional role and provide a service to what is now a neighbour - ***Aberdeenshire*** to Moray, and ***Stirling*** to Clackmannanshire. The extreme example is ***WoSAS***' coverage of eleven Authorities formerly in Strathclyde Region. Then there are the gaps made by those unwilling or unable to provide or pay for an SMR service, partial in the case of ***Perth & Kinross***, ***West Lothian*** and ***Dundee***, and total in the case of East Dunbartonshire and Midlothian. Simply in terms of improving understanding about landscape and context in an area wider than current administrative boundaries, contacts between neighbours ought to be better than the returns showed - four with formal contacts and two with informal ones. However, it is obviously difficult when resources are inadequate even for the main domestic record system.

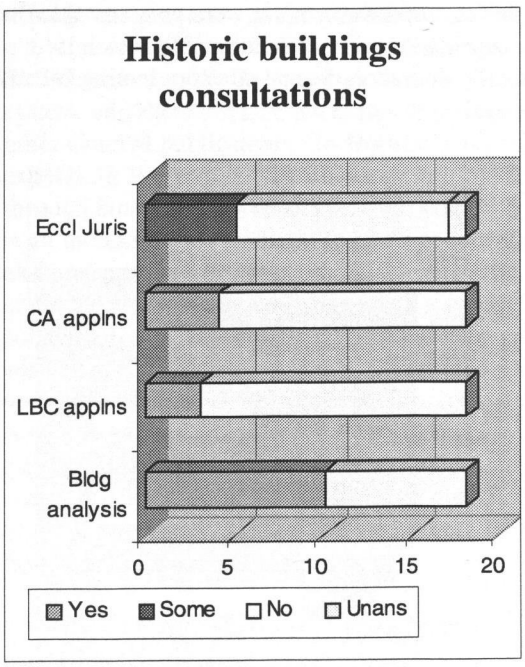


4.2 **Museums** ought to be a major source of information for any system claiming the role of definitive record system for the local historic environment. Yet, for one reason or another, ten SMRs have had no data exchange with accession registers, and fourteen have none with indexes of metal detector finds. There may be explanations, such as an inability to progress rationalisation and digitisation of the former, or confidentiality conditions attached to the latter (if they exist), but the lack of contact with physically relatively close systems is disturbing.

4.3 **Documentary sources** are equally disappointing. Only seven SMRs have exchanged data with their local Archive Service, eight with local library local history collections, five with university archives and six with private documentary archives.

4.4 Links with **archaeological field units** are more stable than in England where the disruptive effects of market-based commercial competition upon a research-based activity are more deeply engrained. All except ***Dundee*** require reports on projects to be submitted to the SMR, and it happens always in fourteen cases. Non-Scottish Units worked in only six SMR areas during 1997-98, and several were

university-based teams. Only in seven cases were more than seven different Units at work in that period.



4.5 A question was asked about the extent to which SMRs have a direct role for **historic buildings** (i.e. providing and receiving information) analogous to that in advising upon archaeologically sensitive NPPG5 applications. Ten consider they have a direct role in archaeological buildings analysis and recording, but only three and four respectively have any in relation to applications affecting listed buildings and Conservation Areas. This partly reflects a poor coverage of Conservation Officers in Scottish Councils. Where they do exist, one comment noted a lack of archaeological awareness and another an unwillingness to negotiate the conservation case when dealing with applications.

4.6 A similar question was asked about the SMR role in relation to systems for exempt ecclesiastical buildings. One comment described the situation as a "disgrace", and the 'never' responses to questions about consultation and documentation deposit ran at twelve and thirteen respectively. However. Scotland's legacy of medieval churches is not as rich as England's, and the first task in further investigating the scope of the problem would be to gather some hard factual information about the nature of this particular historical resource.

4.7 SMRs were asked whether they had any special arrangements for information exchange with other organisations like local history or archaeological societies. Seven referred to several groups or societies, three mainly to a single one, three to students or universities, and for five not at all. With the question asked more sharply, as systematic rather than special arrangements, four said Yes and twelve No. Occasional references to obviously long-established local, sometimes county, archaeological societies, suggest that the survival and vigour of these could usefully be mapped, perhaps in conjunction with CSA. One commented that a helpful society was becoming less active simply because its members were ageing and not being supplemented with new younger colleagues.

4.8 Only ten SMRs have any kind of contact or arrangement with **other environmental records**, including databases for general planning purposes, countryside management, natural history and ecology, and Forestry Commission purposes. Four are GIS-related, to other layers. Four are special local arrangements including ***Fife***'s evolving relationship with Fife Nature, ***Perth & Kinross***' relationship with the museum-based Natural Sciences section and Biological Records Centre, and ***Shetland***'s with a similar centre being established in the Amenity Trust.

National Organisations

4.9 Data exchange and other contacts with national organisations were covered in two questions. A specific question about a 'start-up' data exchange with RCAHMS / NMRS seems to have been outside the experience or awareness of most respondents; other contacts referred to difficulties about downloading or otherwise *ad hoc* arrangements. Only six cited contacts with the National Museum of Scotland (NMS), and these were *ad hoc*. Those with Historic Scotland (HS) ranged between good to patchy over Field Monument Wardens (FMW) reports, but were less good on information about Scheduled Ancient Monuments. One response reported that HS FMW reports were finally received after eight years' wait, but without any documentation or explanation. Four mentioned positive contacts with the National Trust of Scotland (NTS), but most exchange seems to be only manual. Stretched local organisations undoubtedly face difficulties over matters of liaison and exchange. Digital transfer can often be a difficult and time-consuming exercise due to lack of staff time and inadequate system documentation. Work is needed on methodologies and schedules for transfers of aerial photographic transcriptions.

5 Users

(Average SMR score = 51%)

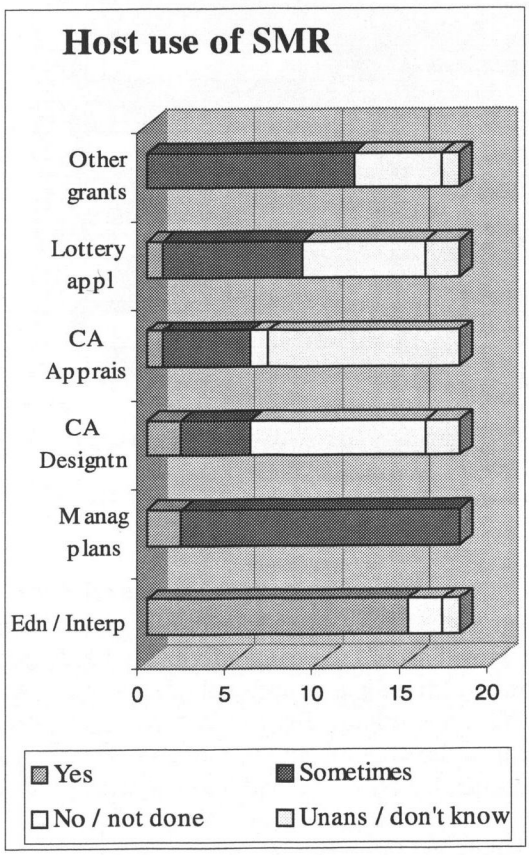
Volumes and types of users

5.1 These were difficult to assess, because only six SMRs kept any kind of register, and only four of them could provide a fully compiled table of volumes of users, nearly all those who employ a Users Declaration Form. There was insufficient information to extrapolate an overall Scottish position with regard to types of user, though planning and conservation management clearly dominate education and community outreach.

5.2 Seventeen SMRs reported that the development control teams in their area sought and accepted advice based upon their material, though only fourteen said it covered both control and plan matters fully. Only six supply map-based constraint areas or archaeological trigger maps. The reasons why twelve do not supply them include two cases of insufficient resources, two where the area is sufficiently small or the Council Archaeologist has sufficient control not to need to do so, and two where they are not supplied on principle. The latter is justified by fear of probable misuse by generalist planners considering themselves capable of dealing with archaeological matters. There are various problems of communication with other organisations such as the Forestry Commission, the Water Authority, electricity, telecom and gas suppliers.

5.3 Matters are less satisfactory over devising management plans for sites and areas. Only two SMRs are always consulted and only two are given generated documentation. For the rest it is 'sometimes', with three never receiving any generated documentation. The situation is hard to judge for Conservation Areas because many were designated before SMRs came into existence. But the high level of uncertainty or negative response suggests that official guidance about their archaeological dimensions and their potential as a meeting place for history, architecture and archaeology has yet to be fully appreciated by those responsible for them. There is irony in the situation of ***West Lothian***, where data on the SMR will be used for Conservation Area Appraisals because it is the Conservation Officer who is trying to promote an archaeological capability in the Planning Department.

5.4 A similar air of uncertainty hangs over the use of SMRs in preparing or assessing grant applications. Only one SMR (***Highland***) was confident that consultation had happened over all **Lottery** applications, the remainder being split between 'some' and 'none'. A question on **other grants schemes** produced twelve 'sometimes' responses, but few examples were given outside the Countryside Premium Scheme (CPS) which is generally on a more formal advisory footing because it is paid.



User access

5.5 Only 2 SMRs have an informal policy identifying specific sites or monuments as sensitive. ***Shetland*** considers Viking graves are particularly vulnerable, and ***Western Isles*** would screen unknown people interested in vulnerable sites. Eight SMRs charge for access, over CPS applications and for commercial consultants, and have a document explaining charges.

Outreach

5.6 The quality of access people can have to SMRs, should they be aware of their existence, is one matter; the capacity of SMRs to reach out to people

who may well be unaware of them is another. Existing provision is seriously under-developed. On-line access to the SMR from a public library does not exist in fifteen cases, is planned in two, and operates through the provision of disks in ***Shetland***. There are a few encouraging initiatives. In ***Aberdeenshire***, the SMR features on the Archaeolink Park ArchaeoQuest system, and there are references in site leaflets and in other Council publications. In ***Highland***, outreach is expanding electronically, with a web site, and links through email and fax to local service points. There is an increasing involvement in heritage education and interpretation services, notably through the annual Highland Archaeology Weeks, a specific collaboration of societies, museums and local groups with over 120 events in 1998. The Highland SMR is sensitive to the needs for local access to its material in such a large area. It provides local explanations, making links with museum, archive and countryside ranger services, but it is also conscious of difficulties in providing a good level of services to areas as distant from Inverness as Caithness.

5.7 Answers to questions about **heritage education and interpretation services** are encouraging. Only two reported that they were not used by them, though one of them is ***WoSAS***, prevented by financial constraints from doing more than the occasional piece of non-planning work, even though serving a third of all Scottish Councils.

5.8 A question on **future provision** asked about proposals under active consideration and invited imaginative ideas about other possibilities. Many answers were anecdotal and the whole response is difficult to analyse. The most frequently mentioned area (nine proposals) was greater use of information technology to go out to people, through the use of Web pages or the creation of networks. Next, at six, were proposals working through libraries or museums. Examples of proposals include:
Dumfries & Galloway: recent interest in Christian Heritage also gives scope for a combined interpretation and conservation project.
City of Edinburgh, East Lothian: the creation of an integrated local authority one-stop-shop archive provision.
Fife: a proposal to create a Fife Heritage Resource Centre (archaeology, Fife Nature and others) in a 17th century building in Kirkcaldy, owned by the Scottish Historic Buildings Trust
Scottish Borders: a more interesting tool for the user including post-medieval landscapes digitised from historical maps, with an enhanced historical gazetteer providing information about place-names, land holding, charted historical development (eg toll roads, railways development, military campaigns etc.)
Aberdeen City: images and data about each site presented in SCRAN-like format on the Internet with links to all other archives - Art Gallery, libraries, archives, RCAHMS etc
Aberdeenshire: school catchment - based electronic education packs (and hard copy versions); electronic bulletin boards for schools and communities; interlinking SMRs / NMRS and other environmental / archival systems throughout Scotland and beyond
Highland: greater involvement in communication with voluntary groups and more involvement of volunteers in SMR enhancement.
Shetland: Ambitions for future provision in new offices include public access at a dedicated terminal perhaps together with biological records. Also survey teams to carry out data capture and field validating of sites not visited by an archaeologist in recent times, also establishing ease of access / parking etc.

6 Data / quality assurance

(Average SMR score = 40%)

Overall state of development

6.1 Three questions were asked as tests of evidence offered by SMRs about their current state of development. A basic one was whether they had fully absorbed the record cards of the former Ordnance Survey Archaeology Division, of which thirteen are confident, with the three 'uncertain' unclear about what had happened before their times. Related to this was a question as to whether they had absorbed the material from the start-up data-exchange with RCAHMS, to which only six could return a positive answer, whilst five had done it partially only and two were uncertain.

6.2 Questions were asked about **whole-area surveys** done as part of basic SMR-building. Responses were patchy, with only about one-third of SMRs able to identify any.
Aberdeenshire: several surveys, notably annual aerial reconnaissance since 1977.
Scottish Borders: a basic desk / library-based sweep carried out for historical information relating to each parish, standing alone as a supporting document to the database. RCAHMS have produced a large-scale landscape characterisation for Forestry Commission land.

WoSAS: documentary research and non-intensive fieldwork on historic settlement areas including all the significant burghs. Some areas of the 1st edition 6" map have been reviewed for roofless structures and industrial monuments.

Fife: The main whole-area surveys have been:

- Maritime Survey - some integration of results into the SMR is still required
- Historic Gardens / Designed Landscapes survey - fully integrated
- Historic Landscape Character Assessments - two pilot areas, results to be integrated
- ASSIS West - survey data to be integrated.

East Lothian: Very little apart from a coastal survey.

Orkney: systematic desk and fieldwork surveys done by Raymond Lamb for the north isles in the late 70s and early 80s ('RCAHMS lists') now fully accessed to the SMR.

Shetland: Whole-area SMR building surveys are confined to total surveys of selected areas and field visiting programme for known sites.

Highland: RCAHMS' FESP is a good starting point for medieval and post-medieval settlement information. The Non-Statutory Register enhances SMR entries, and the Highland Council's Maritime SMR identified 300 locatable wrecks in a desk-based trawl.

Existing Records and Unaccessed Material

6.3 A question was asked about how much source material is waiting to be fully recorded in the SMR, and how it breaks down into

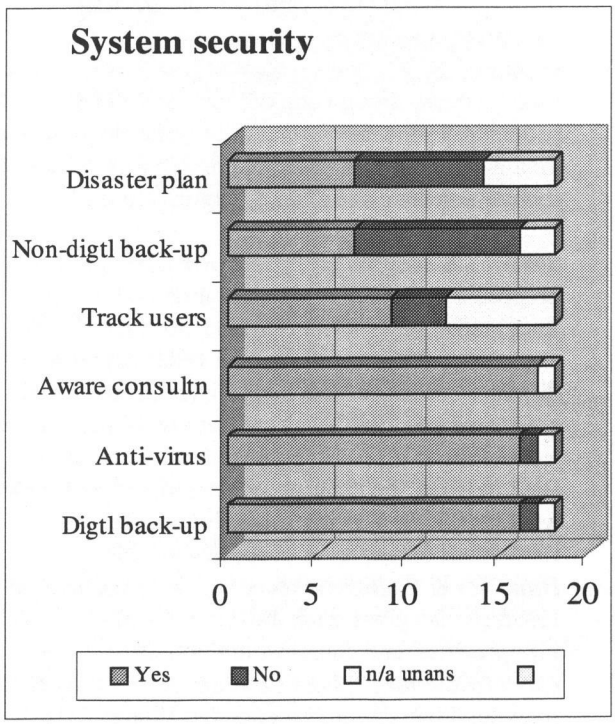
- *developmental*, existing material that ought to be in any self-respecting SMR
- *operational*, accumulated through casework etc. during the life of the SMR
- *migrational*, created by the need to change software and / or impose new data standards / structures.

6.4 Only eleven of eighteen were able to answer this question, and only three of them could offer costs as well as time. Thus any attempt to define a global cost is even more fraught with difficulty than in England where a final figure of nearly £3m (£2,986,480) was obtained through a series of extrapolations of increasing unreliability. The three that did include costings represent about a third of the total time estimated, so a proportional increase of them gives a total of £176,156 for eleven record systems. Extrapolation arithmetically to eighteen record systems gives £288,255, but on the assumption that those who did not reply were the weakest, that figure is likely to be a minimum. eighteen record systems attracting a cost at the level of the 75 English ones would give a total of £716,755.

6.5 Such extrapolations show the unwisdom of relying upon these figures for forward planning. Other relevant issues, such as what constitutes 'backlog' and what needs to be put on a local SMR, are broached in the **Discussion** section of this report.

System security

6.6 This was assessed in terms of **unauthorised access** by those who might wish to misuse the information. Answers to the question on tracking users of the system split between half who could track users, a sixth who could not, and a third who did not answer. Possession of a database and location in open-plan offices may be confusing factors. However, uncontrolled consultation was not possible in any record system.



6.7 The other aspect of system security assessed was **information technology**. Fifteen SMRs have anti-virus procedures, but only seven have a disaster recovery plan. These go beyond digital matters, and deserve guidance from RCAHMS, perhaps drawing upon the experience of museums.

6.8 Good procedures for **digital back-up and security copying** are essential in permanent record systems. On the digital question, sixteen reported a variety of generally satisfactory arrangements. Security copying is seriously deficient, nine lack arrangements altogether, and seven have only some.

6.9 Over **copyright issues**, nine had experienced difficulties in acquiring or using data for / on their SMR. Interviews suggested crown copyright gave the greatest difficulties.

Quality control

6.10 Indicators of **quality control** were sought in a question on data validation. Maintaining consistent procedures for validating data is difficult for someone who is effectively a part-time SMR Officer after the planning work has been done: only four could claim they are in place. Clearly practice varies widely, and gets patchy beyond the use of keyword lists / glossary pick-lists / menu-driven fields.

6.11 The lack of **technical manuals** and **written recording policies and procedures** is another indicator of under-staffing and under-development. Seven and twelve had none respectively, with four and three regarding what they had as out of date.

7 Each SMR and all SMRs

(Average SMR score = 47%)

7.1 This assessment concludes by bringing together the results for all six sets of functions, to give an overall picture. The scope of the questionnaire approximates to the standard of a mature, fully stocked SMR providing a full range of services, so quantification of responses can indicate how far each and all SMRs have progressed towards meeting that standard. It is however a relatively crude exercise at a high level of generality, a rapid assessment unable to deliver the precision and confidence that would flow from more detailed investigations. The tables below must be seen in the light of the following notes and the underlying methodology described in **Appendix 3**.

7.2 The scores for each SMR depend upon several factors, including how thoroughly questionnaires were completed; scorable questions not answered (for whatever reason) were given a '0'. No weighting was given for size of area covered. SMRs that concentrate entirely on serving the planning function will be penalised by this method (but see 7.10 below). The topic of 'backlogs' in data inputting needs more careful definition before it can be safely used as a quantified qualitative measure, so the scores do not fully reflect the completeness of SMRs, though answers to questions about information content give some help.

7.3 It must also be stressed that this assessment relates to 1 August 1998. Many SMRs are at different stages of development; past and present fortunes and future prospects vary, as will be apparent from **Appendix 5**. The tables cannot reflect potential for development from future programmes.

7.4 The global score for all SMRs is 47%, with a range of 40% to 62% between the six aspects of functionality. The overall picture shows a sufficient number of SMRs established to show what is possible given a reasonable level of resources and organisational stability. However, too many are on or below the edge of viability, and there is significant ground to be made up by virtually all SMRs if they are to be effective for community purposes as well as giving planning advice. There are continuing gaps in a putative Scotland-wide network and there is the risk that they may increase.

7.5 Some of the placings in bands deserve comment. ***Falkirk*** scored well because the area is small and the service, though over-stretched, is well integrated into the main museum. ***Perth & Kinross*** scored much better than the other two non-SMRs because certain (non-planning) aspects of functionality appeared to be well up to the general standard. ***Western Isles*** inevitably scored low because the SMR was only a few months old. In any repeated exercise, the investment being put into it (and into the revival of the ***Orkney*** SMR) ought to show significantly higher scores.

7.6 Breaking that score down by the six sections of the questionnaire gives this ranking.

Rank	Section	%
1	Information content	62
2	Users	51
3	Management context	46
4	System linkages	42
5	System organisation	41
6	Data / quality assurance	40
	All sections	**47**

7.7 **Table 1** shows total scores for each SMR, presented alphabetically within the same 10-point bands used for the English SMRs, for ease of comparison. Such generalised presentation is appropriate for an exercise that tries to deal with a number of different situations in a similar way, and also helps avoid distraction by a misleading appearance of numerical precision. Taking the raw figures as a group, it is notable that:

- thirteen of eighteen fall within the range 39% - 58%, with eight in the decade 45% - 54%
- Fifteen of eighteen scored below 60%, and four below 40%.

7.8 Comparisons with the much larger group of 75 SMRs studied in England are instructive. They are also evidence of the crudity of the exercise, though are not felt to invalidate it within its own terms of reference. The range appears to be the same, between bands G-H (74% - 65%) and Q - R (24% - 15%), and the averages are 47% for Scotland as against 50% for England. But it must be asked how top-tranche ***Aberdeenshire*** might fare in a more direct comparison with Northamptonshire, and ***Falkirk*** with Greater London. It must also be noted that, apart from Southampton City which may approximate to ***Dundee City*** and ***West Lothian***, the English stragglers reflected technical factors as well as actual weaknesses. The essential difference between the two sets of SMRs is that England has a much larger proportion in band I-J (64% - 55%), 28% as against Scotland's 11%.

7.9 **Table 2** shows performance in each of the six sections, based on five-point bands expressed as letters. These detailed scores are more vulnerable to distortion by local factors.

7.10 Only a few of the scorings have any significant weighting, so this exercise is vulnerable to the criticism that, by incorporating an assumption of multi-functionality, it does not adequately reflect the performance of Scotland's SMRs in their primary role as instruments for local planning and conservation management. The criticism gains some weight from relative scorings felt to be anomalous on the basis of impressionistic but knowledgeable experience. In the light of these concerns, the scores were recalculated, double-weighting 35 (out of 140) questions dealing most directly with planning matters or closely related aspects of functionality. The revised scores averaged 49%, an increase of two percentage points, exceeded individually by ***WoSAS*** (+4), ***Shetland*** (+3) and ***Stirling*** (+4) as might be expected, but perhaps more surprisingly also the ***City of Edinburgh*** (+4) and ***East Lothian*** (+5). Relatively, the top 5 places were unchanged; all other changes were one place or less, apart from ***Dumfries & Galloway*** (down 3 on an unaltered score) and the ***City of Edinburgh*** (up 3). In selecting the scores for double-weighting it proved difficult to separate aspects of functionality that directly support planning work from those with wider relevance. An assessment of Scottish SMRs solely for their planning role would also need to include users more directly.

Bands used in Tables 1 & 2 below

A	100	H	65 - 69	O	30 - 34
B	95 - 99	I	60 - 64	P	25 - 29
C	90 - 94	J	55 - 59	Q	20 - 24
D	85 - 89	K	50 - 54	R	15 - 19
E	80 - 84	L	45 - 49	S	10 - 14
F	75 - 79	M	40 - 44	T	5 - 9
G	70 - 74	N	35 - 39	U	0 - 4

Table 1

10% bands (cross-decadal) in relation to attainable Standard (100%)

As part of a 'rapid assessment', this is a relatively crude exercise and in no sense a 'league table'. It should be read in conjunction with the comments above and in **Appendix 3**. No special weighting has been applied for size of area covered, density of field evidence, pressure of development, or relative effectiveness of service to planning in comparison with other functions.

Band	**Range**	**SMRs**		
		No	*%*	
A - B	100% - 95%	-	-	None
C - D	94% - 85%	-	-	None
E - F	84% - 75%	-	-	None
G - H	74% - 65%	2	*11*	Aberdeenshire & Moray, Falkirk
I - J	64% - 55%	2	*11*	Fife, Highland
K - L	54% - 45%	8	*44*	Angus, Dumfries & Galloway, City of Edinburgh, *Perth & Kinross**, Scottish Borders, Shetland, Stirling, WoSAS
M - N	44% - 35%	3	*17*	Aberdeen City, East Lothian, Orkney Islands
O - P	34% - 25%	1	*6*	Western Isles
Q - R	24% - 15%	2	*11*	*Dundee City*, West Lothian*
S - T	14% - 5%	-	-	None
	TOTALS	**18**	***100***	

* not visited

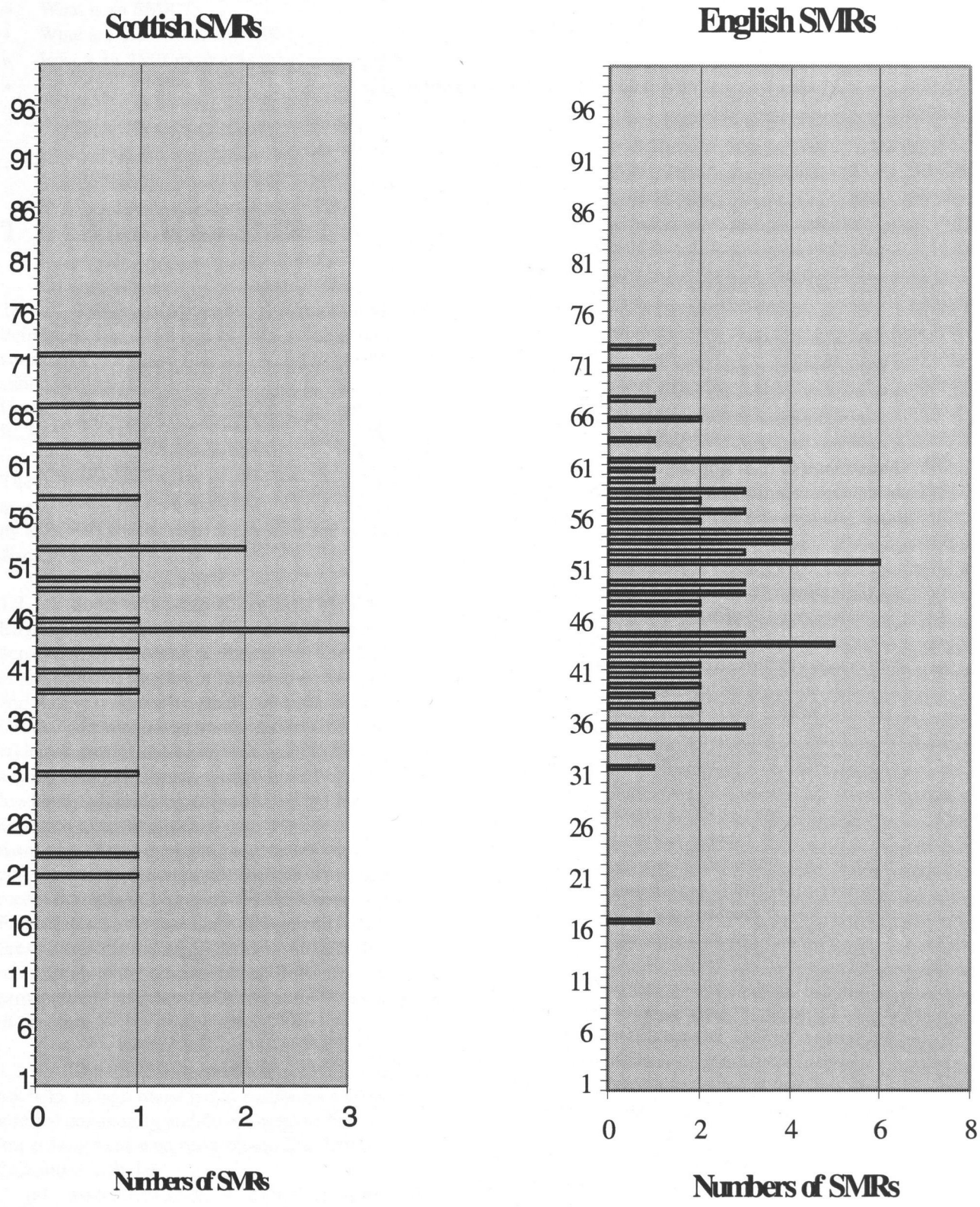
not a full SMR in terms of archaeological management and / or full role in advising planning process

The 'planning-weighted' scoring (para 7.10 above) would have put ***Highland*** up into Group G-H, ***Shetland*** and ***WoSAS*** up into Group I-J, ***Aberdeen City***, ***Orkney Islands*** and ***East Lothian*** up into Group K-L.

Table 2
Attainment of individual SMRs by bands for each section of the questionnaire

		1	2	3	4	5	6
QUESTIONNAIRE SECTIONS		**Man Contxt**	**Sys Org**	**Info Cont**	**Sys Links**	**Users**	**Dat Sys QA**
COUNCIL / HOST	**Type**						
Aberdeen City	post-1996	K	M	G	O	M	R
Aberdeenshire & Moray	fed SMR	E	G	G	H	G	G
Angus	non-local	M	M	H	R	K	J
Dumfries & Galloway	SMR	K	L	L	O	K	L
Dundee City	non-SMR	P	R	Q	Q	M	S
East Lothian	non-local	P	N	K	P	J	N
City of Edinburgh	post-1996	L	M	K	N	J	N
Falkirk	post-1996	H	J	E	H	J	G
Fife	SMR	L	J	H	K	G	L
Highland	SMR	I	I	E	K	F	K
Orkney Islands	SMR	K	P	H	N	N	N
Perth & Kinross	non-SMR	L	N	G	G	L	P
Scottish Borders	SMR	O	K	H	M	K	O
Shetland	SMR	L	M	I	K	I	L
Stirling	fed SMR	L	M	H	K	N	K
West Lothian	non-SMR	Q	O	N	Q	T	R
Western Isles	new SMR	N	R	J	Q	L	S
WoSAS	fed SMR	L	I	G	K	O	J

Comparison of total % scores for Scottish and English SMRs



C Discussion

Drawing upon the assessment (which was based upon the questionnaire and interviews) and other material, this section considers four sets of inter-related questions.

- What is an SMR ?
- What are the uses of an SMR ?
- How is an SMR most effectively managed ?
- How should SMRs develop in the future, by themselves and in conjunction with other systems ?

1 What is an SMR ?

1.1 The Brief (**Appendix 1**) required that "the definition of an SMR and its ideal scope should be considered". It noted that ARIA and RCAHMS subscribe generally to the principles in the Cooperation Statement for England between RCHME, ALGAO, and EH (1998), though "there is not yet an agreed statement ... tailored for Scotland". The definitions accepted in a recently completed assessment of English SMRs (for ALGAO sponsored by RCHME) are the basis for this section of the discussion.

1.2 Some of the difficulties faced by SMRs in England and Scotland have arisen from their perception by others as exclusively archaeological instruments, of interest primarily to archaeologists and thus with a relative small constituency of support. Official documentation has tended to reinforce this archaeological exclusiveness through the use of separate guidance notes, though more recently there has been an increasing emphasis upon a holistic approach to environmental conservation, management and explanation. Nonetheless, compartmentalisation is still evident, and there is a recent example in Historic Scotland's paper, 'State-Funded Rescue Archaeology in Scotland - Past, Present and Future' (1997) which shows little recognition of the crucial role of SMRs as essential providers and recipients of information at each end of the process.

1.3 The title 'Sites and Monuments Record' does not help, though many feel it reinforces a sense of internal community and do not want to risk imperilling hard-won recognition. Particular difficulties include:

(a) association of the concept of *monument* with an antiquarian definition of the discipline

(b) *sites and monuments* seen as specifics, exclusive of, and at a different level from, the wider landscape framework for understanding the past

(c) the apparent exclusion of historic buildings in use, even though their proper conservation involves archaeological considerations including recording and analysis of upstanding fabric

(d) a more analytical approach to information handling, with the 'event-monument-archive' data model giving 'monument' a new meaning within data structures.

1.4 SMRs should be recognised generically as 'Local Environmental Information Management Systems' (LEIMS), a term first proposed in the English SMR Assessment. The recently coined term HEIR (Historic Environment Information Resource) seems to be accepted by the major British interests in all aspects of the historic environment, and completes a three-tier set of LEIMS, HEIR and SMR. Thus

- an SMR is an HEIR and a LEIMS
- not all HEIRs are LEIMS (some are subject-based or national in scope)
- not all LEIMS are HEIRs (some are concerned with other than historical matters). Viewing SMRs in this way helps focus on the strategic issues of scope, structure and functions.

1.5 The following single-sentence high-level definition ought to be generally applicable in all three mainland countries. It sees an SMR as *a definitive permanent general record of the local historic environment in its national context, publicly and professionally maintained, whose data is accessible and retrievable for a wide range of purposes.* It has ten aspects that include generally applicable core principles, together with more detailed working parameters, that can be flexibly applied to individual

countries and record systems. Each of these ten aspects requires some definition and qualification.

1.5.1 ***definitive***

An SMR should be the reliable and authoritative source of information for its locality, through the material it holds directly, and the access it can provide to material held elsewhere. It should be generally accepted by all conservation interests that new information ought to be automatically communicated to or gathered by the SMR, in full or as index data.

1.5.2 ***permanent***

Permanence is essential for an instrument of sustainable conservation intended to preserve and pass on information about elements and aspects of the historic environment in parallel with, or in place of, the actual survivals themselves. Put in terms of SMR functions, their contents must survive, if necessary by transfer between systems, in the event of changes in structure or scope.

1.5.3 ***general record of the historic environment***

The Brief indicated that the scope of an SMR might include "archaeology, historic buildings, historic landscapes and historic sites, with chronological coverage from earliest times to the present", and where there is a coastline, maritime records. All SMRs are general local record systems, unlike special records of, for example, Pictish stones (subject) or the National Trust of Scotland (selected land and buildings). As such, their scope should be all-inclusive as to subject and period, certainly for all archaeological matters and preferably for all aspects of the historic environment. As a first step in that direction, each SMR should define and review its policy for data collection, making explicit what it includes and excludes, temporally and in terms of subject. Within its defined policy, each SMR ought also to be able to assemble information from data about 'events' or other elements within a 'nested' hierarchy of scales:

- the human-altered landscape and its patterns of settlement
- particular settlements and organised landscapes
- sites of past human activity and historic buildings continuing in use
- artefacts and ecofacts.

1.5.4 ***local***

It is an 'agreed principle' that one SMR should be recognised in each locality as having unique responsibility for ensuring the availability of information at local level and supporting input into the planning system. The area covered by each SMR must be defined and agreed. One of the key differences between Scotland and England is that the former has several cases of one SMR covering more than one Unitary Council, while the latter has several cases of more than one record system operating in one set of two-tier Councils. In both cases, though, the SMR ought to be the system that provides cover for the defined local area in terms of the core functions and in a way that is easily intelligible to users.

1.5.5 ***in its national context***

Many of the administrative areas responsible for SMRs are of arbitrary significance for most of past history and all prehistory. The operation of SMRs should also be viewed on a national scale through potential links and partnerships, with each other and with NMRS. They should contribute to enquiries into issues that are distinctively regional within Scotland, Scottish, and of wider significance for the history of the British Isles.

1.5.6 ***publicly***

Because environmental management is the responsibility of everyone, it should be co-ordinated through publicly owned structures and systems. SMRs should be maintained by the public organisations of local government, so that information can be as close as possible to the processes which it supports. In the event that a local authority contracts out the provision of SMR services to private organisations, it must accord those services the same status, resources and planning-related contacts as if they were based within the authority.

1.5.7 ***and professionally maintained***

The intricacies of data about the historic environment and the complexities of the information technology needed to order it, together with the need for its permanency as an accumulating revisable record system, require the standards and certainties that can be delivered by dedicated professional specialised management. In no way should this inhibit material being brought to SMRs or SMRs being used by

volunteers or other non-professionals, but the enthusiasm and interest which they often show should not be confused with the systematic long-term skills required in record system maintenance

1.5.8 ***whose data is accessible***

Accessibility is defined here in two ways. First, it is about people being able to get into direct contact with the SMR, either electronically, or by physically visiting the place where it is held, and, when contact is established, being able to get at the required material in a suitable form. Second, it is about 'outreach', aspects of SMR material being taken out to its publics, usually selectively. Each local authority should define and resource appropriate levels of access and outreach in relation to each of the public services its SMR provides.

1.5.9 ***and retrievable***

The material put into an SMR must be retrievable to the degree and in the forms required by the public services that it provides. Retrieval of information should be digital and, to be fully effective, is predicated upon the proper absorption of unaccessed material. Its success will depend basically (as the 'agreed principles' state) upon SMRs having common **data standards**, including the **structure of data** held within systems and informed by a thesaurus of terms able to cope with the diversity of Scotland's heritage. Its flexibility for multiple purposes will require a **data model** that goes beyond a mere collection of facts or observations, and facilitates understanding through synthesis, interpretation and reinterpretation, for a broad range of users, both public and professional. The use of databases linked to GIS systems is an essential element in effective retrievability, and all SMRs should acquire this facility as soon as possible.

1.5.10 ***for a wide range of purposes***

Each SMR should define the types and levels of public services that it can provide. All must serve the land-use planning process and conservation management. Those who cannot get beyond these basics must be encouraged and supported in efforts to take opportunities for short-term demonstrations of what might be possible given the resources. They should encourage managers unaware of the range of possibilities to face up to the issues, and should not let intermittent and inadequate services outside planning-related work become accepted as satisfactory.

1.6 Relating this definition to the issues raised in the Brief, it places no restriction on the width of services that an SMR ought to be able to offer its community. The only limiting factor is the need, in the name of economy, for the SMR to act as a conduit to, rather than a duplicate collector of, material from (say) national level that is already well structured for any of those local purposes and easily available.

1.7 A different kind of more functionally-orientated definition was offered in the course of discussing drafts of this report, and deserves consideration in parallel with that discussed above. It sees an SMR as '*a systematic, inter-related and up-to-date record of monuments, finds, archaeological events and consultations, cross-referenced to holdings of historic maps, aerial photographs, images, fieldwork archives, organised within a relational database linked to GIS, and with full system security, back-up and data-auditing capabilities.*'

2 The uses of SMRs

General

2.1 Both the 'agreed principles' and the framework of official Scottish documents state that SMRs should support education and research applications within archaeology and related environmental disciplines, as well as fulfilling their primary role in the planning process. Wherever possible, contributions to multi-disciplinary research should be encouraged, including European initiatives. SMRs should foster public enjoyment of the historic environment by supporting and developing leisure and tourism activities. SMRs as local detailed record systems exist to inform their localities, just as NMRS is available to inform Scotland and other countries about nation-wide matters. Continuing popular support depends upon an informed and interested public.

2.2 There are difficulties in achieving this, because most SMRs were created specifically as planning tools, and many operate in organisational contexts that do not lend themselves to diversification

of function and in physical contexts where ready public access is difficult. Those able to deliver all these services are in a minority. In many cases, capacity for diversification has been mopped up by the expansion of demand associated with NPPG5.

2.3 Yet it is difficult and must be undesirable to keep the lid on demand for wider use of SMRs created for single administrative purposes. They are publicly funded and their content is the subject of continuing academic enquiry, intrinsically interesting to much wider audiences. It has always been clear that SMR holders have to go further than the basic archival function, and a summary interpretative text field for each record has long been built into software programmes. Nonetheless, people without archaeological knowledge often find these summaries difficult to understand and use for their own purposes, and would usually get confused by the raw data. The consequence is that the minority of SMR holders who try to provide some kind of wider public service are under pressure to spend time helping enquirers or virtually doing their work for them, something which is rarely possible under existing constraints of time.

2.4 The problem can be illustrated by a model of three levels of interpretative curation, making lesser or greater demands upon SMR curators and users respectively.

2.5 In practice, and certainly at the present stage of development, any SMR is likely to exhibit more than one of these stages in different parts of it. Compensation may exist to the extent that someone is available to assist enquirers. SMR managers, as part of their business planning, might wish to decide in their particular circumstances which level of service they ought to be delivering for what functions.

2.6 Such a model also helps focus more clearly upon the extent to which various types of enquirer should expect to get instant 'complete' answers, and what levels of resources are needed to achieve it. Failure to respond for lack of information that ought to be available from or through a SMR can be a legitimate cause of complaint, but enquiries of any complexity will require interaction with the available material, selecting and interpreting. Like most general-purpose information systems, SMRs usually cannot give fully tailored and verified answers to specific questions just by pressing buttons or retrieving what has been said earlier, probably in a different context. Such considerations lie behind projects such as CANMORE and SCRAN, and current proposals for HLF-funded outreach projects.

RECORD CURATOR	RECORD USER
Basic ordering the data and caring for the records so that they are capable of retrieval and association with other relevant material; the role of the SMR is largely passive, with enquirers coming to it, physically or by remote access;	requires high levels of academic understanding and research / retrieval skills from users
Compiled adding front-end guides, summaries, digests and glossaries which will help the great majority of relatively straight-forward enquirers about places, subjects and periods; going out selectively to potential users through, for example, libraries and educational centres;	material still requiring processing by enquirer to fit purposes but brought broadly within the scope of many user capabilities
Proactive preparing material based on the SMR and other sources in formats for use by others, either directly or after commercial publication.	material is interpreted and presented in forms that are fit for a wide range of purposes

Management uses

2.7 The importance of the role of SMRs in conservation work has increased in parallel with the emergence of Environmental Assessment, Conservation Plans and Statements of Significance as tools in the management of historic sites and buildings. These, the planning process as evinced in NPPG5 and PAN42, and Historic Scotland's new draft Scottish Conservation Charter, make important twin assumptions. Conservation management must start from an awareness of the whole body of available information; it will generate further understanding and documentation to be added to that body for future reference.

2.8 To assess the quality and effectiveness of SMRs in terms of **planning outcomes** would require a re-run of the survey by Historic Scotland just before local government reorganisation, asking questions of planners and SMRs. The assessment (**B5** above) shows that everything is not satisfactory everywhere, with physical separation between SMR and planning

process being the main problem. In places like ***Dumfries & Galloway*** and ***Highland*** with devolved area offices or planning committees, there is an inability always to make direct contact due to either pressures on a single officer (***D&G***) or sheer physical distances (***H***). Successfully devolving relatively specialised topics of considerable local interest must be accompanied by improvements in remote communication systems, making relevant information available in as user-friendly a way that can be achieved without discouraging necessary specialist consultations. In places where one Council runs the SMR for another, similar principles apply, and communication systems should be established that obviate any feeling that their historic environment is less important because advice about it comes from an outside source. Technical advice should be drafted in consultation with local authorities on minimum standards for procedures to ensure the planning process - plan and control - is properly and expeditiously informed when it needs it.

2.9 Environmentally active agencies operating either outside the planning system or on a supra-council level also need attention. Arrangements for consulting SMRs by Public Utilities and the Forestry Commission should be reviewed on a Scotland-wide basis, with regular monitoring checks made on both sides to ensure consistent procedures in different Councils, companies and area offices. The *Forestry and Archaeology Guidelines* (Forestry Commission / Authority 1995) do not seem to be universally followed. As SMRs develop generally and deepen their holdings about the local context of nationally important sites, so arrangements for curatorial information flows should be kept actively under review by HS, RCAHMS and SMRs.

2.10 Planning problems arise as much from over-pressured local council archaeologists as from planning officers poorly positioned or disinclined to listen to their advice. The argument that planning advice comes most effectively from the person who runs the SMR only works when levels of demand from both activities are compatible within a single post. This is rare and exceptional in Scotland, yet the majority of the provision is singleton posts. A planning adviser cannot work efficiently with material that is part accessed and part in un-indexed piles awaiting accession, and record system maintenance or development is usually the victim when planning pressures mount. Though in many cases it might impinge upon the demands of an effective planning service, there is a case for ring-fencing a proportion of the time of single multi-functional posts for SMR maintenance and development against a defined programme of work. It might help make a point about the importance of SMRs.

2.11 SMRs have scope for informing schemes and programmes of **conservation management**. In Scotland much of this work consists of reacting to the proposals of others, often embodied in grants schemes such as the Countryside Premium Scheme (CPS), rather than helping identify schemes which are then carried out proactively by the planning archaeologist. This is an area of activity that will need urgent development if European or other economic factors begin to cause land-use change on any scale. As it is, even though (paid) CPS consultation of SMRs is generally regarded as a success, much of the work is unsatisfactorily confined to desk-top studies.

2.12 The SMR has an important role as the repository of information on management history (with suitable safeguards for confidentiality), as distinct from academic or archaeological information about identity and significance. Publicly maintained record systems dealing with the historic environment should contain both kinds of information. Management information in the publicly available record system will tend to reflect episodes of public involvement rather than the whole management process, and will be particularly valuable in those instances where owners have no inclination to retain or manage such documentation themselves. In theory at least, such management documentation ought to be part of the records kept by owners and passed on with the property to successors in title. This is what happens with some major estates, and the major owners of heritage sites, Historic Scotland and the National Trust for Scotland (which would like to develop better links with SMRs). SMRs should not necessarily seek to hold copies of this management material, but need to have index records of what is in the relevant archives. This can often include major surveys of estates, buildings and landscapes, important documents for analytical understanding as well as baseline data for routine maintenance and larger campaigns of repair.

2.13 SMRs have an important role in major management-related studies of areas or topics, potentially as providers of information and more usually at this stage in their development as beneficiaries of its collection by others. One example is the survey work associated with the compilation of Historic Scotland's non-statutory registers of important unscheduled sites. Where these have been done locally, as in ***Fife***, they have added significantly

to SMR holdings, and their lack is noted by less fortunate areas. Another is the surveys of afforestable land carried out by RCAHMS. Survey results need to be added to both NMRS as part of the national record system, and (whether directly or through immediate data exchange) to the relevant SMRs where they have a local role as the basis for further inspections, casework, and more widespread analysis of their area's archaeological resource. Yet another, with perhaps the greatest long-term potential is the programme of Historic Land-Use Assessment for landscapes. It combines an enhanced 'joined-up' non-site-specific view of the historic environment with capabilities for feeding into SMRs' GIS systems and smoothly relating historic with other environmental interests. In the long term, SMRs should develop as sources of information about the management of local sites and monuments to the extent that a Scottish equivalent of the English Monuments-at-Risk Survey (MARS) could be undertaken, based upon their holdings.

Research

2.14 Despite the relatively under-developed condition of many of Scotland's SMRs it is important not to lose sight of their long-term potential for research, especially bearing in mind that the advance of knowledge and understanding are the principal justifications for all archaeological activity. Equally, it must not be forgotten that SMRs are means to a range of ends; for research they contain neither questions nor answers, though their material can help formulate one and contribute to the pursuit of the other. Adding unaccessed material, 'cleaning' data and preparing comprehensive summaries will help them provide statements of existing knowledge. Yet there is a clear distinction between such 'springboard' statements and further work within the guiding intelligence of a framework of enquiry, purposefully reviewing the data and enhancing it with new material.

2.15 Developing SMRs to the level at which they contain or have access to all the reasonably knowable information about their locality involves several kinds of 'data capture'. One, through obtaining material already generated in the past and available in published form, is relatively straightforward; synthesis with material already on the SMR can enable advances in knowledge. Another is through obtaining new material in survey programmes designed primarily to expand the holdings of a SMR. These must always be conducted within a research framework that is more sophisticated than merely finding out what is there, whether by investigating the distribution of a type of site or the developing patterns of settlement in a landscape. In the same way, independent research projects which begin by collating and reviewing existing data should, as far as practicable, organise their processes so that their outputs positively contribute to SMR holdings, duly qualified as to source and reason for collection. Some university projects in the areas of the Islands Councils are setting a good example, though others have been known to operate more or less independently as if the SMR did not exist. Historic Scotland and RCAHMS should use their influence as grant-aiders of research projects to ensure the existence of appropriate arrangements for results to be presented to SMRs in suitable formats for inputting.

2.16 The usefulness of SMRs for research is likely to increase as new data structures and information technologies facilitate manipulation and research. The 'event - monument - archive' data model is an essential ingredient for its ability to reconstitute, and therefore reinterpret, various elements of evidence. The GIS system that allows different layers for events and monuments may point the way towards more complex sets of interpretative layers. Such tools would allow more sophisticated responses to large-scale proposed land-use changes. They could also provide an important meeting point for the material already on the SMR and wider structures of knowledge about subjects and periods, leading to the development of regional research strategies. NMRS and SMRs should together monitor the progress of the new ***Western Isles*** SMR in its use and adaptation of the exeGesIS software with its EMA capability and links to GIS, with a view to considering the benefits of wider adoption.

Education

2.17 SMRs are under-used for educational purposes, there being little time for such activities after basic maintenance and service of the planning function is covered. Moreover, however interested or skilled an SMR holder may be in various levels and types of teaching, the record system needs to be stocked with sufficient uniquely local material to be able to open the eyes of local communities and connect people with their historic environments. Particularly with the advent of SCRAN-like nation-wide heritage information projects, and the Heritage Lottery Fund, with its emphasis on access to the heritage and outreach from information systems to

communities, it is important to look hard at the actual and potential role of SMRs. There is an urgent need for further study of ways and means by which SMRs might more actively become involved in local environmental education, perhaps through an ARIA-led working party.

2.18 Circumstances will vary from place to place. The type and range of SMR-based activities that are possible will depend upon what the host organisation is prepared to fund. There is a sharp contrast between what ***Highland*** is able to do with its Archaeology Weeks, and the frustrations suffered in the ***West of Scotland*** by the restriction of archaeological services almost entirely to planning matters. Fulfilling educational needs especially requires collaboration, between the SMR holder who knows the material and the locality, and teachers who know the topics of the Curriculum and other courses together with the skills and aptitudes they are intended to impart. It is good in principle that the ***Orkney*** archaeologist should also be working as a local tutor for Aberdeen University as well as contributing to work led by Thurso College within the network of the University of the Highlands and Islands. (It is less satisfactory that this is possible because her post is only 4 days a week).

Access and outreach

2.19 Perspectives on the topics to be considered under this heading have changed in recent years. The role of 'general public interest' amongst the uses of SMRs tended to refer rather loosely to casual public enquiries for factual information about local 'lumps and bumps' in fields, the equivalent of things brought into museums for identification. Though these will always be an important part of SMR work, there is now a wider explicit context in Government policies which stresses the importance of culture and heritage "for the many not just the few" and "the nurturing of educational opportunity". That opens up two approaches, enabling people to come to the SMR, either physically or through remote terminals, and taking aspects of it out to help people explore their local historic environment.

2.20 The Brief indicated that, if time allowed, it would also be useful to gather outline information on who are the customers of the SMR, both in house and external, what is the relative demands from them and the extent to which they are able to meet them. The subjects of accommodation and public access to the SMR for private individuals, researchers, consultants etc (rather than outreach from the SMR to the public) were deliberately linked. This was on the basis that, despite progress with digitisation, the ability to make direct contact with the information would continue to be important for some time. The survey showed scope for many SMR hosts to provide facilities that do not at present exist.

2.21 SMRs have mostly taken root in organisational contexts where it is not expected that the public should have access and, indeed, there are security arguments against it. Plans are customarily brought out into a lobby and there is rarely an equivalent of the search room in an archives department. Local authority buildings are becoming more security conscious, in defence of confidential papers and against theft, through the apparatus of card-swiped door-locks and visitor badges, which have proliferated in parallel with the advance of policies for open local government. In several places it will need clear statements from national level, coupled with the inducement of grant-aid, to mitigate the exclusive effects of many current office management policies. This puts pressure, and perhaps rightly so, on thinking about outreach strategies which can take interpreted information out to the great majority of enquirers who would want it in that form anyway. There is good evidence of staff enthusiasm in this direction, but a lack of time and facilities to prepare material.

3 How is an SMR most effectively managed ?

Organisational context

3.1 The 'Agreed Principles' adopted from the English Co-operation Statement argue no single ideal home for an SMR, but note that they are mainly found in local authority planning departments. The drive to establish SMRs has been based upon their essential role in the planning process, and the basis of any statutory recognition is likely to be a clear relationship with a statutory, i.e. planning, service. Association with environmental regulatory processes should always be the leading link and the minimum acceptable degree of involvement.

3.2 However, success stories in some museums have shown it was not the only way. As SMRs mature, the type of host department ought to become less important than the 'agreed principle' of "efficient co-ordination with the forward planning and development control functions of local authorities and the provision of qualified staff to maintain the SMR and provide expert advice". Part of the argument for locating an SMR in any one department must include a demonstration that it is well-placed to inform functions not also brigaded with its host, research, education and community outreach if it is planning, and planning if the base is in museums and / or cultural services.

3.3 The current varied Scottish experience tends to bear this out. In ***Highland***, the move from Culture and Leisure to Planning and Development gave the SMR a much better placed role in relation to an extensively devolved planning process; yet it was also able to retain valuable links with education and local communities built up from its earlier base. In the ***Western Isles***, the new SMR is based advisedly in the Museum, not least because the planning function is split between two other Departments. In ***City of Edinburgh*** and ***Aberdeen City***, existing museum bases have potential assuming that proper links with planning can be set up and maintained. Yet in ***Dundee*** and ***Perth & Kinross***, getting 'pre-SMRs' upgraded to the real thing may require transfer from the museums to the planning function.

3.4 SMRs, and indeed the NMRS at national level, need to position themselves as historic environment information resources that can serve both environmental conservation and the promotion of understanding and enjoyment of the cultural heritage. There can be administrative tensions between these two aspects of the historic environment, and it is to be hoped that arrangements to be developed by the new Scottish Parliament will avoid the currently poorly coordinated provision in England, divided between DETR for 'environment' and DCMS for 'culture'.

3.5 The way to take matters forward locally involves seeking alliances with other interests less well served by records systems, the historic built environment and various aspects of nature conservation. Those local authorities developing comprehensive systems by linking databases with each other and GIS layers will be obtaining valuable experience. Another involves individual SMRs actively increasing their managerial profile (and promoting their organisational stability) by preparing Business Plans. There are none yet in Scotland, and many would find it difficult to prepare one, but action by even the top third of SMRs would start to set standards and send messages. They do not have to be elaborate or time-consuming, but they are the gateway to the corporate planning mechanisms of parent organisations that may then regard SMRs in a new light. They are also an opportunity to take forward issues of resources and internal communications within a more structured framework than the occasional *ad hoc* and often negative-sounding complaint.

Achieving Scotland-wide coverage of SMRs

3.6 Most of the eighteen SMRs and other record systems considered in this assessment are unique to their area. The issue in Scotland is how to complete the coverage of unitary councils, not as in England how to sort out tensions between overlapping systems at different levels of a two-tier structure. Yet, whilst nine SMRs (and three pre-SMRs) are single-council in scope, there are three more complicated kinds of situation which embody varying degrees of instability.

3.7 A **joint service** exists for eleven of the new Councils in the former Strathclyde Region, run by the ***West of Scotland*** Archaeology Service from a host base in Glasgow City. This is essentially a planning service, with the SMR seen by most partner Councils as a means to that end. The English experience has already demonstrated in the former metropolitan county areas after 1986 how this kind of arrangement is vulnerable to differential financial pressures upon the partners, affecting the policies and priorities chosen by managers and elected members. As the screws tighten, so the attention of the 'partners' focuses upon how little they can pay to get a minimum local service, weakening commitment to a jointly maintained system. The joint service has already been reduced by the withdrawal of East Dunbartonshire, purely on grounds of financial necessity and to the regret of its professional planning officers. East Renfrewshire has formally given two years' notice of withdrawal, apparently without first discussing the matter with the joint service steering group. ***WoSAS***' budgets are already so tight that further reductions could affect the viability of the whole. A joint service arrangement on this scale is, of course, infinitely better than nothing, but it should be adequately funded for long-term stability. It is regrettable that the critical mass derived from about half the national population and eleven Council areas seems unable to support what could easily be an extremely cost-effective and full range of services.

3.8 There are two cases of **one Council also covering a neighbour**, in what amounts at least nominally to an integrated service, regulated by SLAs. These continuations of arrangements prior to the 1996 reorganisation are ***Aberdeenshire*** with Moray, and ***Stirling*** with Clackmannanshire. They are useful responses to the difficulties of critical mass in new small areas that might not otherwise be able to support an SMR and a post, even though in the latter case there is only one person. Yet this kind of arrangement can create difficulties for the client areas in confirming ownership of the SMR, and through it, of the historic resource it represents. This issue needs to be addressed positively and jointly by the two Councils in each case.

3.9 Variants on this theme are the **separate SMRs run for a Council by a neighbour** in such a way that they could easily be taken over fully by the client should this be desired and affordable. Current instances are the ***East Lothian*** SMR run by ***City of Edinburgh***, and the ***Angus*** SMR run by ***Aberdeenshire***. Both participants need a clear view of the resources needed for the critical mass to make arrangements work well, whether jointly or separately. Existing clients wishing to assume full responsibility must ensure that the resources are available, so that the outcome is not a reduction of service.

3.10 These three kinds of situation carry the seeds of their own alteration, and the two blank areas (East Dunbartonshire and Mid Lothian) have yet to develop, possibly utilising one of them. As matters change and hopefully improve, it must be with awareness that an effective local SMR requires local ownership and adequate critical mass: in circumstances where these do not naturally coincide, appropriate arrangements must be considered with realism and sensitivity. The closer an SMR and its staff are to their local population, the better placed they are for basic tasks of conservation and communication. As part of the drive to achieve statutory status, it is recommended that in consultation with Historic Scotland and COSLA, RCAHMS and ARIA devise an advisory model of linkages and protocols to cover the various kinds of agency arrangements.

Human resources

3.11 The existing staffing provision for Scottish SMRs compares adversely with a poor situation in England. 59% of English SMRs have some kind of dedicated officer, defined as spending 90% or more on the SMR, but no Scottish Council has a wholly dedicated permanent SMR post. 17% of English SMRs have some dedicated clerical or technical assistance, and 11% in Scotland.

3.12 The variety of practical situations in Scotland suggests that there is no simple formula. In ***Falkirk*** all the local archaeological roles are recognised, but one person has to do them all, which means that SMR work easily gets squeezed. At the other extreme, the area covered by ***WoSAS*** abundantly justifies a full-time SMR post, but financial need is judged narrowly by the funding Councils in terms of planning advice, without adequate regard for the services and systems needed to support it.

3.13 If there are no staffing 'perfect fits', ***Aberdeenshire*** perhaps comes closest with several posts and long experience based on the former Grampian Region, but what would cover the core area must be stretched to handle Moray and ***Angus*** also. Lengthy local experience probably makes all the difference in ***Dumfries & Galloway***, enabling one person to provide a severely over-stretched service on both planning and SMR aspects rather than just on planning. ***Highland*** has a good structure of three posts, with one now largely dedicated to the SMR, but the size of territory to be covered and the distances involved again make it less than fully fit for purpose. Other illustrations could be provided.

3.14 By themselves, the critical mass of skills for running an SMR demand at least one individual dedicated to the task. It follows from acceptance of SMRs' multiple uses that the skills most desirable in those responsible for them are information management and knowledge of the archaeology of the area, even though many SMRs were established or grew on the back of a capability for giving planning advice (see 3.17 below). In the long term, it may be desirable to separate SMR management from direct responsibilities for giving planning advice, which easily crowd out SMR maintenance and development if combined in the same post. (This separation need not diminish the planning adviser's knowledge of the area, and in most cases there is more than enough scope to expand further into countryside management). SMR management is more usefully combined with the outreach activities that help archaeological information to be recognised as owned by the community and not just a tool of 'the planners'. Having a separate SMR post, working to a planning archaeologist as overall manager, must be the way forward, as has been demonstrated in better

developed areas such as ***Aberdeenshire & Moray***, ***Fife*** and ***Highland***, where they are helped by favourable circumstances of critical mass and relatively good local funding.

3.15 This argument may not be welcomed by those who have to maintain an SMR and give planning advice single-handedly, because they naturally see the two functions as inextricable, but that is more probably a function of under-resourcing. It might just be possible to combine the roles of SMRO and Archaeological Planning Adviser (assuming good dedicated clerical support) in a medium-sized area without excessive development pressures, once comprehensive basic surveys had been completed, and further inputting was largely from new fieldwork and research-driven data manipulation. However, these circumstances do not seem to exist anywhere at present, and would of course tend to squeeze other public services that the SMR ought to be providing. Restricting the role of the SMR entirely to planning-related matters may be a priority bred of scarce resources, but it is no economy culturally, educationally or promotionally. In another approach to the problem of resources, some economies of scale in technical or clerical servicing may also be possible where the SMR is one of several inter-linked environmental databases, but the need for proper archaeological understanding of the area is irreducible. Good technical development can reduce the need for expensive staff, but there is a minimum viable level for intelligent management and interpretation.

3.16 All Scottish SMRs are still in the developmental stage, so need additional resources, above the requirements of day-to-day service provision. This can be either as short-term temporary extra professional help to deal with specified tasks, or as a longer-term enhancement of the basic provision to deal with the same work over a longer period alongside day-to-day duties. Some SMRs have used students or volunteers for basic data inputting. This must be handled with great care, and any such work must be intensively supervised and checked in order to maintain the integrity of the system. This device should only be used as part of community outreach, or to allow those who have gathered the information to take the process through to a conclusion. Substitutionism, using volunteers for routine maintenance of an SMR, is wholly unacceptable, technically and professionally, especially in relation to the statutory mechanisms of the planning process.

3.17 It is an 'agreed principle' that staff maintaining and supporting SMR systems should be adequately trained professionals, qualified to appropriate standards. Several professional skills are essential. These include academically-based understanding of the broad outlines of Scottish archaeology and classes of evidence occurring in the area, together with an understanding of the principles of records management including relevant information technology and clerical skills. There is also a need for analytical skills so that blocks of submitted material can be converted into 'data' suitable for entry on to the SMR, and for converting 'data' into 'information' to serve a range of purposes. Communication skills are important: maintaining and developing SMRs that serve several authorities requires talents of pro-activity and diplomacy in addition to core skills of archaeological and archival competence.

3.18 Training must be properly recognised as an important key to the development of a stable local provision for Scottish SMRs. It will be needed to ensure that the full requisite set of skills is present and kept up to date, with a mix of general, locally-provided courses and specialised provision provided externally, perhaps by a combination of RCAHMS / HS and ARIA with IFA involvement. Training budgets tend to be early casualties of the kind of financial squeeze that is continuing to affects Scottish local authorities, yet environmental information management systems are a rapidly evolving sector where knowledge and skills must be kept up to date if diseconomies are not to develop. There is a role here for links with English and Welsh SMRs. Because distance creates barriers of travel time and costs, one of the greatest benefits Scottish (and British) SMRs could obtain would be user-friendly conferencing facilities that would make it easy for neighbours to communicate, for groups to share and exchange experience, and for running technical upgrading sessions involving outside tutors.

Financial resources

3.19 The Brief indicated that the assessment must be capable of expression in financial terms (i.e. the cost of the resources required to bring SMRs to a satisfactory level of consistency). The variables to consider include the density, quality and complexity of survivals, the nature and intensity of pressures upon them, the stage of development of the SMR, the range of services provided, the size of area and population served, and the nature of existing political arrangements. Responses to the questionnaire and interviews showed that most SMRs would have to

undertake more detailed and specific investigation of their holdings and their areas to become clear about what they do hold (and to what standard), and where the gaps are (and their sizes). Data Audits of the kind used and grant-aided by RCHME Data Audit are required. It would also be necessary to get agreement about the capability for delivering services represented by that 'satisfactory level of consistency', whether wider than planning-related, and how correlated with what NMRS can provide. At the level of rapid assessment, two kinds of costs can be identified, recurrent / core and one-off / project-based.

3.20 Recurrent / core expenditure would ensure that the SMR was properly staffed for permanent professional maintenance and clerical support; it would also include capital depreciation on IT equipment and accommodation. For a unit of viability, however defined, this would mean one professional post of SMR Officer combining duties of maintenance and development, technically and archaeologically, with the active promotion of the full range of uses, but usually providing material to a planning adviser rather than undertaking that role. That post should have dedicated support in clerical and some technical matters from another, probably 50% post. Those two together, with on-costs and a small operational budget, might total a core cost of £30-40,000 annually. Much would depend upon how the SMRO post was graded: there are quite wide variations at present in Britain, and proper job evaluation is needed. This might be regarded as the notional core cost for a unit of viability coinciding with a Council area. Where one minimum viable service is able to cover more than one area, each would benefit from economies of scale but would also have to make allowance for the costs of ensuring effective liaison. Some places might need more than the minimum viable provision to ensure effective cover.

3.21 'One-off' / project-based expenditure would make the holdings of the SMR current, by enhancing data content through inputting backlog or recasting, and bringing data standards, structure and supporting software up to a consistent level. Specific local projects or local participation in regional or national projects would be involved. A list of needs would have to be compiled for each SMR, and decisions taken about how far they could be satisfied through existing capabilities such as NMRS, and how far tailor-made work would be involved. Costing here is extremely difficult and must have the benefit of more detailed enquiry, but it ought to be possible to define urgent priority tasks for the basic functioning of an SMR, and others which can be fitted into a longer planned developmental sequence. The best readily available source may be the three-year costed programmes Historic Scotland is now seeking as the basis for grant applications. Another may be the emerging proposal in relation to the HLF bid for provision to be made for temporary staff to work at each SMR putting their record systems into a state where consistency and common standards for outreach can be applied across Scotland.

4 How should SMRs develop in the future ?

Status

4.1 For several years, **statutory status** has been sought for SMRs, and the prospect was held out most recently in the Green Paper 'Protecting our Heritage' issued by the last government (Historic Scotland 1996a). It would be achieved through legislation and / or specific inclusion within the Standard Spending Assessment for local authorities. Arguments in favour of the proposal are based upon NPPG5 / PAN42's confirmation of SMRs' role in the planning process and the need to secure adequate funding to create and maintain a viable record system. The issue merits review in the light of gains and losses in an incomplete coverage of continuing vulnerability, especially at a time of political change.

4.2 Making the "SMR" statutory refers to a system and its expert manager with the function of providing access to information about aspects of the historic environment for defined purposes. It would be unreasonable to expect each Scottish Council area to maintain its own SMR regardless of critical mass and cost-effectiveness, but there should be a presumption that each Council has one in-house unless a properly constituted agency arrangement could be shown to be fully effective. Effectiveness would be measured in terms of working links to and from the SMR that ensured the information was properly used. There is a presumption of professional record system management, and that would be the principal element of cost (see **C3** above).

4.3 In the context of wider environmental policy, this might be seen as seeking a priority for archaeology over other discretionary historical and environmental activities, such as archive offices and museums, and over other kinds of information

systems, such as for nature conservation and historic buildings. There must be a risk that, if convincing reasons cannot be adduced why record systems covering this aspect of the environment should be made statutory, the debate would widen so far that progress might easily fail in endless review and fears of uncontrollable costs.

4.4 The strength of the case lies in the relationship of SMRs with the planning function, defined, not only through NPPG5, but also through the General Development Order of 1992. This identifies "a site of archaeological interest", or important for planning purposes, as one "within a site which has been included in a Sites and Monuments Record held by any local authority". These bring within the scope of 'material planning consideration' a much wider range of important evidence than can be encompassed by the more selective and tighter constraint of scheduling. The need for an informed and expert service is greatly supported by the absence of any other statutory designation covering the vast majority of archaeological sites (the non-statutory registers are more closely associated with scheduled ancient monuments). In this respect, the case for archaeology is arguably stronger than that for the historic built environment, where listed buildings and Conservation Areas provide a much greater width of designation (though their need for proper information systems and expert staff is no lesser).

4.5 The primary purpose of making the SMR statutory is to secure the position of its manager, so that informed planning advice is available, preferably from a separate rather than a combined post. It will always make sense for a Council's (other than museum-based) archaeological information about the historic environment to be provided from one expert source. Indeed, the non-planning uses reinforce the democratic basis of planning constraints by communicating the intrinsic interest of what is being conserved in the name of the population at large. It goes well with the encouragement from government to improve access to their cultural heritage.

4.6 The counter-argument that existing formal guidance makes a statutory requirement unnecessary is crucially undermined by the failure to complete a stable coverage of Scotland nearly three years after local government reorganisation and five years after the issue of NPPG5 and PAN42. Despite the link with planning, the blank or weak areas for SMR coverage lose out when Councils forced to make cuts decide to prioritise expenditure by categorising existing and potential services as statutory or discretionary. It is difficult to see how a new parliament celebrating the institutional recognition of Scotland can credibly ignore the continuing existence of gaps in the infrastructure of national and local cultural identity. Given the strength of that official guidance, either if government squeezes local authorities overall to the extent that they decide not to maintain or obtain an archaeological service with an SMR, or if local politicians are unwilling to give SMRs sufficient priority, then the function must be made statutory.

4.7 Mindful of the severe restraints upon local authority expenditure, the bestowal of statutory status should be accompanied by an organised programme of grant-aid from Historic Scotland, designed to achieve minimum standards of functionality within a defined time period. Apart from an increase in finance, that might require

(a) extension of the three-year grant programmes adopted by Historic Scotland, perhaps including 'tapering funding' arrangements to help create permanent dedicated SMR officer posts, together with some support to RCAHMS for the resource-intensive task of liaising effectively with distant and varied local records systems

(b) a view on priorities from RCAHMS and ARIA operating in the co-operative forum outlined below

(c) a strategy of self-help within ARIA so that the weaker could benefit from the experience of the stronger.

Local and national roles

4.8 Crucial to the future development of SMRs in Scotland is a stable and mutually supportive relationship with RCAHMS. This should clarify distinctive and collaborative roles at national and local levels, including the nature of RCAMHS' 'leading role' for SMRs. The arguments for systems at both levels reflect functional requirements rather than a desire to please through compromise. A single system at either level would have less scope for developing public services, as well as being less effective and economic in providing what is mostly available now. The vision should be what amounts to a distributed national - local network, with each level driven by its primary agenda of local or national service. The interconnections would allow most users to get what they want (and pointers towards centres of

relevant expertise) from any one point. Several more detailed supporting arguments can be deployed.

(a) A modern record system comprises three interrelated elements, the material, the systems for storing it, and the staff who make it work. Though the digital fantasy of a universally accessible corpus of electronic information may be getting closer, people will always be necessary for their expert ability to place individual records and queries within wider contexts of place, period and subject, and advise how information might be tailored to particular uses.

(b) Linkages to be developed for flows of information between the two levels would be for the avoidance rather than the encouragement of duplication. Generally, local knowledge and issues need to be informed by a regional or national context and vice-versa: perhaps the best current illustration is the preparation of the Scottish Thesaurus which must be handled at national level but cannot succeed without fully taking into account regional variations in site-types and terminology.

(c) One record system at national level might have difficulty in serving the immense diversity of localities in Scotland and overcoming traditional suspicions about the influence of Edinburgh. There is no substitute for on-the-ground advice based on local knowledge and interpreted in a local context, as is acknowledged by the GDO definition, referring to sites in SMRs.

(d) The systems in a totally devolved local network would have difficulty individually in reproducing the acknowledged quality and uses of a well-developed national record system academically strong on subjects, periods and regions. They would have great difficulty in carrying out nation-wide tasks consistently, such as advice to the Ordnance Survey on map depiction (though they have an obvious role in helping a national record system ensure its local information for such purposes is up-to-date).

4.9 The present situation has its tensions and misunderstandings, partly rooted in the political uncertainty about how the new parliament will choose to manage culture and environment in Scotland. RCAHMS is understandably anxious that, despite the different circumstances of Scotland, a lead may be taken from the political decision to merge English Heritage and RCHME. SMRs fear that continuing constraints on resources will inhibit the expansion of their role beyond planning-related matters. Current perceptions and anxieties in the localities were usefully reflected in a discussion document prepared by ARIA in March 1998, **The Role of Scotland's SMRs (RSSMR)**. Whether or not the critical comments in this document are justified to any extent, the fact that they were made signals the need for joint discussions between RCAHMS and ARIA. The table below represents an outsider's view of some of the issues surrounding clarification of national and local roles.

A national record systems forum

4.10 Initial discussions and continuing relationships require a forum that is stronger and more mutually owned than any that appears to exist at present. It is essential that one is created as soon as possible, with the positive blessing of Historic Scotland and the Convention of Scottish Local Authorities, subsuming existing 'liaison' meetings and specific discussions on matters such as Lottery applications. It requires an engaged role in a common cause from both parties. It should be based on an explicit recognition boldly promoted that the record of Scotland's historic environment is the sum of what is held at national and local levels, and that sensible co-ordination would greatly increase its value for country and community.

4.11 The forum should meet at least twice a year and operate through working parties on topics according to need. In order to ensure participation of experienced and suitable people from the SMR community, and to ensure that the geographically distant were kept fully informed, some funding would be needed to support attendance time, expenses and occasional secondments. It might be helpful for Historic Scotland and the National Trust for Scotland to have at least observer status on the forum on account of their extensive use of records systems in scheduled monument control and conservation land management.

4.12 The first task of such a forum would be to agree a **statement of co-operation** on lines similar to that prepared in England (but hopefully much more quickly). This would be a means of securing the positive commitment of the national and local bodies standing behind the members of the forum. It would combine an appropriate quantity of high-level policy with sufficient definition of specific responsibilities and aspirations at both levels to give a standing agenda. It would also be the means of dealing

NMRS	*SMRs*
Basic role	
The role of RCAHMS, derived from the royal warrant of 1908, is to survey and record the man-made environment of Scotland, compile and maintain NMRS, and promote an understanding of its information by all appropriate means.	Local authorities have been given strong guidance to local authorities from the Scottish Office, HS and RCAHMS that the key function of a local archaeological service is to conserve and promote understanding of the local historic environment, with a maintained SMR at the core of its services.
Archive	
The NMRS has a primary archival role in relation to its holdings of the OS records, the results of RCAHMS surveys, maps, aerial photographs, architects' drawings and papers, excavation archives, survey reports, manuscripts and other records.	SMRs deliberately avoid a primary archival role, though can hold copies or indices of relevant material.
Inventory	
NMRS holds the inventory of 'sites' in Scotland. Historically and strategically, this is a 'top-down' inventory, containing selectively identified sites and landscapes.	SMRs aim to be the definitive detailed local record system, a comprehensive inventory achieved through a combination of their own holdings and index information to the holdings of others, principally NMRS.
Data capture	
Most data-capture is by systematic collection. Traditional inventory programmes have become more selective, with areas of survey identified by several factors including pressures on the resource and 'gaps' in the NMRS record.	Excluding any initial start-up down-loads from NMRS, most data-capture is through casework or (usually) survey work funded externally by HS / RCAHMS / other research agencies. Scale and depth can be on a significant scale.
Planning / conservation management	
NMRS does not provide advice on the management and preservation of sites nor (presumably statutory) information on listed buildings and scheduled ancient monuments as done by Historic Scotland (though accessible on-line through NMRS).	SMRs provide information for archaeological advice on local planning and conservation management issues. Sites on a local authority SMR are a material consideration for planning processes. SMRs could support site and landscape management initiatives like a Scottish Monuments at Risk Survey.
Data presentation	
The NMRS database has descriptions based on the OS records and more recent field survey reports. This is combined with a catalogue to the archive material and bibliographic references.	Some SMRs have well-validated index descriptions of each 'monument' sitting on top of more detailed holdings from various sources. These descriptions should be linked through the same database to other sources.
Access to data in records systems	
NMRS data is accessible at Edinburgh in staffed search rooms, on subjects as diverse as architectural schemes by Robert Lorimer to C19 descriptions and photographs of the Stones of Stenness.	SMR data is usually accessible in principle by appointment during office hours, but often in user-unfriendly conditions. The ADS 'meta-data' project involving ***Shetland***, ***WoSAS*** and ***Fife*** is at an early stage, and suggests that in-depth remote accessibility is some way off.
Outreach from record systems	
RCAHMS publishes inventories and other period or regional studies based upon its survey work and existing NMRS holdings. CANMORE is an on-line facility enabling public access to simplified text-and-image records of material in NMRS.	Some local archaeological services produce occasional publications aimed at various local audiences. On-line facilities have yet to be developed, but ***Shetland*** distributes disks to remote museum centres.

Notes towards defining the roles of national and local records systems

Comments	*Matters for consideration*
Basic role	
RCAHMS' Scotland-wide role is functionally limited and does not include every detail in all localities. Within the restrictions of their geographical limits, local services are potentially inclusive and comprehensive.	- How to define RCAHMS' formal 'lead role' for SMRs within existing distinctive national and local primary roles - How to develop permanent operational linkages between the primary roles of national and local services.
Archive	
Neither NMRS nor SMRs ought to hold artefacts. NMRS has integral archival capabilities unavailable to SMRs except when the latter are directly associated with museum or documentary archival services.	- How to coordinate NMRS' documentary holdings with national and local archives. - As fieldwork archives increase how (a) to develop the NMRS depository and (b) ensure effective information flows from local project archives in local museums as well as from Edinburgh.
Inventory	
NMRS' inventory does not systematically include small-scale local 'monuments' or management 'events'. SMR direct access to NMRS could avert repeat data capture except in agreed programmes of revision.	- How to develop the 'true' Scottish record system as the sum of national and local holdings, curated consistently across different functional emphases, and giving record system managers net-worked access to the whole from either level.
Data capture	
Current data-capture policies are designed to increase the detailed local and / or the broad national view, but a lack of resources can create difficult choices. Some exemplary partnership projects tackle both tasks economically at the same time.	- How to avoid duplication by: (a) systematic policies for data exchange with adequate staffing levels to implement them (b) ensuring data formats and media facilitate rather than hinder data exchange (c) removing legalistic copyright barriers while ensuring security for confidential information.
Planning / conservation management	
There is uncertainty about where a complex collection of and management interests, some with a primary archaeological function (Historic Scotland, NTS etc) and others with it thrust upon them (Utilities, developers etc), can find the information they need in order to fulfil their obligations.	- Through effective linkages, how to avoid duplication, so users need only one source. The SMR should hold basic information and be able to connect with other relevant sources. - How to avoid compartmentalisation, with HS using NMRS and own systems for SAMs, and LAs using NSRs and SMRs for 'other' sites.
Data presentation	
These are 'basic' descriptions, for supplementing or reformatting to serve various purposes. In EMA terms they define a 'monument', though as point-in-time summaries are perhaps 'events' (?).	- How to develop NMRS ASP / HLF proposals for 'super-data' summary records tied back to a thesaurus to "enable connectivity and interactivity". As shared national / local descriptions these should bring out the significance of period, subject and locality.
Access to data in records systems	
Access facilities enable people to select material as ordered in the record system and then to re-order it for their own purposes. Data in publicly maintained records systems should be publicly available subject to reasonable safeguards.	- How to develop satisfactory arrangements for remote access through effective linkages that avoid duplicate archives. - How to encourage access so that interesting and attractive information can reinforce support for conservation policies.
Outreach from record systems	
True 'outreach' selects and presents material on records systems for specific purposes. It can be either 'active', physically going out to the defined public, or 'passive', creating a specific facility to which people come.	- How to devise and agree outreach strategies to reflect the complementary focuses of record systems' interests at country and community levels. Care must be taken to avoid blurring roles and undermining the case for working out different strategies at each level.

with the repeated complaint from ARIA that RCAHMS' lead role is undefined, whether that is due to shortcomings in definition, communication or listening by either party. It should incorporate a statement of seamless policy to the effect that the goal for Scottish records systems must be user-driven, perhaps expressed as *'to make information on the historic environment available to all who require it in the most appropriate forms and by the most effective means'*. The launch of such a statement might be a timely opportunity to seek support and increase commitment from parent or sponsoring bodies. It might help the new parliament to appreciate needs and act accordingly if it saw it was being offered a solution rather than a problem.

4.13 Such a forum would help overcome one of the greatest barriers to communication, that the NMRS is a unity in one place with a unified agenda, whilst the SMRs are widely distributed in a range of organisational contexts. In making these basic perceptions, eliciting viewpoints, and explaining agreements, the work of the forum would have to go beyond spokespeople and engage positively with those relatively isolated single-person local situations where motivation to think beyond the locality can be weaker than in an urban base.

4.14 A stable forum for partners is the best way to deal with perceptions of one that the other does not deliver what it claims from its role. Much of this centres around '**data-exchange**', such as difficulties with reading or using 'downloads' and failure to deliver enhanced records. Whether the reasons are organisational (giving it sufficient priority), technical (getting software and data formats right) or financial (being able to afford the time and staff) is unclear, and that lack of clarity is probably part of the problem. If one level cannot deliver what the other expects, then the fact and the reasons should be made clear immediately so that people know where they are, and alternative arrangements can be considered.

4.15 To respond to another key issue in the Brief for this assessment project, properly constituted national and local record systems should expect to hold definitive data sets for their areas of interest. 'Hold' should be interpreted to mean either the actual detailed records themselves, or direct on-line access to them somewhere else, or indices that enable a rapid remote retrieval. How this is actually organised is a matter for further detailed consideration. It is more important for the national record system to concentrate its energies and limited resources upon knowing where everything is and upon developing its nation-wide specialist collections than upon seeking copies of everything at every level of detail. Similarly, local record systems in a country with a strong national record system should give priority to ordering detailed local material for use in the service of their communities and associating it as required with remotely acquired or exchanged data from national or regional surveys. The underlying presumption is that the real 'national' record system will aim to comprise the sum of the national and local record systems.

4.16 An issue related to data-exchange is the need to secure a common perception about the implications of recent developments in data accessing, as focused by the work of ADS at York. At the December 1998 Workshop meeting about HLF applications, there was significant confusion between 'meta-data' and 'index-data'. Whilst it is a valuable move forward for meta-data on the SMRs of **Fife, Shetland** and **WoSAS** to be made available on a pilot basis, it is also important not to invest the concept with more than it can bear. In fact, working from the outside inwards, there are three levels of remote access

(a) **metadata** that characterises the nature of a system's holdings in the form of types of data-field held, but cannot supply more specific information

(b) a metadata-based **index** listing all the records ordered by those fields

(c) **detailed information** behind that index, only some of which may be digitally accessible.

4.17 The concept of metadata highlights two practical development issues. One is the dependence of effective remote access to detailed information upon 'data-cleaning', indexing and digitising: the welcoming overtones of the word 'gateway' are much over-used; there has to be something usable and interesting on the other side. The SMR Integration Project (ADS 1999) shows continuing difficulty in getting beyond (a) to (b) and (c) until systematic 'data cleaning' brings system content up to the standard of compatibility for system structures. The other issue is the need to decide which information users can be directly satisfied through standard interrogation of generally formatted data, perhaps supplemented by associated interpretative glossaries, and which will need to have information pre-selected and re-presented in SCRAN-like formats. The latter is particularly important in the context of ASP and the HLF bid discussed below.

4.18 Another related issue is **copyright**, a topic on which RCAHMS is much more experienced than most SMRs. Mechanisms must be worked out to for agreed processes of data exchange. Tensions have to be resolved between the restrictive implications of the concept of 'intellectual property' and the growing government demands for increased public access to a commonly owned heritage and its records.

4.19 Data exchange should be a standing item on the agenda of the forum because it also represents a set of technical issues which Scottish records systems must confront. These revolve around the **emerging data structure of 'event, monument and archive'** (EMA), the subject of extensive and continuing exploratory debate in England. It is essential for NMRS and SMRs to start to work towards a jointly agreed strategic view. One of the strengths of local systems with integrated databases and GIS systems is their ability to 'model' the landscape as an aid to reconstructing past patterns of settlement and predicting areas of sensitivity in the context of development. NMRS has a relatively sophisticated albeit specialised GIS system, and most SMRs are moving towards acquiring their own. An EMA data structure linked to GIS would be an immensely powerful and flexible tool for conservation and research. Yet converting existing 'monument-based' data sets to this new format may be a massive undertaking at both levels. It might be difficult to justify at a time of heavy constraints on resources when many other apparently basic tasks are still not done, especially because its benefits are long-term rather than immediate. It will be impossible to consider how to proceed sensibly down this road without whole-hearted joint action based upon an improved level of mutual understanding.

4.20 The forum would keep the development of all record systems under review through:

(a) ensuring each compiles a regularly updated history of its development. The need to explain what was meant by '13 core data fields' shows that a younger generation of SMR officers may not always be aware of the basis upon which developmental decisions were made;

(b) maintaining a list of all surveys on any scale in each SMR area so that differential coverage can be identified for future attention from national or local projects;

(c) using a benchmark audit process, perhaps modelled on the English SMR Data Audit or a revised version of the questionnaire for this assessment project, covering all aspects of functionality.

4.21 There are particular problems to be sorted out over access to **aerial photography**, on which most SMRs are weak. It is essential that adequate information in this format is readily available locally for various purposes: as one respondent remarked, the right picture deployed at the right time can save weeks of difficult negotiation with incredulous developers. Yet it is not feasible for each SMR to hold actual copies of everything in the NMRS collection covering their patch, and *vice-versa* where where substantial local holdings have been built up. These difficulties might be managed through effective indexing systems involving flight plans and sketch plots of discrete features, and on-demand digital availability of images. An agreement would need to be worked out, covering material generated by and held by NMRS, generated locally in nationally grant-aided programmes, and generated by local initiative.

4.22 The forum would also be the right place to deal with the challenging and sometimes difficult issues raised by the development of a **bid to the Heritage Lottery Fund**. The HLF bid could be a tremendous opportunity for Scottish record systems to develop outreach services, but it is important not to gloss over some problems, by-and-large not of the making of SMRs, RCAHMS or HLF.

(a) Many one-person-band local archaeological services are so under-resourced that, without a significant improvement in their position, their SMRs may be too slender to support new directly grafted-on facilities for access and outreach.

(b) RCAHMS rightly sees an opportunity for reinforcing its role as the holder of the national record system. Yet SMRs fear that a national-level remote access facility developed centrally through the extension of CANMORE would be perceived politically as adequately meeting the need for publicly accessible material. It might undermine their case for resources to develop different kinds of complementary services tailored more closely to the needs of local communities.

(c) Because HLF has to be sensitive to the dangers of 'additionality' - the use of its funding for tasks that are properly part of existing mainstream public responsibilities - it faces real difficulties when, for one reason or another, those public responsibilities are not clearly defined.

4.23 Behind these fears is a structural problem for government to solve. There is an apparent inconsistency between making money available through HLF for access and outreach while inadequately supporting the basic local government systems upon which these services have to be built. The latter is indeed the driving force behind the argument for making SMRs statutory. But would success trigger 'additionality', and put the resources for access and outreach at risk ? The problem is sharpened by the results of the SMR Integration Pilot Project (ADS 1999), showing the need for much reformatting and 'cleaning' of SMR data before it can be properly accessed to serve multiple uses through a distributed network.

4.24 The nervousness of the participants about these issues is understandable, but they are best confronted openly and resolved so that answers are available to questions. It is up to them jointly to develop a project that meets their own aspirations and those of HLF. In assembling the case, they may wish to consider these arguments.

(a) Though the multi-purpose nature of SMRs is clearly expressed in government guidance, the strongest emphasis has always been on their role in planning and environmental conservation, upon which the case for creating them has been mainly based. In the same way, though NMRS has a duty to promote an understanding of its information by all appropriate means, until recently this has been seen mainly in terms of a passive consultable record system and relatively formal academic publications.

(b) The government's emphasis on public access to cultural and heritage assets is a welcome and important broadening of a historical concentration upon the more strategic activities of academic research and conservation management. While such ambitions have long been shared by most local record systems, they have had little or no funding explicitly for those purposes. For that reason, HLF funding, a new source and part of a substantial new policy initiative, can hardly be regarded as coming within the restrictions of additionality.

(c) The project under discussion envisages establishing links between NMRS and SMRs. These will allow national topics to be considered in the localities, local topics to be accessed from national level and other localities, and for localities to develop their own community access and outreach services, calling upon national skills and material as appropriate. This is the key to making heritage information available to a wide range of people and uses, both in ordered 'raw' formats and in various kinds of interpreted packages. Such interconnectivity in such a cause is also new. Apart from HLF, there are no obvious resources for taking it forward.

(d) Fundamental to achieving that degree of interconnectivity is work on the data, reformatting, 'cleaning', and co-ordinating. *Without* the opportunities represented by HLF, access and outreach will continue to be mostly patchy and opportunistic, at a level that adds little weight to the case for enhancing data quality. *With* HLF support for increasing public access, and work on the primary data as an essential first step, the case is greatly strengthened. To the extent that such work also serves the general development of record systems and thereby helps their other functions, it should be regarded as an extra bonus and a particularly effective use of public funds, rather than as a reason for reducing or withdrawing from funding altogether. Safeguards could exist in a carefully designed and monitored programme that ensured data enhancement and increased access for nation and community went hand-in-hand. The preparatory data enhancement would also be finite, without long-term commitments, and suitable for temporary contracts or other accountable ring-fenced arrangements. Ultimately, is not a sophisticated circumvention of 'additionality', unless the term is defined so restrictively that it ought effectively to stop many approved projects in their tracks.

4.25 The model outlined by NMRS at the HLF workshop in December 1998 should be explored by the forum. The idea of a publicly accessible and user-friendly index capability managed by NMRS acting as a gateway to general records and discrete project-specific collections in both national and local systems is very attractive. It gives both levels of record system a mechanism to deliver the product of HLF-funded projects preparing material specifically for public access. It gives all record systems control over what they make available, so that security issues can be respected, and material can be customised for different kinds of users. Though the material made accessible might well be diverse, it would be reached through a common system whose branded identity ought to help it develop its own momentum. It does not rely for its success on all SMRs having to contribute at a level of activity that many might well find difficult. Nor, if coordinated properly, need work

on the national element of the scheme undercut the case for funding future local initiatives. It has the attraction for individual record systems of representing something whose attainability ought to encourage participation from many who might otherwise find it too difficult to start from scratch by themselves. It does not preclude the few who are already developing local programmes from continuing in the context of new arrangements.

4.26 Though this approach may solve the problems that beset devising a coordinated bid to HLF, it must not obscure the findings of this assessment, that, without additional core resources, most SMRs will have great difficulty in taking advantage of the HLF bid on behalf of their communities. 'Most' includes those with less than one full-time equivalent dedicated SMR Officer. One must not underestimate the dedication of many single-person local archaeology services or the honed talents of under-resourced archaeologists in putting together creative packages, but, like the old MSC schemes, they may prove unsustainable. The starkest illustration comes from the area covered by ***WoSAS***, a minimally-funded agency service for a third of Scottish Councils, vulnerable to differential cuts by its partners and restricted largely to basic planning advice. It has the position, the capability and a proven commitment to wider public service, but neither the partnership resources nor the infrastructure to apply the bounty of the Lottery for the benefit of about half the national population.

Unaccessed material or 'backlog'

4.27 The forum would also be the best place to deal with one of RCAHMS' concerns, that the development of local record systems will involve avoidable duplication of holdings in a national record system becoming increasingly accessible digitally. Again, there is a current issue to focus constructive discussion, the problem of unaccessed material awaiting inputting to local record systems, usually known as 'backlog'. The apparent size of the task together with the inability of some SMRs (for reasons of resources) to quantify it, gives rise to concerns about the risk of wastefully re-entering material already been input to NMRS, or that some critical prioritising against generally agreed criteria ought to be applied. The forum could support quantification projects and identify classes of material already on the national record system that could be accessed from or exchanged with the locality when required and in the appropriate format or data structure.

4.28 While backlogs of unaccessed material must be liquidated as soon as possible in order to maintain the currency of record systems, some questions must be considered. Does the material need to be added to the record system, and, if so, at what level of detail, whether as index data, a summary, a selection, or fully ? Is there is a risk of it being accessed into both national and local record systems in a wasteful duplication of effort ? For the latter, theory suggests three scenarios

- averting obvious duplication by prior agreement
- a useful opportunity to upgrade older NMRS holdings through collaborative action
- double approaches justified if properly coordinated because each level needs such different things.

4.29 This problem must be tackled thoroughly, under the guidance of RCAHMS' leading role, ensuring that collective wisdom is fully circulated, providing support for solutions, and helping to co-ordinate efforts economically between levels and across localities. Questionnaire returns suggest confusion between three types of 'backlog', and the forum could usefully consider whether this or another working analysis might help reduce the problem into manageable sections.

(a) *Basic compilation* backlog is material already existing in one form or another, whose accession, directly or as an index, is part of basic SMR construction, not obtainable directly in the required form from another source such as NMRS, but as yet omitted for lack of resources

(b) *Operational* backlog is material deposited with or obtained for the SMR as a result to day-to-day activities but not yet accessioned so that it is fully usable

(c) *Enhancement* backlog is unaccessed material from survey or research programmes with a direct or intended benefit for SMR holdings; work needed on existing holdings of material due to changed data structures or standards, often associated with software migration.

4.30 Roughly sorting unaccessioned material into categories such as these would be a useful start for any SMR seeking resources. It would help establish priorities and also allow issues of responsibility for funding to be considered. *Enhancement* projects ought always to carry their own funding for publication in the broadest sense, whether in academic form, for wider community consumption, or

to access material on to the local SMR. Accumulations of *operational* backlog might highlight structural under-resourcing by the SMR host, with too many roles required of the person acting as SMR Officer and / or lack clerical or technical support. *Basic compilation* backlogs, if shown to be widespread, might be handled through one-off projects dealing with common sources for groups of SMRs, though careful thought may need to be given to how much effort should be spent on accessing material readily available elsewhere, beyond the level of summaries and index.

4.31 More precision and better predictions about **numbers of records on / awaiting / predicted** for SMRs would require further work. This should take account of the extent to which records equate with 'monuments' or 'events', of past survey coverage by RCAHMS and any other local projects, of how existing land-uses and development pressures have helped or hindered discovery, and of the past pattern of resourcing for development of the SMR's holdings.

SMRs and other environmental databases

4.32 Whilst establishing soundly based working arrangements between national and local record systems for archaeology must be the priority, it is important not to lose sight of other interconnections, especially at the local level where it ought to be easier to develop a holistic approach to environmental conservation. The 'agreed principles' state that SMRs should be able to draw upon parallel databases, such as records of museum archives, portable antiquities and of the natural environment. The evidence of the questionnaire returns is that linkages with museum record systems, historic buildings and other environmental record systems are deficient and patchy. ***Fife*** SMR, with its close physical proximity to the developing record of Fife Nature, may be one of the best placed able to show the way forward to a more integrated environmental approach.

4.33 The historic built environment is the area closest to the traditionally archaeological SMR. Unfortunately, historical conservation over the last thirty years has been characterised by a continuing schism between perceptions of the resource above and below ground, kept in place by different legislative codes, administrative systems, and different intellectual and professional traditions. SMRs developed initially as explicitly archaeological tools, usually including buildings only as ruins or because they had been scheduled as ancient monuments. Some added listed buildings for their historic interest; others included industrial archaeological buildings, on principle or because they were a particular feature of their area. Very few SMRs supported the conservation of the built historic environment from their inception in the same way as traditional archaeological aspects. Scotland's equivalent of England's PPG15, which began to exert a useful influence from 1994 onwards, may now appear in 1999. The lack of systematic documentation for the conservation of historic buildings is becoming increasingly untenable as holistic approaches to environmental conservation continue to develop. Particularly with the growing emphasis on 'statements of significance' and Conservation Plans, it is essential that the principles embodied in SMRs are applied to the conservation of the historic built environment.

References

WGSMRS [1987 ?]. 'A survey of Scottish Sites and Monuments Records'. Working Group for Sites and Monuments Records in Scotland. RCAHMS n.d. but probably 1987.

NPPG5 - Archaeology and Planning. Scottish Office Environment Department. January 1994.

PAN42 - Archaeology, the Planning Process and Scheduled Monument Procedures. Scottish Office Environment Department. January 1994

Forestry Commission 1995. 'Forests and archaeology: guidelines'. Forestry Authority, Edinburgh

Historic Scotland Circular HS 1/96. Local government reorganisation: guidance to local authorities on the conservation of the historic environment. March 1996.

Historic Scotland 1996. 'Archaeology and Planning. surveys of planning authorities and archaeological bodies. Historic Scotland Archaeology Paper 6, November 1996.

Historic Scotland 1996a. Protecting the Built Heritage: a Green Paper presented by the Secretary of State for Scotland. Cmnd 3267. Edinburgh.

Historic Scotland 1997. 'State-Funded 'Rescue' Archaeology in Scotland: Past, Present and Future'. Occasional paper No 2, ed Gordon J Barclay. Edinburgh.

Royal Commission of the Historical Monuments of England, Association of Local Government Archaeology Officers, English Heritage 1998. 'Unlocking the past for the new millennium, a new statement of cooperation'.

RCAHMS 1998. 'Monuments on record' Annual Review of the Royal Commission on the Ancient and Historical Monuments of Scotland 1997-98. Edinburgh

ARIA 1998. 'The Role of Scotland's SMRs: A discussion paper. Association of Regional and Island Archaeologists.

ADS 1999. 'Accessing Scotland's Past. Phase II - SMR Integration Pilot Project. Draft final report. Archaeological Data Service, York (typescript).

Appendix 1: Brief

REVIEW OF THE CURRENT STATE OF SMRs IN SCOTLAND AND THEIR FUTURE DEVELOPMENT ON BEHALF OF THE ROYAL COMMISSION ON THE ANCIENT AND HISTORICAL MONUMENTS OF SCOTLAND (RCAHMS) AND THE ASSOCIATION OF REGIONAL AND ISLAND ARCHAEOLOGISTS (ARIA)

1 Purpose

1.1 The purpose of the consultancy is to provide a rapid quantitative and qualitative assessment of the current state of SMRs in Scotland and an overview of their future development. The consultancy will develop a methodology for the assessment of SMRs, adapted to Scottish circumstances, and a series of outline criteria to be assessed including spatial coverage, consistency, currency, depth of record, breadth of scope, systems development, and completeness and quality of data. While it is recognised that there are significant differences between the situations of SMRs in Scotland and England, the review, as far as possible, should be conducted in a way that allows comparability with the SMR assessment recently undertaken in England. The cost of the resources required to bring SMRs to an agreed level of consistency must be capable of expression in financial terms.

1.2 The consultancy will be funded by RCAHMS and the report will be the copyright of RCAHMS. Project management will be undertaken by a Steering Group comprised of representatives from RCAHMS and ARIA. Historic Scotland will be invited to send an observer to meetings of the Steering Group.

1.3 The output from this work will inform the preparation of a lottery bid by RCAHMS in association with ARIA and others, which will include the enhancement of SMRs in Scotland to an agreed level and the development of a nationally networked 'heritage' record.

2 Background

2.1 The development of SMRs in Scotland reflects the gradual and ad hoc nature of the growth of Scottish local authority archaeological services themselves. The time taken to achieve a coverage that is still not complete (from Grampian in 1975 to ***Angus*** in 1997) is symptomatic of the manner in which local authorities have had to seek their own solutions to a greater extent than in England. There are still important gaps, most notably Perth and Kinross. The early SMRs grew organically, the later ones were generally formed around downloads from the NMRS Several are augmented by aerial photography taken by the local authority archaeologists. Since local government re-organisation in 1996, one major joint service and several agency arrangements have also been established.

[Shepherd I 'The Scottish Dimension' in Baker D, Hunter J and Ralston I, *Archaeological Resource Management in the UK,* 1993, 111-13]

2.2 RCAHMS is charged by Royal Warrant with exercising responsibility for the oversight of Local Sites and Monuments Records in Scotland. This lead role is set out in a policy statement (Appendix 2). Funding for SMRs, which has only once exceeded £15,000 per annum in total, is no longer available from the RCAHMS and Historic Scotland now provides limited project-based funding to SMRs in consultation with RCAHMS.

2.3 There are twelve archaeological services supporting SMRs in Scotland. Most are housed in local authorities, but two, ***Orkney*** and ***Shetland***, are based in Trusts closely aligned to the authority. Their senior professional archaeologist is a member of the Association of Regional and Island Archaeologists. Founded in 1990, Aria acts as a forum for the exchange of professional views and a means of liaison with government bodies. All SMRs in Scotland conform to the definition of an SMR in Pan 42, para 14 and are used primarily as an information base for advice to the planning system in the context of NPPG 5. Several SMRs also function as major sources for local interpretative and educational initiatives.

PAN 42, ARIA Discussion document, ?CSA paper (forthcoming)

2.4 *Protecting the Built Heritage*, a government Green paper published in May 1996 indicates that 'the Government is considering making provision and

maintenance of SMRs a statutory obligation on local authorities'. The advent of a Scottish parliament may encourage further consideration of this proposal.

3 Specifications

In consultation with the Steering Group the consultant will provide:

a) A detailed project plan, with suitable checkpoints for reporting to the Steering Group

b) The criteria for the Review

c) The methodology for the Review which should include questionnaires and follow up interviews (including a written summary) for each SMR in Scotland. It is recommended that all the SMRs in Scotland are visited by the consultant during this Review.

d) The completed questionnaires and the summary reports which will be deposited with RCAHMS and copied to ARIA. These will remain confidential to the participants.

e) A report which should include:

- An objective evaluation of the current state of SMRs in Scotland based on the agreed criteria for assessment
- A quantification of resources required to bring SMRs to an agreed standard which should include consideration of enhancement of existing records, staffing levels, training, IT and GIS requirements, external communications and data transfer methods, equipment and consumables, continued running costs.
- An evaluation of the future potential for SMRs in the context of nationally networked data with particular consideration of professional and public access to data contained in SMRs and the NMRS, as well as other on-line resources, and with particular reference to the proposed HLF bid.

(The report should be illustrated with relevant tables, graphs and maps and should be presented in hard copy and digital form. Each section of the report should include a summary which can be used in other contexts)

4 Data Audits

No data audits have been undertaken in Scotland. The consultant is asked to consider whether these are desirable and whether some elements of such an audit could be incorporated into the questionnaire as part of this Review.

5 Contact

Contacts in the course of the review will include:

5.1 Local authority Sites and Monuments Records and staff in RCAHMS (main contacts); Historic Scotland, Council for Scottish Archaeology, Local Authorities without an archaeology service, Archaeology Data Service (for further information).

5.2 Day to day liaison will be provided by members of the Steering Group. The Consultant will report to the project Steering Group for progress monitoring..

ANNEX 1

Matters for consideration during the course of the review

Definition of an SMR:
The Sites and Monuments Records to be considered in this survey are those which are being used by archaeologists who provide services to Local Authorities primarily for the planning process. Local Authority Areas without such a service, some of which hold archaeological records of various types, should also be matter of report in this review. The Review should include an assessment of the day-to-day and strategic management of the SMRs, programmes of updating and data exchange with NMRS, review of data content, analysis of data structure, copyright and charging issues. It should also consider the suitability of each SMR to meet the requirements of the Local Authority archaeologist and the demands of NPPG5.

Principles governing SMRs
Although there is not yet an agreed statement on the principles governing Sites and Monuments Records tailored for Scotland ARIA and RCAHMS subscribe to the principles set out in the document produced by ALGAO, RCHME and English Heritage (Appendix 3). The definition of an SMR and its ideal scope should be considered by the consultant .

RCAHMS Lead Role
RCAHMS works in a lead role with SMRs in Scotland. The focus of this work has been on providing data to Local Authority Archaeological

Services, providing advice on database and SMR issues, encouraging the maintenance of standards and compatibility, and identifying and testing means of data interchange to build an archaeological information network facilitated by rapidly advancing technology. The aim is to avoid unnecessary duplication of records, harmonise the databases and define the differing roles of SMRs and the NMRS respectively. Statements on the roles of SMRs and of NMRS are being prepared. The Review should include an assessment of the NMRS in the context of its relationships with the SMRs A statement relating to RCAHMS Lead Role (1996) is at Appendix 2

Information network
The husbanding of very limited resources together with travelling distances, the rapid growth in distance learning and potential interest from ex-patriate Scots overseas, mean that remote access to information is becoming a pressing issue. It is one which SMRs and the NMRS believe can be achieved in Scotland, reducing duplication of record holding, allowing SMRs to concentrate on managing their own data but providing access to a wide range of data, not just that held in SMRs and the NMRS but also other on-line services (e.g. ADS, SCRAN) both for professional and for public use. It would be of benefit to understand what links (or potential links) are considered valuable either, physical or conceptual, at local and national level (e.g. environmental and planning databases, European contacts etc.)

User needs
The use of the SMR for the purposes of public information should be assessed including educational use, tourism, promotional activities, individual consultations by the public and what facilities are available (space, hardware/software etc.). If time allows, it would also be useful to gather outline information on who are the customers of the SMR, both in house and external and what is the relative demands from them.

Information Systems
The state of development of information and mapping handling systems, both computerised and paper based, should be reviewed to help assess the requirements to bring each SMR to a minimum standard of computerisation and data structure and the resourcing that would be required to achieve national networking. Information on the current use of GIS mapping and other digital data would also be valuable.

Data Content of the SMRs and the NMRS

The data content should be assessed to establish

a) the scope of each SMR which may include archaeology, historic buildings, historic landscapes and historic sites, with chronological coverage from earliest times to the present. Where the SMR includes a coastline, the assessment should provide basic information on maritime records held

b) the amount of detail held for each record within the SMR and whether there are any quality checks.

Data Standards
During the 1980's a series of basic standards were established relating to classification and terminology, levels and methods of recording and computerisation. These basic standards have been more or less universally adopted, but they are long overdue for review. The presence of the standards to which the SMR works should be established.

Archive
Documentary archive from projects funded or part-funded by Historic Scotland is required to be deposited in the NMRS and it is not normally recommended that original archive material be housed with SMRs. There are circumstances where copies of archive may be required by the SMR. RCAHMS advises on the collection of original archive and can arrange for copies to be made. Security, suitable storage, copying and public access facilities must be made available if originals are to be housed by libraries or museums. RCAHMS is working closely with ADS to establish guidelines for the preparation and long-term storage of digital archives from excavations and fieldwork, which, in Scotland, will be deposited with NMRS.
'Guidelines for Archiving Archaeological Projects' in Historic Scotland, 1996, *Project Design Implementation and Archiving*, Historic Scotland, Archaeological Procedure paper 2.
The procedure for the funding of aerial photography through the Scottish Archaeological Air Photograph Committee is taken up by a few Local Authority Archaeologists. A catalogue of the photographs is supplied to NMRS and in copies of the photographs taken are selected for the NMRS.

The assessment should identify whether the SMR is holding original archive and if so, to what standard and for what purpose.

Resourcing

The level of staffing and professional expertise of the SMR staff should be considered, IT provision and support should be assessed. Levels and sources of funding, (including income generation) would help inform the resource needed to bring SMRs to an agreed consistent standard.

ANNEX 2

ROYAL COMMISSION ON THE ANCIENT AND HISTORICAL MONUMENTS OF SCOTLAND - Lead Role for Local Sites and Monuments Records
Policy

Summary

RCAHMS recognises those archaeologists who are part of Council Archaeological Services as the most appropriate to create and maintain local Sites and Monuments Records (SMRs).

RCAHMS will provide limited funding for two distinct purposes:
a) to assist Councils to establish Sites and Monuments records for new Archaeological Services, usually on a pump-priming basis.
b) to assist existing Council Archaeological Services to establish or enhance Sites and Monuments Records

RCAHMS will provide data and other material to Council Archaeological Services for the enhancement of Sites and Monuments Records including downloads of data from the NMRS database, copies of aerial photographs, copies of maps, and copies of RCAHMS surveys either free or at reduced cost.

RCAHMS will provide advice on database and SMR issues to encourage the maintenance of standards and compatibility with the National Monuments Record of Scotland and to encourage the exchange of data.

RCAHMS will continue to play a lead role, in liaison with Historic Scotland, in identifying and testing means of data exchange and access between local records and NMRS facilitated by rapidly advancing technology.
RCAHMS will work in partnership with Council Archaeological Services on specific activities where the results are of mutual benefit.

Background
The Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) is charged by Royal Warrant with exercising responsibility for the the oversight of Local Sites and Monuments Records (SMRs) in Scotland.

The lead role of RCAHMS is based on the aims and objectives of the Commission which are to survey and record the man-made environment of Scotland; to compile, maintain and curate the National Monuments Record of Scotland (NMRS); and to promote an understanding of this archaeological and historical information by all appropriate means..

Local SMRs are an essential resource for the management and protection of the historic environment, directly applicable to Local Authorities in the three main areas of Strategic Planning, Development Control and Heritage Interpretation and Research, particularly in the implementation of NPPG5 and PAN42.

The common concerns of RCAHMS and Council Archaeological Services are the maintenance of the Sites and Monuments Records, the recording and collection of information and the provision of information for heritage management.

Advice concerning the protection and management of archaeological sites is the concern of Historic Scotland with whom RCAHMS and Council Archaeologists work closely. The NMRS and SMRs are the necessary tools on which that advice is based. Historic Scotland has now had to withdraw its skeleton service to Councils with no archaeological service of their own.

The RCAHMS has always seen its relationship with SMRs as one of co-operation and interchange of ideas and information and is committed to the prospect that this spirit will continue under the re-organised Local Authority structure.

Procedure
RCAHMS will continue to liaise with individual SMRs and has allocated contacts for specific areas of Scotland (Appendix). RCAHMS recognises those archaeologists who are part of Council Archaeological Services as the most appropriate to create and maintain local Sites and Monuments Records (SMRs) for heritage management purposes.

RCAHMS recognises that there are other records which are also appropriate to the aims and objectives of the RCAHMS. Such records usually have a specific role eg. in the curation of archaeological collections in museums and the presentation of

information to the public. RCAHMS will maintain contact with such records where appropriate

RCAHMS, in conjunction with Historic Scotland, will continue to encourage Local Authorities to establish or use an archaeological service. This will include visits to Councils with no archaeological service as well as existing Council Archaeologists, and providing advice as required.

The RCAHMS welcomes opportunities to discuss matters relating to existing Sites and Monuments Records with the Association of Regional and Island Archaeologists (ARIA) and other Council Archaeological Services. ARIA is represented on the RCAHMS User panel.

Data Standards
During the 1980's a series of basic standards were established relating to classification and terminology, levels and methods of recording and computerisation. These basic standards have been more or less universally adopted, but RCAHMS recognises that they are due for review.

Exchange of Data
An important aspect of co-operation is the exchange of information to ensure that both local records and NMRS are as up-to-date as possible. It is particularly important to ensure a consistent response at both national and local level.
Computer printouts or data on disk will be supplied free to Council Archaeology Services. Copies of map overlays containing information on recent RCAHMS surveys will be supplied free at the end of each RCAHMS survey project. Photographs and copies of other archive, including maps, may constitute part of a data exchange or may be negotiable and costs kept to a minimum or waived at the discretion of RCAHMS.

In return, RCAHMS expects a regular supply of information to update the National database, deposits of original archive or copies where appropriate, and co-operation on specific requests for information eg in advance of RCAHMS surveys.

Computerisation
To facilitate exchange of data, the use of information technology must be a first priority. Data has been downloaded to a number of SMRs on disk, but pilot projects to look at more sophisticated data exchange and access mechanisms have not proved particularly easy to manage. RCAHMS will continue to play a lead role, in liaison with Historic Scotland, in identifying and testing means of data exchange and access between local records and NMRS to build an archaeological information network facilitated by rapidly advancing technology.

Archive
RCAHMS can advise on the collection of original archive or arrange for copies to be made and is happy to negotiate individual cases *ad hoc*. Security, suitable storage, copying and public access facilities must be made available if originals are to be housed by SMRs, libraries or museums. Archive from projects funded or part-funded by Historic Scotland is normally required to be deposited in the NMRS.
Guidelines for Archiving Archaeological Projects RCAHMS 1996

Information and Advice
RCAHMS can offer information and advice on a variety of technical aspects including sites and monuments recording, archive cataloguing, computerisation of records, aerial photography, and field-surveying and recording. No official training courses are offered, but individuals seeking assistance have been, and will continue to be offered the professional support of Commission staff.

Appendix 2 - Official Documentation

3.1 SMRs are mentioned in several recent key official documents about local archaeological services. These references constitute the framework for assessing the adequacy of existing arrangements and how they might develop in the future.

3.2 **NPPG5 - Archaeology and Planning** (Scottish Office Environment Department - January 1994) is a statement of government policy aimed at all those "whose actions have a direct physical impact upon the natural or built environment" (2). It includes general definitions of SMRs and descriptions of their functions and uses.

(a) It defines SMRs as "continuously maintained and updated ... intended to contain a description of all known archaeological sites, enabling an assessment of their importance" (10). They should be "provided by qualified archaeologists who have the necessary experience of archaeological fieldwork, record curation and local authority procedures to provide up-to-date information and advice tailored to local, and particularly local planning, needs" (8).

(b) It asserts that local authorities "can ensure local archaeological services are developed for planning, recreational and educational purposes" (13), and reinforces this width of purpose by defining the importance of archaeological features in terms of "their potential use for amenity, tourism and education purposes" (17).

(c) Relating SMRs to the planning process, it specifically cites them as "the sound information base" which is the "first requirement of any policy aiming to protect and manage archaeological remains." "This can be achieved by the creation, maintenance and regular augmentation of a record of all known sites. Such a record will permit an accurate assessment of the importance of known sites and the likelihood of undiscovered sites within the area of a development proposal. All planning authorities should ensure that they have access to such a record, which should be professionally maintained and readily available for consultation by planning departments of ... councils and all other interested parties" (19).

3.3 **PAN 42 - Archaeology - the Planning Process and Scheduled Monument Procedures** (Scottish Office Environment Department - January 1994) provides advice on good practice and other relevant information in support of **NPPG5**.

(a) It asserts that "the future of the great majority of archaeological and historic sites and landscapes lies with local authorities, acting within the framework set by national policies, in their various capacities as planning, education and recreation authorities ..." (11).

(b) It argues "that a regularly maintained and augmented record of all known sites is an essential pre-requisite of any policy aiming to protect and manage archaeological remains ..." (12). It advises "planning authorities with access to the services of [then] Regional Archaeologists, working with properly maintained SMRs (to) make the fullest use of their expertise" (12).

(c) It states unequivocally that "the development of records at [local] level provides an indispensable tool for the formulation of local plans, and the determination of planning applications. More generally, the SMR is an important first stage in the positive management and presentation of the historic landscape for the purposes of education and recreation, and as an input to local history, conservation and tourism projects" (13).

(d) In a frequently quoted paragraph (14), it identifies the four main elements of an SMR under headings of a professionally qualified curator, a list and description of all known evidence, a map record and an archive of detailed supporting material.

(e) It draws attention to the role of RCAHMS in maintaining the NMRS (12), to the role of NMRS in "providing access to data in the establishment phases of a new SMR" (14), and to the ability of RCAHMS to assist local authorities in creating or improving SMRs (15).

3.4 **Historic Scotland Circular 1/96 on Local Government Reorganisation** (March 1996) gives guidance to local authorities on the conservation of the historic environment.

(a) It starts from the premise that "the protection and enhancement of our heritage depend on the competence of local authorities to use their powers and to carry out their responsibilities with effectiveness and commitment" (1). To that end it includes advice on "ensuring that a comprehensive inventory of the historic environment is maintained and fully accessible for use in connection with planning and development control" (2).

(b) In discussing the requirements for an archaeological and conservation service it identifies its essential components as including "reliable and comprehensive inventories and records" (7,8).

(c) What is meant by the "Resource Inventory" is described in seven crucial paragraphs (10-16). These portray it as "the foundation of all conservation and management policies ... important ... at a strategic level and ... for development control decisions. It can also be a valuable educational resource" (10) and "the main source of archaeological information at the local level" (13). The value of NMRS as an information source is indicated, as well as its role in establishing or enhancing them. "But for local use the combination of a local record and information from the national record, interpreted by appropriately qualified local authority staff, will normally provide a fuller and more rounded input to planning considerations" (14).

(d) Specific italicised guidance asks new authorities to ensure:

- that they make adequate provision for day-to-day access to an SMR;
- that when an authority is too small to support an SMR service on its own, it takes steps to ensure ready access to one that is jointly supported;
- that each SMR establishes arrangements for access and exchange of data with neighbouring authorities, NMRS "and other relevant agencies concerned with the recording, understanding and preservation of the archaeological and historic environment" (15).

(e) It also sees Historic Scotland's "non-statutory registers of monuments potentially of national importance" as potentially "an important enhancement to Sites and Monuments Records" (16).

3.5 **Historic Scotland Circular 1/96** needs to be seen against the background of **Historic Scotland Archaeology Paper 6 - Archaeology and Planning,** (November 1996). This reports on **surveys of planning authorities and archaeological bodies** in late 1995, before local government reorganisation took effect in April 1996, and dealing with their responses to NPPG5 and PAN42. Essentially a document of record rather than a reiteration of policy, it charted the then considerably incomplete coverage of SMRs and recorded anxieties about arrangements after reorganisation. It concluded that "the problems of local monuments require local solutions, informed and supported by national agreements" (Preface).

3.6 The incompleteness of post-reorganisation SMR coverage and its continuing fragility prompted different responses to the government Green Paper **Protecting the Built Heritage** (May 1996) which stated an intention to consider making the provision of SMRs a statutory obligation on local authorities. A report of the **Scottish Ancient Monuments Board** responding to the Green Paper canvassed an increase in the funding to NMRS as a viable alternative. In response, a discussion paper from ARIA, on **the Role of Scotland's SMRs** (March 1998) saw the way forward as a clearer definition of responsibilities and relationships as between NMRS and SMRs.

3.7 The draft NPPG **Planning and the Historic Environment** (1998) reiterates its "immense importance for education, recreation, leisure, tourism and the wider economy (4)" and the vital role in conservation of "a full and detailed analysis and understanding of the heritage resource contained within our towns and cities" (29). However, it is extremely weak on the principle of documentation as an essential tool in the management of the historic environment. SMRs receive one mention in over 9,000 words, and then only as a possible source of historic photographs or archive material when considering development proposals both within or adjacent to historic areas. The degree of subsequent interest in Conservation Plans and statements of significance as the starting point for all conservation activity must make a major revision, or even a conflation with NPPG5, extremely likely.

3.8 This is perhaps foreshadowed in Historic Scotland's draft **Scottish Conservation Charter** (1999). Though it perpetuates the confusing term of "built heritage" to cover "ancient monuments and archaeological sites and landscapes; historic buildings, parks and gardens and designed landscapes", it does identify its "range of values to society ... as an important social, economic, recreational and educational resource." Its six Articles, which deal with process rather than specific organisations or responsibilities, fully integrate information needs into all stages of conservation work "for the benefit and enjoyment of present and future generations".

3.9 Both the Scottish Conservation Charter and the Scottish Museums Council's consultative document **Taking Responsibility, A National Strategy for Scotland's Museums** (September 1998) are looking forward to arrangements that will be made by the new Scottish Parliament. Though it includes no specific reference to SMRs, it argues strongly that museums have similar social and economic roles in "making the cultural heritage physically accessible ... (as) an essential aspect of maintaining national and local identities" (1.3). Consideration of its argument for "a national cultural strategy and for the creation of a Ministry of Culture and Heritage which embraces every aspect of culture including the material and built heritage" (7.1) is outside the direct terms of this assessment, but does raise other issues. It consolidates the arguments for the multi-purpose functions of SMRs, and the need for adequate levels of resources however they are organised. It invites a comparison of effectiveness as between planning-based records systems required to communicate to the wider constituencies on whose behalf planning decisions are made, and systems based on cultural celebration or research seeking to insert themselves into probably more focused planning systems.

Appendix 3: Method Statement

Development of the Questionnaire

1 The questionnaire, like the Brief (Appendix 1), was based upon that previously prepared for the review of English SMRs. This was amended by the project Steering Group to take account of Scotland's particular characteristics and circumstances while also retaining those aspects common to all SMRs in Great Britain. Some amendments also arose from the experience of applying the questionnaire in the English survey.

2 The questionnaire retained its framework of six functional sections:

- management context
- system organisation
- information content
- systems linkages
- users
- data / system quality assurance.

3 This framework represents a common standard, albeit with national or regional variations, to which SMRs should aspire. By measuring them against its various aspects the extent of development of each can be gauged. A list of future tasks can be compiled from which priorities can be selected.

4 As a level of investigation, the questionnaire stops short of the detail required in the English RCHME 'Data Audits' but goes further and more systematically into the kinds of matters covered by recent shorter surveys, such as that of 1997 by the ARIA SMR Working Party. Except, however, through analysis of the SMRs as a group, or by comparisons between stronger and weaker examples, it was not possible in "a rapid quantitative and qualitative assessment" to provide detailed information that could not be identified or produced by the SMRs themselves.

Selection of SMRs

5 A feature of the Scottish situation is that SMR coverage is incomplete, with gaps of various kinds in some places, and arrangements in others that seem vulnerable to the continuing financial difficulties of local authorities. The reorganisation of local government that took effect in April 1996 meant that in several places new arrangements were in process of settling down, though in a minority of cases there were unresolved difficulties affecting the creation, development or survival of SMRs.

6 The project brief sought a definition for an SMR and an indication of the level of resources required to bring them up to the standard implied in that definition. This raised the question of which Records ought to be included in the survey: some known to exist clearly did not come within that definition, and those responsible for them did not qualify for membership of ARIA. Insofar as Scotland-wide coverage of SMRs is a shared objective of ARIA and RCAHMS, it therefore seemed sensible to include all Records within the survey, including those that do not yet qualify as SMRs, in order to gauge some measure of what has still to be done.

7 Eighteen SMRs or near-SMRs are therefore included in this study, as indicated in the table below. The two Council areas without any means of documentation for the conservation and understanding of their historic environment are East Dunbartonshire (formerly covered by ***WoSAS***) and Mid Lothian.

Visits to SMRs

8 All the SMRs indicated in the above table were visited between August and October 1998. At each visit the SMR was inspected, the questionnaire was gone through, and other matters relating to the SMR and archaeology service were discussed.

Processing questionnaires and visits

9 The eighteen questionnaires were put on an Excel spreadsheet and extended comments were tabulated separately. This was the basis of **Appendix 4**. Each visit was written up separately and a narrative created by synthesising those notes with a summary of the questionnaire including the more extended comments; a summary presented as a SWOT analysis

SMR / Record and area *[not visited]*	**Type**	**Comments**
Aberdeen City	SMR	
Aberdeenshire & Moray	federal SMR	Unified SMR for two Council areas maintained by Aberdeenshire Council following on from the pre-LGR Grampian Region
Angus	non-local SMR	Maintained by Aberdeenshire Council as separate SMR for Angus Council, following on from the pre-LGR Grampian Region
Dumfries & Galloway	SMR	
Dundee City	*pre-SMR*	*System maintained by Museum which is seeking its transfer to Planning*
East Lothian	non-local SMR	Maintained by City of Edinburgh as separate SMR for East Lothian Council
City of Edinburgh	SMR	
Falkirk	SMR	
Fife	SMR	
Highland	SMR	
Orkney Islands	SMR	
Perth & Kinross	*pre-SMR*	*Maintained in the Museum but with limited opportunities for useful influence on planning matters*
Scottish Borders	SMR	
Shetland	SMR	
Stirling	federal SMR	Includes Clackmannanshire Council SMR as semi-separate system, following on from the pre-LGR Central Region
West Lothian	pre-SMR	ACT maps as database and GIS provided on contract by WoSAS and attached to WL Conservation Officer
Western Isles	SMR	Included as a proper SMR though only a few months old at the time of survey
WoSAS	federal SMR	Serves Councils of Argyll & Bute, East Ayrshire, East Renfrewshire, Renfrewshire, Glasgow City, Inverclyde, North Ayrshire, North Lanarkshire, South Lanarkshire, West Dunbartonshire, South Ayrshire

is the basis for **Appendix 5**. Each SMR was shown a draft of the SWOT analysis and encouraged to identify errors and omissions.

10 Questionnaire responses were quantified using the methodology described in the **Assessment, section 7**. It worked through the indicators in the six sections of the questionnaire, many of which could be quantified by scoring answers to questions requiring 'yes - no' or 'all - some - none' responses. The total score should not equate with the excellence of a few but with a standard it is reasonable to expect all to attain; actual scores highlight the ground which individual SMRs might need to make up. The questions excluded from scoring mainly covered opinion or comment and factual material unrelated to quality or performance, together with the answers to the question about backlogs. Generally, they had maxima of 5; weighting was used, rising to 10, only in selected areas of greatest significance. The questionnaire in **Appendix 4** has been annotated to show which questions were scored with what values.

11 A comparison of scores for all scorable questions and selected 'key' ones made in the course of the English assessment showed no significant difference in totals, so the former approach was adopted there and here. Two ways of representing the

scoring were considered. In the first, the six sections were totalled, giving potential maxima ranging between 70 and 323, with an overall maximum of 849. Thus, *System Organisation* contributed nearly twice as much to the overall total as *Information Content*, in turn double or more than double the scores for *System Links*, *Users*, and *Data / System Quality Assurance*. In the second approach, which was adopted, each section total was expressed as 100, and scores expressed proportionately, to give an overall maximum of 600. Thus *System Organisation* was weighted down to 31%, and *Users* up to 143%. Comparing the two, there was no difference in the total of SMRs scoring below 60% of the desirable norm. In 'league table' terms only two SMRs moved more than one place up or down (***Aberdeen City*** down three places on two % points difference, and ***Scottish Borders*** down two places on three % points difference).

Appendix 4: Summary of responses to the SMR assessment questionnaire

This analysis is based on eighteen questionnaires, a full return of all those sent out.
Scored questions are starred *, with maximum scores shown thus *[5]*.

1 Management Context

1.1 Basic data

1.1.1 What is the **name** of the Record ?

All eighteen Records use the traditional title 'Sites and Monuments Record' except ***Dundee*** ('Sites and Finds Index') and ***West Lothian*** ('Cultural Resource Management Database').

1.1.2 What is its **parent** Department and Local Authority or other host ?

SMRs or records by type of area coverage	SMRs	Councils
Established SMRs covering single Council area	9	9
New SMR covering a single Council area	1	1
'Federal' SMR covering more than one Council area	3	15
Separate but non-local SMR managed by a neighbouring Council	2	2
Record systems not full SMRs hosted by single Councils	3	3
Council areas without any SMR coverage		2
TOTAL	**18**	**32**

SMRs by type of Departmental host	**SMRs**
Planning / Environmental / Development	**9**
Museum / Arts / Recreation / Leisure	**7**
Trusts	**2**
TOTAL	**18**

What exists of the three non-SMRs is based in Planning (1) and Museums (2), with one of the Museums (***Dundee***) striving to get the Record adopted by Planning. The two Trusts are both Islands.

1.1.3 Where is it physically **located** if not on the premises of 1.1.2 ?

8 are based in main planning-type departments and 3 in main museums. 4 are in outstation museums. 3 are in other accommodation relatively isolated from the local government services they advise, ***WoSAS*** in the Charing Cross complex in Glasgow, ***Orkney*** in an old school, and ***Shetland*** in the offices of the Amenity Trust of which it is part.

1.1.4 Please give SMR address / phone / fax / e-mail / web site

All were able to provide a fax number, thirteen an e-mail address, and four (***Shetland***, ***Orkney***, ***Highland*** and ***Stirling***) quoted a web site.

1.2 Geographical area of responsibility

1.2.1 What is **your Record's area of responsibility** as an information resource and as the provider of information for advice to local planning authorities, the Forestry Commission and Public Utilities ?

As an **information resource**:
Same as Council area - 15, Probably - 1 (***Dundee***), Notionally - 1 (***Perth & Kinross***)
(***Western Isles*** excludes St Kilda, covered by detailed records of National Trust for Scotland).

As the provider of information for **advice to local planning authorities**:
Same as Council area - 16, Specific sites - 1 (***Dundee***), Limited - 1 (***Perth & Kinross***)

As the provider of information for **advice to the Forestry Commission**:
Same as Council area - 16, Limited - 1 (***Perth & Kinross***), Unanswered - 1 (***West Lothian***)

As the provider of information for **advice to Public Utilities**:
Same as Council area - 15, Limited / Patchy - 2 (***Perth & Kinross***, ***Stirling***), Unanswered - 1 (***West Lothian***)

1.2.2-4 *Does this reflect a **generally understood and accepted state of affairs ?** *[5]*
*If so, is it **informally understood** *[2]* or is it **documented** *[5]* ?

This question mainly concerns external relationships with client authorities or external bodies like the Forestry Commission and Public Utilities: most singleton-Councils SMRs regarded it as not applicable to them. Much depends upon how far the culture of inter-departmental charges and SLAs has penetrated. Within Falkirk Council, exceptionally, the Museum provides SMR-based planning advice through an SLA. SLAs are being negotiated in ***Orkney*** and the ***Western Isles*** between the SMR and other departments. Two of the three 'non-local' SMRs are run with SLAs in existence or nearing completion, while ***Stirling***'s service to Clackmannanshire is regulated by an exchange of letters.

1.2.5 If arrangements over responsibilities are transitional, or due for review before March 1999, or if any significant changes are planned, please give details.

Refer to above.

1.3 Resources

1.3.1 *Staffing

The table below incorporates the analytical categories used in the English SMR Assessment.

CATEGORIES OF SMR STAFFING	
Dedicated permanent SMR Officer	
90% or more of full time equivalent *[10]*	**0**
50% or more of full time equivalent *[5]* = 1 x 80%, 1 x 75%, 4 x 50% all also doing Development Control	**6**
Less than 50% of full time equivalent *[2]* = 2 x temporary 25% posts, 2 x 15% posts of which one temporary	**4**
Other posts reported but with nil return against dedicated SMRO	**8**
Dedicated clerical / technical support	
40% or more	**0**
Some, but less than 40%: 1 x 35%, 1 x 10% *[2]*	**2**
None	**16**
Direct input to SMR from CAO / DAO or equivalent	
25% or more *[5]*	**3**
10% or less - ? essentially managerial + personal *[2]*	**13**
Archaeological Planning Officers involved in SMR work	
30% or more: 7 (32%) / 22 *[5]*	**0**
20% or less, i.e. nominal or personal: 15 (68%) / 22 *[2]*	**0**
Other staff, by SMRs *[2 each]*	
Temporary 'Assistant' 50%	**2**
Conservation Officer 5%	**1**
Human History Officer 5-10%	**1**
Non-statutory project officer, HS funded 100%	**1**
Part-Time Lecturer 10%	**1**

Has **demand on SMR staff** increased, due to the introduction of NPPG5, in requests for planning information and the need to access assessment and fieldwork results ?

Eleven out of eighteen reported a significant increase. The longer-established SMRs in a position to notice change did report significant increases. Those created largely as a result of local government reorganisation were usually unable to judge. One commented that the matter could not be assessed effectively because the planning officer generally ignored NPPG5. ***Highland*** noted that, although Inverness claims to be the fastest growing town in Britain, rising pressures on the historic resource are coming as much from forestry, in terms of amenity schemes and natural regeneration, as from commercial schemes.

1.3.2 Does your SMR have an identifiable **budget** controlled by the ARIA member for other than core-funded staff or wholly externally funded projects ? If so, what does it cover ?

Yes - 7, No - 11.

1.3.3 Where do you get your IT support ?

Internally - 6, Externally - 7, Both - 5.

(b) Is it likely to continue as far as can be reasonably predicted ?

Yes - 16, No - 1, Unanswered - 1.

(c) Does it have to be paid for out of any budget which covers SMR functions ?

Yes - 8, No - 8, Unanswered - 2.

1.3.4 *(a) Are there resources for **training** in skills directly related to running an SMR ?

Yes *[5]* - 10, No - 8.

(b) If YES, are the budgets specifically for the **SMR** or within a **wider** specialist conservation team, at departmental or corporate level ? Can you quantify / estimate for 1998-99 ?

Source of budgets	
Team only	**5**
Department only	**4**
SMR only	**0**
Corporate only	**0**
Unanswered	**9**

1.3.5 *Is the SMR **accommodation** shared with other archaeological or planning functions, in a separate space, or split across more than one site ?

Shared *[5]*- 17, Unanswered - 1.

1.3.6 * Does existing SMR accommodation provide **external physical access** for private individuals, students, consultants etc in terms of

	Yes	**No**	**Unanswered**
dedicated desk / table space *[5]*	**5**	**11**	**2**
a computer terminal *[5]*	**3**	**14**	**1**
staffing support for inquirers *[5]*	**8**	**9**	**1**
direct access to SMR database *[5]*	**1**	**15**	**2**
facilities for copying *[5]*	**14**	**3**	**1**

* What are opening hours for public access to the SMR ?

All those open to the public used office hours. Weekday by appointment - 10, weekday on demand - 4, remotely - 1, selected days - 1, unanswered or n/a - 2.

*Is public access (physical or remote) to SMR data limited in any way ?

Yes - 12, No *[5]* - 5, unanswered - 1. Comments included:
"forbidding council building and working planning office; space limited"
"SMR is in a restricted storage area without supervision"
"the database is on a PC in a private first-floor office"
"some material is stored in a non-public space: network access is limited"
"no space at all - this may change with new premises".

Have you / will restrict inquirers by volume or type due to lack of accommodation and / or facilities ? If so, please give details.

Yes - 2, No - 13, Other - 1, unanswered - 2.

Do you have a benchmark response time for telephone or written queries ?

Yes - 12, No - 5.

*If yes, do you meet it ?

Always *[10]* - 2, Usually *[5]* - 9, Sometimes *[2]* - 1, uncertain - 1, unanswered - 1.

1.4 Strategic landscape

1.4.1 *Does the SMR form an explicit part of a formally adopted **departmental or authority-wide** 'vision', corporate service or business plan ? If so, briefly describe it.

Yes *[5]* - 3, Structure / Local Plan only - 6, No - 7, Unanswered - 2.

1.4.2 * Does the SMR have its **own Business Plan** or does it in one for a wider specialist team ?

No SMR had its own Business Plan, but 6 did figure in wider statements. .

* Was the existence of your SMR explicitly recognised at LGR or subsequently by resolution of members or any other formal mechanism ?

Yes *[5]* - 5, No - 8, Partial - 3, Unanswered or n/a - 2.

2 System organisation

2.1 Information media

2.1.1 Photographic material

* Does your SMR incorporate a collection of **colour slides** ?

Yes - 13, No - 5.

* If so, how **systematically** is it assembled ?
Is it **cross-referenced** into your main retrieval system ?

3 collections are outside the SMR. I is sytematic but not cross-referenced. 4 claim to be systematic and cross-referenced. 5 have partial or complete cross-referencing

*(b) How comprehensively does your SMR contain material from the main **aerial photographic** sources relevant to your area ?

I = index ***P = prints***		**Yes/All**	**Many**	**Selctd**	**Some**	**Few**	**None**	**Unans**	**Total**
RCAHMS *[5]*	**I**	**14**					**3**	**1**	
NMRS *[5]*	**P**				**13**		**4**	**1**	
Cambr *[5]*	**I**	**5**					**10**	**3**	
[5]	**P**				**4**	**2**	**9**	**3**	
RAF *[3]*	**I**	**3**					**11**	**4**	
1940s *[2]*	**P**				**2**	**2**	**10**	**4**	
Admin *[3]*	**I**	**3**					**10**	**5**	
Area *[2]*	**P**				**2**	**3**	**8**	**5**	
MLURI *[3]*	**I**	**1**					**12**	**5**	
87/88 *[2]*	**P**	**1**				**1**	**11**	**5**	
Special *[5]*	**I**	**7**					**7**	**4**	
Progs *[5]*	**P**	**7**				**1**	**6**	**4**	

Quantification was not sought unless the information was already to hand, and SMRs were encouraged to use words like 'few' 'some' 'many' 'most'; 'a chosen selection' 'what we could afford after 19**', and to insert any major omissions not otherwise covered.

*Do you hold plots ? Are they sketch or computer-generated ?

Some - 10, None - 2, unanswered - 6.
The ten gave little information, and the impression is that Scotland's SMRs hold few plots of any kind.

*Does your SMR contain copies or references to specialist photographic collections, such as historic buildings, old local photographs etc.? If so, please indicate *[5]*.

Historic buildings	**1**	Other	**2**
Fliers	**1**	World War 2	**1**
Local history	**2**	None	**8**
Museums	**1**	Unanswered	**1**
University sources	**1**		

2.1.2 *Please indicate the scales of current **modern OS maps** for your area held in the SMR. Are they paper copies, film copies or digitised (i.e. for use in a GIS) ?

15 SMRs have mapping at 1:10,000 or 1:10560 scale, 2 at 1:1250, 8 at 1:2500, 4 at 1:25000, and 4 refer to GIS-based mapping at several scales.

	Yes	No	Unans
Paper copies *[3]*	**17**		**1**
Film copies *[5]*	**3**		**15**
Digitised *[10]*	**6**		**12**

*Does your SMR include copies of, or have access to, **historical Ordnance Survey maps** ? If copies, are they paper or electronically scanned ?

All *[10]* - 12, Some *[5]* - 5, None - 1.

Does your SMR include **copies of historical maps and surveys** ?

Yes *[5]* - 11, No - 5, unanswered - 2. 'Yes' answers include access to maps held nearby in archives or libraries 11 were paper-based, and 3 on microform.

*Are they copies, or transcriptions on a modern OS base, or scanned into a GIS system (if so, raster scanned copies registered to an OS base or vector transcripts) ?

Copies *[5]* - 3, Scanned *[10]* - 0. Raster / vector is not an issue.

Do you have copies of or access to the surveys of Pont / Bleau and Roy ?

	copies	access	both	none	unans or n/a
Pont / Bleau	**3**	**8**	**2**	**1**	**4**
Roy	**1**	**7**	**4**	**1**	**5**

2.1.3 *What classes of **digital material** does your SMR hold ?

[each 5]	Much	Some	Little	None	Unanswered
text files (reports etc)	**4**	**7**	**1**	**5**	**1**
databases (not main SMR)	**1**	**7**	**1**	**8**	**1**
spatial data on GIS systems	**7**	**1**	**2**	**7**	**1**
geophysical output				**17**	**1**
field project outputs		**3**	**3**	**11**	**1**
other		**2**	**1**	**8**	**7**

*Is digital data available as points from the database or as digitised areas ?

Points only *[5]* - 3, Areas only *[3]* 2, Points and Areas *[10]* - 4, unanswered - 9.

*If you do not have GIS when do you expect to acquire one *[5]* ?

9 did not answer, including those already equipped. Of the rest, 5 could, and 3 could not, give a specific date, and for 1 acquisition was not in the foreseeable future.

If so, which software package(s) are you considering?

6 responses mentioned packages, GGP, DataMap, ArcView, FastMap, ArcInfo, exeGesIS.

2.1.4 *Does your SMR contain (physical originals, not just copies or references to) artefacts and 'finds', fieldwork project paper archives, and original historical documents ?

[each 5]	**Much**	**Little**	**None**
artefacts and 'finds'	**3**	**3**	**12**
fieldwork project archives	**4**	**11**	**3**
original historical documents	**1**	**2**	**15**

Comments showed a high level of consistency of treatment, including referral of fieldwork project archives to NMRS. 'Much' responses came from SMRs held by Museums services and organisations that sponsored or undertook fieldwork as well as maintained an SMR.

2.1.5 *Do you have **an SMR Library** ?

Yes - 13, No - 4, unanswered - 1

	Comprehensive *[10]*	**Selective** *[8]*	**Patchy** *[3]*	**None**	**Unanswered**
Published reports	**2**	**7**	**7**	**0**	**2**
Periodicals	**2**	**5**	**7**	**1**	**3**
Standard works	**0**	**9**	**5**	**1**	**3**

*Do you have **an SMR Archive as defined in PAN 42** ? *[10]*

Yes - 15, No - 2, unanswered - 1.

Thirteen answered the question about how it is organised, virtually all in box-files arranged by map-sheet or SMR number.

2.2 Data standards and data structure

2.2.1 General classification

*Do you use a Thesaurus ? If yes, how far have you applied it back retrospectively to holdings acquired before it was issued ?

Yes *[5]* - 9, No - 9.

2.2.2 *Have you **standard documented requirements for accepting material** for accession:

[each 5]	Yes	No	Unanswered
field survev projects incl assessments	2	15	1
excavation projects incl evaluation	2	15	1
building recording	2	15	1

2.2.3 Do you use the set of **13 core fields used for the c1989 data exchange between SMRs and NMRS ?** If **yes**, have they been applied consistently to your SMR in current use and retrospective recasting ?

Similar fields in use	7
What are they ?	3
None	4
unanswered or n/a	4

2.2.4 *Information schemes

	Yes	No	Partly / Unkn*	Unanswered
Aware of principles behind and operation of 'Monument - Event – Archive' ? *[5]*	6	7	4	1
Aware of principle of grouping monuments and components hierarchically ? *[5]*	10	1	6	1
Worked through practical and resource implications of applying to SMR ? *[5]*	3	13		2
Content with what have now ?	7	8		3
Other prospective arrangements ?	3	8		7
If migrate, to MEA, given resources ?	6	4	3	5

Please add any additional comments you would like to make about MEA / exeGesIS

See Assessment, paragraph 2.14

2.3 Input and output methods

2.3.1 *Is basic **data inputting** done by anyone other than SMR staff such as volunteers ? If so, who and under what conditions of control ?

No *[10]* - 10, In the past but not now - 2, Yes under supervision - 6.

*Is inputting regular, as and when needed, or as and when time can be found ?

when time found *[3]*	**10**
when needed *[8]*	**6**
regular *[10]*	**1**
unanswered	**1**

2.3.2 What **units of record** do you use and for what purposes; are they represented on maps / digitally as points or polygons ?

Unit of Record / level of survey response	**land parcel**	**unit of archaeology or 'monument'**	**unit of info or 'event'**
Yes / point	**2**	**4**	**1**
Yes / polygon	**6**	**1**	
Yes / point & polygon		**9**	**2**
No	**4**		**8**
Unanswered	**6**	**4**	**7**

2.3.3 *Which type of **retrieval system** do you use ?

Types of retrieval system	**Occurrence**
Relational database linked to GIS [20]	**7**
Flat-file database only *[10]*	**1**
Relational database only *[15]*	**11**
Simple card index only *[3]*	**9**
Unanswered	**1**

Some SMRs use more than one type of retrieval system

What database software are you using ?

Access - 10, Dbase4 - 1, DataEase - 1, Other - 2, Unanswered - 4.

2.3.4 Output formats

*Are there any limits on bespoke searches of your retrieval system ?

No *[5]* - 12, Yes some - 4, unanswered - 2.

Do you generate any index / summary outputs ?

No - 8, Some - 5, Unanswered - 3.

3 Information Content

3.1 Scope and width

3.1.1 Records on SMRs (numbers without qualifications added in many responses)

LOCAL AUTHORITY	Area	On SMR	Awaiting	Projected
Aberdeen City	small	1276	250	3500
Aberdeenshire & Moray	large	10500	500	20000+
Angus	medium	3700	50	? 6000
Dumfries & Galloway	large	c 12700	< 500	? 14000
Dundee City	small	1400 +	500	2000
East Lothian	small	c 2500	c50	c 6000
City of Edinburgh	small	c 1800	c200	c5000
Falkirk	small	1150	none	-
Fife	medium	c 9500	2 boxes	10000
Highland	very large	28519		? 50000
Orkney Islands	medium	c 2000	c 1500	3500
Perth & Kinross	large	5000 - 6000 +	c 3000	? c 10000
Scottish Borders	large	11,500	don't know	don't know
Shetland	medium	5000+	400	6000+
Stirling	medium	3500	400	4500
West Lothian	small	1000+	<10	
Western Isles	medium	awaiting SMR		
WoSAS		20405	542 + archive reports	22000 ?

Are there any notable patterns in the accumulation of records during the life of the SMR ?

see Assessment, paragraph 3.3

3.2.1 *Are there any parts of your SMR area for which **spatial coverage** is consistently higher / more detailed or lower but in principle remediable ?

Higher and lower *[2]*	**11**
Higher only *[5]*	**3**
Lower only	
Neither *[3]*	**1**
Unanswered	**3**

for details see assessments of individual SMRs in Appendix 5

*What proportion of sites or monuments entered on the SMR as **visible and extant** (excluding crop and soil marks) from 'third party' sources (i.e. not by your team or a recent systematic survey) have been field- checked to your satisfaction ?

Some *[3]*	**13**
Most [7]	**1**
All *[10]*	**1**
None	**1**
Unanswered	**2**

11 sets of comments: see Assessment, paragraph 3.5

3.2.2 *What is your **recent cut-off date** for data collection. Is it sharp or tapering ?

Tapering	**8**
Sharp	**3**
None	**3**
Unanswered	**4**

3.2.3 *Do you record data on the following **topics / subjects** (in practice rather than in principle) ?

Topic / subject *[each 5]*	**all**	**some**	**none**	**unans**
scheduled ancient monuments	**18**			
important unscheduled HS non-statutory mons	**16**		**1**	**1**
listed historic buildings in use	**5**	**12**	**1**	
important unlisted historic bldgs in use	**2**	**15**	**1**	
registered historic parks and gardens	**9**	**3**	**6**	
un-registered historic parks and gardens	**3**	**4**	**9**	**2**
historic landscapes	**3**	**8**	**7**	
landscape features	**4**	**12**	**2**	
historical ecology		**8**	**9**	**1**
urban deposits / deposit modelling	**2**	**8**	**8**	
historic towns as an entity	**11**	**3**	**4**	
historic village / hamlet as an entity	**5**	**9**	**4**	
documented sites, no located remains	**7**	**11**		
place names		**10**	**8**	
field names		**4**	**14**	
industrial archaeology	**2**	**15**		**1**
maritime archaeology - inter-tidal	**2**	**15**	**1**	
maritime archaeology - off-shore	**1**	**7**	**10**	
historic sites incl battlefields and sieges	**6**	**9**	**2**	**1 [n/a]**
18th / 19th century military / defensive	**8**	**9**	**1**	
20th century military and defensive	**5**	**9**	**4**	
stray finds / artefact scatters	**13**	**5**		

Please specify historical ecology categories recorded.

10 responded, mostly referring to named trees; ***Shetland*** noted glacial erratics that resemble standing stones.

Is there an historical / archaeological element or site / monument type distinctive in your area or its wider region (e.g.'s given) If so, please identify and indicate extent of practical recording.

for details see assessments of individual SMRs in Appendix 5

.

3.2.4 Process: *Do you record / retain

	Yes *[5]*	No
site management / conservation data	**16**	**2**
planning history & applications	**17**	**1**
previous interpretations	**16**	**2**

3.3 Level of easily retrievable detail

*Can you roughly estimate the proportions of records that could be easily retrieved now under the following categories. Please also indicate whether retrieval would be **digital** from a database, **manual** from back-up files, or a **combination** of the two.

(i) **Extensive minimal**: basic field index key-words only: name-subject-date-location: no text
(ii) **Extensive comprehensive**: basic field index key-words only: AN32 fields or own selection consistently applied plus a text summary
(iii) **Intensive systematic**: basic fields index key-words + references to available data from general periodical searches and other standard local and national sources + a text summary.

[Scoring: each category: combined – 10; digital – 8; manual – 5]

Retrieval by quantity		**Extensive minimal**	**Extensive comprehensive**	**Intensive systematic**
Response				
ALL	digital	**9**	**7**	**4**
	combined	**1**	**2**	**1**
	unspecified	**1**	**1**	**1**
MOST	digital		**2**	**2**
	combined			**2**
	SOME combined	**2**	**2**	**2**
OTHER few				**2**
	unanswered	**5**	**4**	**4**

Retrieval by mode		Extensive minimal	Extensive comprehensive	Intensive systematic
Response				
DIGITAL	All	**9**	**7**	**4**
	Most		**2**	**2**
COMBINED	All	**1**	**2**	**1**
	Most			**2**
	Some	**2**	**2**	**2**
UNKNOWN	All	**1**	**1**	**1**
OTHER	few			**2**
	unanswered	**5**	**4**	**4**

4 System linkages

4.1 Local archaeological records

Please describe arrangements for **mutual access and for data exchange**, indicating whether informal or formal, and if, formal, how documented, and with what frequency.

(a) with another SMR / UAD *adjacent* to your SMR's area but within it before LGR
(b) with geographically adjacent SMRs

	Adjacent formerly within	Adjacent
Informal	3	2
Formal	0	4
Ad hoc / occasional	3	1
Unanswered	5	2
None	2	7
Not applicable	8	2

4.2 National organisations (RCAHMS, HS, NMS etc)

Were there any problems with the **start-up data exchange** with RCAHMS ?

No - 4, Yes - 2, Never happened or 'before my time' - 7, n/a - 3, other - 2

What **data exchange** has there been with these national organisations - National Museum of Scotland, Historic Scotland SAM details and Field Monument Warden reports, other e.g. National Trust for Scotland ?

see Assessment, paragraph 4.10

4.3 *Other historical records (data exchanged rather than services used)

	Yes *[3]*	No	Unanswered
Museums			
Accession registers	6	10	2
Metal detector finds index	2	14	2
Other	5	10	3
Documentary sources			
LA Archive Service	7	11	
LA library Local history collections	8	10	
University archives	5	13	
Any private documentary collection	6	11	1

4.3.3 Archaeology Units

How many Units did fieldwork projects in your SMR area during 1997- 98 ?

Number of SMR *areas* with that total of Units

Areas	1	3	1	2	2	2	2	1	1	3
Units	0	2	3	4	5	6	7	8	9	10 or less

Totals of *Units* operating in an SMR area

How many SMR areas received Units that came from outside Scotland ?

6 SMR areas received Units that came from outside Scotland.

*Does your Archaeological Planning Adviser or equivalent require, through Briefs and / or Specifications, that they send reports to the SMR ? Do they do it as required ?

Are reports required ? Yes *[5]* - 17, No - 1

Are they sent ?	
Always *[10]*	14
Sometimes *[3]*	2
Not arisen yet	1
Unanswered	1

4.3.4 Historic buildings systems

*Does your SMR have a direct role (i.e. providing and receiving information) analogous to that in advising upon archaeologically sensitive / NPPG5 applications, for

Topic *[each 5 yes, 3 some]*	**Yes**	**None**
archaeological buildings analysis and recording	10	8
listed building consent applications generally	3	15
historic areas / Conservation Area consent applications	4	14

*for **exempt ecclesiastical jurisdiction control systems**

	Always *[5]*	**Sometimes** *[3]*	**Never**	**Unans**
Routine consultation	0	6	12	0
Casework documentation to SMR	0	4	13	1

see comments on historic buildings systems in Assessment, paragraphs 4.5, 4.6

4.3.5 Other organisations and systems

*Does your SMR receive / provide information / have any special arrangements with other organisations such as local history or archaeological societies ?

Several groups / societies *[5]*	7
Mainly one group / society *[3]*	3
Students / universities	3
None / to be advised	5

*Do you have systematic arrangements for collecting material from local groups ?

Yes *[5]* - 4, No - 12, unanswered - 2

4.4 Other environmental records

Please describe the nature of any contacts and arrangements your SMR has with any of these:

- General planning (including environmental) databases
- Countryside management databases
- Natural history / ecological databases
- Forestry Commission environmental databases

Specific local arrangements	**4**
Through GIS	**4**
None	**8**
Informal and ad hoc	**2**

5 Users

5.1 Priorities and volumes

Does your SMR have a policy prioritising access by purpose of enquiry ? If so, when and why was it introduced ? What are its priorities ? Is it a formal departmental requirement or an informal policy ?

No - 13, Yes - 5. 7 added comments, mainly about pressures requiring them to prioritise enquiries about planning and direct conservation issues.

*Do you require users to sign a Users' Declaration form - copyright / *caveats* / charges / commercial & private uses of information / etc

No - 12, Yes *[5]* - 4, n/a - 2.

*Do you keep a register of users ?

No - 11, Yes - 6, unanswered - 1

see Assessment, paragraph 5.1

5.2 Management users

5.2.1 Input to planning advice

*Do all the development control teams in your SMR area seek / accept advice based on its material, whether directly or through an archaeological planning adviser ?

Yes *[10]* - 17, No - 1.

Does this advice cover both development control and policy / development plan ? If no or partly, please explain.

Yes - 14, Partly - 2, No - 1, Unanswered - 1

Have you supplied map-based constraint areas or archaeological priority areas to all DC teams, Forestry Commission and Public Utilities in your area ? If not or only partially, why ?

Yes - 6, No - 12.

Please indicate any LPAs where this is either not the case or only partially so.

see Assessment, paragraph 5.2.

5.2.2 *Conservation management (of monuments)

Is the SMR used as	**Always** *[5]*	**Sometimes** *[3]*	**Never**	**Unanswered**
a source for devising management plans for sites and areas ?	2	16		
a depository for documentation generated by management process ?	2	12	3	1

5.2.3 Conservation Area Designations, CA Appraisals / Character Studies

Have any Conservation Areas been prepared in the area covered by your SMR ?

Yes - 17, No - 1

If YES, was it consulted ?

All - 2, Some - 4, None - 10, uncertain - 1, unanswered - 1

In many cases designation had preceded the creation of the SMR.

Conservation Area Appraisals / Character studies

Have any been prepared in the area covered by your SMR ?

Yes - 3, No - 8, Unknown - 5, n/a or unanswered - 2

If YES, was it consulted ?

All - 1, None - 5, probably not - 1, unanswered - 11.

In many cases designation had preceded the creation of the SMR.

5.2.4 Lottery applications involving heritage elements

Has the SMR been used directly in providing information for any prepared in its area ?

All - 1, Some - 8, None - 7, unknown - 1, unanswered 1.

5.2.5 Grants schemes

Is your SMR consulted in preparing grant-aid applications for the conservation or repair of sites, buildings or areas registered on it ?

Always - 0, Some - 12, Never - 5, unanswered - 1

5.3 User access

Do you have any policy which **identifies specific sites or monuments as sensitive,** and screens or prohibits access ? If so, is it an **adopted departmental policy or an informal policy** ?

Yes - 2, No - 13, unanswered - 3.

Do you **charge for access** ?

Yes - 8, No - 10.
Most charge for dealing with Countryside Premium Scheme applications, and commercial consultants.

If so, is it a **source of income** over and above the budgetary provision for the SMR or is it an element built into the budget for SMR operations ?

Over & above budgetary provision - 11, unanswered - 6, 'both' - 1

Do you have a **formal charging policy and pricing document** ?

Yes - 8, No - 10

If so, can you enclose a **copy** with your return of this questionnaire ?

Yes - 5, No - 4, unanswered - 9

5.4 Record outreach

5.4.1 Existing provision

*Is there public library access to the SMR on-line ?

Yes *[10]* - 1, No - 15, Planned *[5]* - 2

*In what other ways does the SMR go out to its potential customers ?

see Assessment, paragraph 5.6 for some limited comments

Have these services increased or reduced in the last three years ?

Increase	3
Same / no change	4
Decrease	
Other	3
Unanswered	8

Few details were given.

Are there heritage education and interpretation services in your Authority ?

Same group	8
Another group	4
Same / another group	4
No	1
n/a	1

*Do they use material from the SMR ?

Yes *[10]*	15
No	2
n/a	1

5.4.2 Future provision

*Do you have any proposals under active consideration ? If none at present but some might considered as part of an application to the Heritage Lottery Fund for a combined enhancement + access project, what might be your priorities (without any commitment)?

see comments in Assessment, paragraph 5.8

Type of provision	
IT-based: more migration / internet access than outreach	3
IT-based: outreach - Web pages, networks etc.	9
Using Libraries and / or Museums	6
Creating / using local centres	2
Local services; community outreach	2
Educational various	3

6 Data / system quality assurance

6.1 Overall state of development

6.1.1 *Have the former **Ordnance Survey Archaeology Division record cards** been fully absorbed into the system of your SMR ? If not, how far has this been done ?

Yes / All *[10]* - 13, Some / Partly *[4]* - 1, Uncertain - 3, No - 1.

Has the material from the **start-up data-exchange with RCAHMS** been fully absorbed into the system of your SMR ? If not, how far has this been done ?

Yes / All *[10]* - 6, Some / Partly *[4]* - 5, Uncertain - 2, No - 3.

6.1.2 *What **whole-area systematic surveys** have been done as part of basic SMR-building e.g. extensive urban survey, medieval settlement remains, parish surveys etc ?

Two-thirds either said ' none' or did not reply: see Assessment, paragraph 6.2

6.1.3 Existing records and unaccessed information
What statistical information can you easily provide about numbers of records (PRNs) and totals of quantities of information held (e.g. aerial photographs) ? How much source material is waiting to be fully recorded in the SMR ?

Yes - 11, No - 1, n/a or unanswered - 6.

6 were unable to respond to this question: ***Dundee City***, ***West Lothian***, ***Highland***, ***City of Edinburgh*** City, ***East Lothian*** and ***Western Isles***.
Falkirk regards its SMR as being complete as far as readily accessible material is concerned.
Perth & Kinross was unable to specify beyond identifying a backlog in most areas probably comprising several months of high priority work.

The table summarises the other replies made: also see Assessment, paragraphs 6.3-5.

Council	**Time / days**	**Cost**
	[minimum]	
Aberdeen City	120	7200
Aberdeenshire & Moray	35	
Angus	30	
Dumfries & Galloway	95	
Fife	130	
Orkney	438	45000
Scottish Borders	165	6600
Shetland	18	
Stirling	35	
WoSAS	1100	
crude total of all available figures	2166	58800

6.2 System security

*Can you track system users other than those running the Record ?

No - 3, Yes *[5]* - 9, n/a or not answered - 1

*Could anyone consult any part of the main Record (excluding outreach copies or facilities) without those responsible for it knowing about it ?

No *[5]* - 17, Yes - 0, n/a or not answered - 1

*Have you got anti-virus procedures ?

Yes *[5]* - 16, n/a or not answered - 2

*Have you got a disaster recovery plan ?

No - 7, Yes *[5]* - 7, probably not adequate - 2, n/a or not answered - 2

*Have you got digital data back-up procedures ? If so, what are they ?

16 said 'Yes' *[5]*. Procedures range from daily to monthly, by tape streamer or disk.
I said 'not yet'; 1 did not answer.

*How do you arrange archival copy and back-up of non-digital material ?

No-one has full arrangements; 9 have none, 7 some, and 2 did not answer the question. The main items cited were paper copies of some plans and two copies of some reports held in different places.

6.2.2 Have you met any **copyright problems** in acquiring or using SMR data ?

No - 7, Yes - 9, Not yet - 1, n/a - 1. 15 had no special arrangements for tracking copyright.

6.3 Quality control mechanisms

6.3.1 *What are your data validating (not field checking) procedures ? How far have you applied them to data input before they were instituted ?

Some in place or 'yes' *[5]* - 8 , none in place - 2, other arrangements - 3, unanswered - 5.
Most instances mentioned referred to in-built keyword lists / glossary pick-lists / menu-driven fields.

6.3.2 *What **technical manuals** have you prepared for Record inputting and use ?
Do you have a written recording policy and procedure ?

None - 13, yes but outdated - 3, n/a - 1, unanswered - 1.

Appendix 5: Scotland's Sites and Monuments Records

Aberdeen City - a largely post-1996 SMR centred on an historic city

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

The area can be characterised as coastal lowland that is more urban than rural, more medieval than prehistoric, and with more detailed information on medieval and post-medieval excavated material. In its post-reorganisation situation the Aberdeen City SMR is well placed to develop an experienced service for a compact urban area and its immediate hinterland, providing this is not frustrated by constraints on resources or cuts.

Overall: upper part of band M-N (35%-44%); strongest on *Information Content* (G) and *Management Context* (K); weakest on *System Links* (O) and *Data / Systems Quality Assurance* (R).

Some strengths

- familiarity of post-holder with relatively compact City SMR area and community
- multiple role of planning adviser, SMR holder, museum function and local Unit
- detailed Historic Burghs Survey for Aberdeen (but medieval core only)
- flexible SMR software plus GIS with potential for linking to other databases
- good access to other Aberdeen-based information resources
- historian for City Unit adds data from local documentary sources to the SMR

Some weaknesses

- SMR assistant only 15% on the SMR and temporary contract
- not in corporate plans or strategic statements
- no standard documented requirements for accepting material for accessing to SMR generated by projects
- rural fringe is less well covered
- no role over applications for archaeological buildings analysis, listed buildings or Conservation Areas
- consultations over HLF bids and grant schemes poor

Some opportunities

- capability for SMR expansion in post-reorganisation situation.
- development of archaeological community input through personal involvements
- database link to GIS with GGP has potential for linking in with other local databases
- current RCAHMS surveys of Strathdon and HS project will improve rural coverage
- expand casework contacts with Conservation Officers towards better mutual understood strategic agendas

Some threats

- risk of commercial regulation splitting SMR and curatorial side from other archaeological expertise and making critical mass unsustainable
- continuing cuts in Council budgets may affect temporary SMR staffing input.

Aberdeenshire & Moray - an established SMR for two Council areas

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

Aberdeenshire and Moray comprise a very wide range of topography, from mountainous land to coastal sand dunes. The generally open rolling landscape provides an essentially lowland environment. The intensity of agricultural improvement early last century has removed many upstanding monuments from areas such as Buchan, introducing certain biases to the data. Recumbent stone circles are unique to the core NE of Scotland and are well represented in the SMR.

This is the SMR of most consistent quality at the time of survey, benefiting from long-term continuity of expertise and community contacts. Aberdeenshire could be a useful pivot for regional support in north-east Scotland if matters could get beyond protecting existing SMRs and filling the gaps.

Overall: upper part of Band G-H (65%-74%); strongest on *Management Context* (E), with *Information Content*, *Users*, *Data / System Quality Assurance* and *System Organisation* all at (G); weakest on *System Links* (H).

Some strengths

- one of the few Scottish SMRs with anything approaching a viable level of staffing
- budgets for SMR, training; IT support good
- SMR recognised corporately
- archaeology perceived politically as worthwhile, attracting little party dissent
- full set of index information to aerial photographic collections
- detail is relatively easily retrieved digitally at extensive and intensive levels
- good links with local museums for information about collections and accessions
- SMR development has benefited from several surveys, notably an annual aerial reconnaissance programme since 1977

Some weaknesses

- no standard documented requirements for accepting material for accession to the SMR generated by field projects
- coverage lower for Buchan and the Deveron valley which has high archaeological importance
- no role for listed building or Conservation Area consent applications

Some opportunities

- SMR part of the Aberdeenshire environmental database network

Some threats

- medium / long-term uncertainty as to location of SMR within Aberdeenshire

Angus - a non-local SMR maintained as a service by Aberdeenshire Council

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

Angus is a generally lowland coastal area with some archaeologically rich uplands and an important series of historic burghs. It has strong potential for aerial photography.

The SMR, established in 1997, has considerable potential for a wide range of services in the new Angus Council, but needs more positive and better resourced development, either as a semi-integrated partner with Aberdeenshire (or Perth & Kinross), or on its own account, always assuming critical mass considerations are favourable.

Overall: lower part of Band K-L (45%-54%); strongest on *Information Content* (H) and *Data / System Quality Assurance* (J); weakest on *System Organisation* (M) and *System Links* (R).

Some strengths

- Detail is relatively easily retrieved digitally at extensive and partially at intensive levels
- Conservation Officer of Angus Council has made use of the SMR.

Some weaknesses

- Angus SMR is located in the Planning and Development Service of Aberdeenshire Council
- there is no public access
- no historical mapping
- no SMR library
- no standard documented requirements for accepting material for accession to the SMR generated by field projects
- Angus Glens (Clova etc) are seriously under-represented
- no links with local museums, archive service, local library local history collections, university archives and private documentary collections
- no role in relation to archaeological buildings analysis and recording, listed building or Conservation Area consent applications

Some opportunities

- GIS capability is expected to be acquired in late 1998 - GGP.

Some threats

- the place of the Angus SMR in the vision of Angus Council is not clear as between Cultural Services and Planning & Transport

Scottish Borders - an established SMR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

Almost the whole SMR region is connected via the river Tweed and its tributaries that form a basin surrounded by mountains and upland landscape elements. The outstanding archaeology is the prehistory of the Cheviot hills and the legacy of frontier warfare in the architectural record. Deserted upland settlements are seen as a distinctive local type of site. An SMR in good basic shape, but with several deficiencies of information content and linkages with related interests; potential development and usage are being frustrated by lack of resources.

Overall: lower part of band K-L (45%-54%); strongest on *Information Content* (H), *Users* and *System Organisation* (K); weakest on *Management Context* (O) and *Data / System Quality Assurance* (O)

Some strengths

- RCAHMS have produced a large-scale landscape characterisation for Forestry Commission land
- most of record easily retrievable digitally at extensive comprehensive and intensive systematic levels, and all of it at the extensive minimal level; summaries vary in quality - few detailed
- all planning teams accept the SMR-based advice
- support in depth from documentary sources for major SMR historic entries

Some weaknesses

- ArcView GIS but map only, no links to files and images from SMR
- SMR database weak as mechanism for putting sites into local context
- early RCAHMS volumes have 1700 cut-off
- staffing minimal, <5% of the Council's Archaeologist and 10% of a temporary technical externally funded.officer
- publicly accessible in theory, in practice no facilities of space or staffing support apart from photocopying
- neither aerial photographs nor indices to other collections apart from local special flying programmes and a few sketch plots
- no standard documented requirements for accepting material for accession from field projects
- data exchange arrangements *ad hoc* or non-existent
- no direct role in historic buildings work, only occasional consultations by the Conservation Officer; no contacts with ecclesiastical buildings

Some opportunities

- migration to Access planned
- separate HBO has own systems but expected to converge upon GIS when obtained
- lacks crippling development pressures

Some threats

- lack of corporate recognition for SMR

Dumfries & Galloway - an established SMR, founded pre-LGR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

The SMR area is 130 miles west to east, and 2469 square miles with a mainly rural population of 147,300: the largest town, Dumfries, has 37,520. The general environmental character is extremely rural. There are only small areas of arable; otherwise it is improved grassland, rough pasture and forestry, the latter being 25% of land use. Archaeology is from the mesolithic onwards. Rock art is a distinctive local type of historic element.

An SMR close to the edge in a Council under financial stress. The post-holder's familiarity with the area maintains viability. The local profile of archaeology has risen through the existence of the SMR but extensive community contact is mostly demand-led and not enough face-to-face. Resources are probably insufficient to build up the SMR and its services on the opportunity of the new database.

Overall: lower part of band K-L (45%-54%); strongest on *Management Context* (K) and *Users* (K), weakest on *System Organisation* (L) and *System Links* (M).

Some strengths

- post-holder's familiarity with the area; formal recognition of SMR by Council
- recent NMRS download to new database; recent RCAHMS volume on E Dumfriesshire
- contacts with Forest Enterprise through post-holder sitting on environmental panels and with private forestry industry through contacts with agents and estates

Some weaknesses

- single post inadequate even for existing rising workload; unable both to develop SMR and to serve four devolved DC offices fully, either personally or through sets of 'trigger' maps
- temporary accommodation with poor access and lack of facilities
- aerial photographic holdings limited
- only possible systematic field checking or enhancement of SMR holdings is reactive and case-work-related
- not always notified of work carried out by or on behalf of Historic Scotland
- time to respond only to written general public enquiries; scope for public outreach virtually non-existent due to planning pressures
- Nithsdale and Machars weak on the SMR: no Historic Scotland 'non-statutory' register

Some opportunities

- working with regional museums service and Solway Heritage
- recently acquired relational database with fields for access and outreach
- much of the area is an ESA
- bids for temporary SMR staffing to HS

Some threats

- planning demands restrict SMR work and will hinder effective use and development of new database
- financial pressures on Council make partnership funding bids for temporary SMR staffing difficult
- lack of time to nurture local interest and support through liaison with local societies / informed people
- no arrangements for security copying non-digital material

Dundee City - a pre-SMR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs. No visit was made]

No characterisation of the area was offered, but it is presumably primarily urban with some rural and maritime hinterland. The Dundee record is not an SMR, and is difficult to evaluate without further information. Transfer of the record to the planning function might produce a 'kick-start', but is the Council area large enough to provide sufficient critical mass for a facility able to supply the full range of functions ? Overall: upper part of band Q-R (15%-24%); strongest on *Management Context* (P) and *Users* (M); weakest on *System Organisation* (R) and *Data / System Quality Assurance* (S).

Some strengths

- development control and policy teams seek and accept advice based on the SMR but see below
- some consultation by some Council services

Some weaknesses

- advises planning authority, the Forestry Commission and Public Utilities on important specific sites only
- no budget; no resources for training
- no SMR Archive
- card index retrieval only
- only ad hoc contacts with national organisations
- no data exchange with local archives, local library local history collections, university archives or private documentary collections
- no role in listed building or Conservation Area consent applications; no contacts over exempt ecclesiastical buildings
- no technical manuals for data inputting, no written recording policy and procedure

Some opportunities

- some contacts with the Angus Council SMR and the Fife Council SMR
- transfer to Dundee Council's Department of Planning and Transportation being negotiated for use and upgrading as a planning resource

Some threats

- IT support is internal and unlikely to continue
- SMR in a restricted storage area and there is no supervision
- does not figure in any visions or business plans and was not explicitly recognised at LGR
- deposit of reports by Units to the SMR is neither required by the planning process nor does it happen.

City of Edinburgh - a 'federal' SMR also hosting East Lothian SMR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

The SMR area is largely urban and 98% lowland, with historic cores, suburban sprawl and limited greenfield areas. Consequently, its prehistoric evidence is fragmentary, but it is rich in historic material and industrial evidence from the 11th to the 20th centuries. Administratively it is a small area with a large population and a centralised bureaucracy. There is potential for significant improvement if the new post can be made permanent and proper links with planning process can be confirmed.

Overall: lower part of band K-L (45%-54%); strongest on *Users* (J) and *Management Context* (L), weakest on *System Links* (N) and *Data / System Quality Assurance* (N).

Some strengths

- combination of 'curatorial' (including SMR) and 'contracting' arms in City of Edinburgh Archaeology Service provides good critical mass of skills and knowledge
- SMR is strongest where threats are greatest
- advice offered to development control and forward planning is accepted
- as part of museums service has access to many artefacts and fieldwork project archives
- local archaeological society and heritage trust provide regular information through surveys, "event-linked mapping" and graveyard survey

Some weaknesses

- only SMR staff is temporary and 25% FTE; senior manager has direct responsibility for SMR *inter alia*
- SMR not prominent - overshadowed by other national heritage resources in City of Edinburgh
- SMR funding poor, falls between two stools - Planning and Recreation
- uninvolved in listed building control and historic building recording
- little educational use of SMR
- no thesaurus is in use
- no standard documented requirements for accepting material for accession to the SMR; no technical manuals for inputting, nor any written recording policy and procedure
- present system unsatisfactory - no GIS; EMA-based model preferred but much data preparation to migrate
- past record accumulation *ad hoc*; little systematic recording outside the City centre and Roman Cramond
- no links with any other environmental records

Some opportunities

- SMR in transition: supplement basic NMRS records and then exchange data
- Heritage Strategy including SMR in preparation
- to include SMR as part of an integrated local authority one-stop-shop museum-based archive provision

Some threats

- risk of commercial regulation splitting off SMR and curatorial side from other archaeological expertise
- SMR sidelined at political / planning level due to consultees going direct to national resources
- data validating is done "as part of general work" - there are "few systematic checks"

East Lothian - a non-local SMR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

East Lothian is a mainly rural area, with a range from sea-shore to southern uplands / Lammermuir Hills. The period mix is small towns and rural villages and farmland, but with the western half of the area containing considerable industrial period monuments / landscapes. There is limited known evidence for early prehistory; it is strong in later ("Iron Age") monuments. Development of this "very new SMR" would probably benefit from its relationship with the City of Edinburgh record, but Edinburgh must help develop a sense of local ownership to underpin resourcing and encourage usage.

Overall: middle part of band M-N (35%-44%); strongest on *Users* (J) and *Information Content* (K); weakest on *Management Context* (P) and *System Links* (P).

Some strengths

- SLA with City of Edinburgh exists
- in draft East Lothian Local Plan as means of defining relevant archaeological issues
- advice offered to development control and forward planning is accepted
- always used for devising management plans and as a depository for documentation

Some weaknesses

- underfunding of service in SLA with City of Edinburgh
- East Lothian consultees have to come to City of Edinburgh where current SMR enquiry service is limited
- no standard documented requirements for accepting material for accession to the SMR generated by field projects
- SMR is weak on easily retrievable detail
- no data exchange arrangements with the archive service, library local history collections, university archives or any private documentary archives
- no role over applications for listed building and Conservation Area consent; no contacts on exempt ecclesiastical buildings
- no technical manuals for inputting, nor any written recording policy and procedure

Some opportunities

- East Lothian has sense of local pride generally – quality of life – tourism led
- East Lothian SMR would not have existed without NPPG5 which has increased workload
- a new SMR easy to upgrade / enhance / improve given the resources

Some threats

- short-term vulnerable nature of SLA between City of Edinburgh and East Lothian
- temporary SMRO part-relies on East Lothian funding but East Lothian lacks sense of ownership of SMR

Falkirk - an established SMR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

The Falkirk SMR area is of lowland character with a wide coastal plain, good quality agricultural land and moorland at higher levels. It is located at the narrow neck of Scotland - the Forth / Clyde isthmus on the main route north to the Highlands. It is one of the smallest areas of the new local authorities. It was the Roman frontier in the Antonine period, and includes one third of the Antonine Wall and 27 Roman temporary camps. It is the cradle of the Scottish industrial revolution, with the Carron Company founded in 1759. There is significant maritime history - ports, shipbuilding, saltpans etc.

One of the strongest Scottish SMRs, but mainly because the area is small and the postholder knows it well. To cover all periods and aspects of archaeological work must be a strain, yet the size and use of the SMR does not justify a full-time post.

Overall: lower part of band G-H (65%-74%); strongest on *Information Content* (E) and *Data / System Quality Assurance* (G); weakest on *System Organisation* (J) and *Users* (J).

Some strengths

- postholder long familiarity with area and good local contacts with community and societies
- SMR explicitly recognised at reorganisation
- comprehensive SMR Library; SMR archive exists
- SMR holds 1150 records and is regarded as complete as far as readily accessible information is concerned

Some weaknesses

- poor natural history links; no Council Conservation Officer
- no budget; no resources for training in SMR-related skills

Some opportunities

- SMR database on same database as rest of Museum

Some threats

- postholder has multiple roles and activities and is over-stretched

Fife - established SMR with same territory as before LGR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

Fife is characterised by a long coastline with an historic emphasis on coastal settlements and international trade. There is an emphasis on maritime significance from earliest prehistory, with coastal mesolithic sites. It was a centre of political / royal power from the early medieval period onwards, with royal palaces and castles. There is important industrial archaeology, again mainly coastal. The wealth of the countryside and agriculture increased greatly from the agricultural revolution onwards, especially with the drainage of boggy areas.

An established SMR in an area of significant planning pressure, benefiting from a series of survey programmes, and with potential for wider environmental integration and community outreach. This has been jeopardised by a recent cut in staffing, and a restriction of the archaeological function largely to planning matters.

Overall: middle part of band I-J (55%-64%); strongest on *Users* (G) and *Information Content* (H); weakest on *Management Context* (L) and *Data / System Quality Assurance* (L).

Some strengths

- some dedicated SMR staffing provision
- annual budget: hard/software development, project publication costs, sites of strategic importance survey
- local planned data acquisition projects such as Maritime Fife, ASSIS survey, Historic Gardens and Industrial Archaeology
- good scale and variety of digital data
- service produces popular publications and advisory leaflets that advertise the SMR service.
- consistent programme of field-checking sites in progress, now completed for West Fife
- conservation within Council's Core Values

Some weaknesses

- located in a working planning office where space is limited.
- no links with adjacent SMRs or local museums; no role in listed building or Conservation Area applications; no local authority Archive Service.
- few contacts with dwindling number of historic buildings conservation staff
- SMR coverage lower in coastal arable area
- no standard documented requirements for accessioning material from field projects

Some opportunities

- develop IT (especially GIS) to do justice to quality of information on SMR
- good contacts with Fife Nature based in the same room and developing GIS in parallel.
- SMR use for management plans, designating Conservation Areas, some Lottery bids and grant schemes.
- proposal for Fife Heritage Resource Centre (with Fife Nature and others) in 17th century building

Some threats

- full-time post doing most SMR work halved with significant reduction of time input to the SMR.
- no archival copying arrangements for non-digital material
- inputting manual currently out of date: no written recording policy and procedure.

Highland - an established SMR, though computerised only in 1995

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

The size of the SMR's area, with its extremities about 100 miles away from the base at Inverness, make it effectively regional rather than local in scope, and covering a wide range of present-day and past environments. An inevitable consequence is thin and limited coverage of many areas in the Record for lack of past survey work which, when now done, often reveals huge archaeological potential. Pressures on the historic resource arise notably from forestry, in terms of amenity schemes and natural regeneration as much as commercial schemes; Inverness claims to be the fastest growing town in Britain. Opportunities exist in providing information about access and potential for cultural tourism.

One of the stronger SMRs making good developmental progress - records nearly trebled over last five years - and with just sufficient staff to stay on top of things. The departmental move has helped it perform more effectively as a proper corporate resource.

Overall: at the top of Band I-J (55%-64%); strongest on *Information Content* (E) and *Users* (F); weakest on *System Links* (K) and *Data / System Quality Assurance* (K)

Some strengths

- move to planning department but retains links with cultural and leisure services
- good community contacts; 'Archaeology Week'; 'Access to Archaeology' project audit of accessibility and visitability to be completed by end 1999/00 if funds
- recent reorganisation of three staff so one is mostly dedicated to SMR
- retains site management history including past planning applications, interpretations no longer current, and is now including information on public access and interpretation
- non-statutory register recently completed

Some weaknesses

- rapid recent growth causing some weaknesses in data quality and database structure - now being tackled
- lack of software support for Access
- major backlog of accessioning
- huge area; some parts under-surveyed; lack of local access due to Highland travel distances to Inverness
- no links with geographically adjacent SMRs

Some opportunities

- high site densities in many areas; FESP added several thousand medieval and post-medieval settlements
- creation of maritime SMR after initial trawl
- access and cultural tourism
- new departmental and accommodation arrangements will improve contacts over listed buildings
- rapidly improving environmental information availability from new host department: Council Intranet
- database to include digital images and interactive Access / GIS link by March 1999

Some threats

- wide community and promotional work largely externally funded and therefore extremely vulnerable

Orkney Islands - an established SMR: recently moribund but now reviving

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

The SMR area is made up of many islands, with largely rural sites. There is much early prehistoric and much maritime archaeology, " ... probably the most remarkable archaeological resource in NW Europe ... 6,000 year continuity of an agricultural community ... within the landscape." There are no listed buildings on the SMR yet. Distinctive local types of site include: the remains of the kelp industry, nausts, treb-dykes, farm mounds and Orkneyinga saga sites.

An SMR in process of revival, from an early sound basis applying to only part of the area. The prospects are bright with the current level of Council interest and recognition if the 'revival' grants from Historic Scotland can continue and existing staffing be consolidated on a full-time basis.

Overall: upper part of band M-N (35%-44%); strongest on *Information Content* (H) and *Management Context* (K); weakest on *System Organisation* (P) with the other three elements at (N).

Some strengths

- recently appointed OI Archaeologist previous experience as Field Monuments Warden
- SMR acknowledged to be central to the Trust's activities
- information from student projects, the OHS, the Friends of OAT and informal island correspondents

Some weaknesses

- Orkney Archaeologist only paid for four-day week; SMRO temporary as funds allow
- travel time-take between islands requires save up visits in groups
- need to clarify the contractual relationships between the OA, OAT and OIC
- no SMR budget; no training resources
- GIS acquisition not in the foreseeable future
- much unaccessed material
- coverage worst in southern and attached isles
- no links with adjacent SMRs, NMRS, local and university archives, unsystematic with local museums
- no role in archaeological buildings analysis, listed building or Conservation Area consent applications, exempt ecclesiastical buildings
- no technical manuals for use of the Record, nor written recording policy and procedure

Some opportunities

- archaeology seen by OIC as tourism promoter rather than barrier to development
- much reliance upon local correspondents
- planning archaeological course with Orkney College, perhaps leading to another post
- massive extra demand for information from planning advisers
- combined OIC / HS grant to re-equip the SMR; further application for 'Orkney SMR RE-Start 1999-2000'

Some threats

- erosion a major problem – many islands soft rock, increased sand-blow.

Perth & Kinross - a pre-SMR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs. No visit was made]

Perth & Kinross has great diversity of landscape in an area of 2,000 sq miles: there is highland and lowland, river valley and moor and a largely agricultural land-use with relatively small urban centres. It has significant monuments from every period and this is reflected in a good level of archaeological research. Historically important is the shrinking level of wetland due to farming practices over the last two centuries, and reflected in the artefact record at Perth Museum and the NMS. In more recent times the use of metal detectors has had an impact upon the artefact record. Distinctive elements in the region include cup or cup-and-ring marked rock surfaces, neolithic henges and cursus monuments, lithic scatters, Pitcarmick-style houses especially in NE Perthshire, the Gask Roman frontier, Pictish carved stones, and Perth, perhaps the most important of the Scottish burghs.

One of the better 'non-SMRs' but still needs a proper level of resourcing and local political commitment to fulfil its potential for providing a wide-ranging local service.

Overall: middle part of band K-L (45%-54%); strongest on *Information Content* (G) and *System Links* (G); weakest on *System Organisation* (N) and *Data / System Quality Assurance* (P).

Some strengths

- recent RCAHMS volumes
- Human History section of the Museum holds a large local photographic archive, which is fully accessible but not cross-referenced in any way to the SMR
- natural sciences section in museum; also Biological Records Centre
- been consulted about Conservation Area designation, Council HLF applications and CPS schemes.

Some weaknesses

- used only to limited extent as the basis for providing advice to the planning authority, Forestry Commission and Public Utilities
- SMR is dispersed throughout the office and is generally not accessible
- no GIS
- no standard documented requirements for accepting material for accession from field projects
- Retrieval is a simple card index and optical coincidence cards
- big hole is the lack of pro-active planning in feeding the SMR
- no contacts with local adjacent SMRs
- historic buildings are a grey area: Museum perceived as having no interest
- data validating procedures are "not really in place".

Some opportunities

- Human History Officer has begun work on a local research framework which will include a statement on the SMR.

Some threats

- lack of resources to enable the appointment of a second archaeologist either in the Planning Department or at the Museum (where one is allowed for in the staffing structure)

Shetland - an established SMR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

Shetland has no lowland; upland sheep subsidies start at sea-level. The area is multi-period and the archaeology is exceptionally well preserved. There is no real urban archaeology, although sites such as Old Scatness require urban techniques. The Amenity Trust is an environmental trust that provides a more flexible service to the community than local government could generally offer. Characteristic site types are brochs and wheelhouses, field systems and neolithic / Bronze Age houses like Scord of Brouster, as well as clearance and crofting remains and pictish stones. High potential for exemplary programmes in handling information product from surveying site-dense landscapes and in 'social' input for dispersed communities, but acquisition of GIS, database contents review and accommodation improvements are key steps.

Overall: upper part of band K-L (45%-54%); strongest on *Information Content* (I) and *Users* (I), weakest on *Management Context* (L) and *System Organisation* (M).

Some strengths

- two posts, one post-holder familiar with islands and community; other 50% SMR
- much proactive data-enhancement through survey and site visiting; high density of sites discovered in summer fieldwork sessions
- data enhancement from archaeology lecturer
- sound financial position of Shetland Council with oil money revenue
- SMR in the Amenity Trust's 5 year plan which also includes a vision for archaeology
- regular data exchange with Shetland Museum
- good contacts with volunteer local history groups running small museums, developing web-pages; contacts through talks, local radio; schools outreach tied into curriculum
- contacts with other environmental services and records at Amenity Trust

Some weaknesses

- database reliant upon local volunteers
- no GIS
- little contact with Conservation Officer over historic buildings recording
- lack of space in current accommodation restricts public access responses to enquiries
- no standard documented requirements for accepting material for accession to the SMR

Some opportunities

- planned new premises with more space and prospect of developing remote access to SMR
- coastal erosion surveys as information source
- use of SMR for heritage interpretation work
- participation in ADS 'metadata' gateway scheme

Some threats

- confusion of academic and management information in text files (being resolved)
- isolation from the rest of Scottish archaeology through distance and travel difficulties
- does not get copies of ESA monitoring work carried out by AOC
- SMR system security: no disaster recovery plan, no security copying of non-digital material

Stirling - a federal SMR, also providing a service to Clackmannanshire

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

The SMR area is a broad mix of landscape types in central Scotland, with very little maritime or coastal archaeology. The area has something of everything except Pictish stones. Forestry is not a major problem any more: Stirling is largely outside the West Scotland Water area. WGS and CPS are generally controllable but large schemes can be hard to assimilate. The Stirling SMR is a good example of the kind of ceiling imposed by consistent long-term under-funding on a record which has existed for several decades, and reinforced by recent cuts in Council expenditure. That ceiling effectively stops with planning, and largely prevents the wider community contribution that ought to increase interest and support for archaeology.

Overall: middle part of band K-L (45%-54%); strongest on *Information Content* (H), *System Links* with *Data / System Quality Assurance* (K); weakest on *System Organisation* (M) and *Users* (N).

Some strengths

- postholder has long experience and good knowledge of the area
- upland areas threatened by afforestation have been regularly surveyed by RCAHMS, HS contractors and forestry companies
- recognition of SMR in County Structure Plan and the Environmental Services Service Plan

Some weaknesses

- always single post for all archaeological planning and SMR matters; no prospect of SMRO or clerical assistance in future
- Clackmannanshire service covers planning and forestry, but not (officially) public outreach and education
- lack of local match funding for HS grants
- antiquated dbase on DataEase, no active direct GIS link
- no SMR budget or resources for training
- public access to SMR virtually impossible
- most of SMR library is personal copies
- no standard documented requirements for accepting material for accession from field projects
- no thesaurus in use
- detailed text never consistently captured on computer
- no contacts with adjacent SMRs and no formal data exchange with national organisations
- no arrangements for archival copy and back-up of non-digital material
- technical manuals for inputting and use of the SMR outdated

Some opportunities

- Stirling SMR has considerable potential, given more resources
- information from Stirling Archaeological Society fieldwork team and Callander Local History Society

Some threats

- the water authorities not using the SMR for advance planning
- HS contractors doing sponsored work outside planning process do not always report to SMR

Western Isles - a brand-new SMR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

The terrain of the SMR is island-based, with a limited physical area, and upland / lowland coastal mix; there is severe coastal erosion (and rabbits) and some areas are inaccessible. The west coast is more heavily settled so gets prioritised, but there is less attention to the east side and many sites being lost including prehistoric. The south islands are a major problem due to communication difficulties. Uplands and peaty areas poorly covered. It is multi-period, but much early prehistoric is masked by peat. There is little urban, with only one town possibly as old as medieval. Distinctive sites-types include sub-peat sites and finds, clearance remains (landscapes and monuments), decorated stones (cup marks, carvings etc).

Quantification and scoring at August 1998 have only passing significance for a new system then awaiting its new database and data migration. This is a space to be watched, but the extent of ground to be made up in order to create a fully-functioning SMR should not be underestimated.

Overall: upper part of band O-P (25%-34%); strongest on *Information Content* (J) and *Users* (L); weakest on *System Organisation* (R) and *Data / System Quality Assurance* (S)

Some strengths

- new post in Education & Leisure; postholder has local and educational backgrounds
- voluntary help with data-input makes time for new postholder to concentrate upon data-cleaning
- budget for travel and equipment; IT support internally and externally
- Ist Edn OS digitised and soon available; Pont / Bleau and Roy surveys in good local library map collection
- exeGeSIS working well: linked to MapInfo which is also used by planning
- close links combining strengths of local history and archaeology societies: interest in topic of 'clearances'
- development not major threat (except perhaps Stornoway)
- initial NMRS download had all SAM details

Some weaknesses

- some errors in initial NMRS download (= basic 1914 survey later augmented for most areas)
- no aerial photographs yet obtained, nor references to other specialist collections
- existing exeGeSIS thesaurus far from ideal for the Hebrides
- as yet no standard documented requirements about field project material for accessioning
- no formal contacts yet with adjacent SMRs or other environmental records; no built archaeology remit
- SAM details from HS limited due to their recent records reorganisation; no FMW reports yet received
- no disaster recovery plan nor arrangements for security copying of non-digital material

Some opportunities

- working relationship with planning function established at outset of new post
- major data-cleaning exercise for RCAHMS data, especially over Gaelic speaker problems
- develop trust in SMR for reporting finds and sites without fear of Edinburgh
- clarify links with FC and Public Utilities
- data exchange with NTS for St Kilda, and all local sources

Some threats

- planning functions departmentally divided, so risk of non-holistic approach

West Lothian - a pre-SMR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

This Council area is perhaps subject to more development pressure than any other rural / semi-rural area. There is no Council Archaeologist to supply a descriptive sketch of the area. West Lothian has the basis of an SMR thanks largely to external influences and a sympathetic Conservation Officer. The current situation, though not without hope, is a classic downside effect of residual tensions from reorganisation and cuts imposed upon the new smaller Councils carved up out of the old Lothian Region.

Overall: middle part of band Q-R (15%-24%); strongest on *Information Content* (N) and *System Organisation* (O); weakest on *Data / System Quality Assurance* (R) and *Users* (T).

Some strengths

- recently acquired ACT maps: included in first Local Plan preparation; useful in Forestry Commission Challenge Fund consultation process
- RCAHMS Area Studies on Forestry also help awareness
- SMR within draft Council-wide Local Plan; will be within Council Conservation Strategy when progressed
- modern OS complete raster / vector coverage; Edinburgh access to historical OS, to Pont / Bleau and Roy
- relational database (Access) linked to GIS
- Conservation Areas Appraisals under way will take SMR into account

Some weaknesses

- record system run by 5% of Conservation Officer
- no District Museum, few relevant and active amenity groups, no archaeological society
- CRM Database is planning management rather than academic
- ACT maps not being kept up to date by professional input
- insufficient day-to-day contact and support from HS, RCAHMS
- archaeology not yet part of day-to-day culture of planning department despite NPPG / PAN, generally not a high priority for planning officers (though some recent improvement)
- no colour slides, aerial photographs or other photographic collections; no SMR Archive; no thesaurus in use; no standard documented requirements for accepting material for accessioning from field projects
- no links with heritage education and interpretation services, local museums or other documentary sources
- no archaeological role in historic built environment or buildings analysis; no ecclesiastical consultations

Some opportunities

- untapped tourist potential
- W Lothian Schools Information Project and other Council-wide data-sharing initiatives
- Scottish Burghs Survey - Linlithgow published in 1999 - promote awareness
- ACT maps layered in general planning GIS databases with countryside and natural history / ecology

Some threats

- Conservation Officer post might be vulnerable if postholder left
- archaeology low Council priority - more interested in development and employment
- consultation of WoSAS on applications never introduced for financial reasons, so essentially desk-based system. Several sites already lost so increasing mismatch between system and what is on the ground.

West of Scotland Archaeological Services - a 'federal' SMR

[This selective summary is essentially an overall impression, drawing upon material from the questionnaire and interviews, and offered to respondents for checking. It is not the full analysis that could be derived from more extensive data auditing, nor is it a vehicle for making detailed direct comparison between SMRs]

The SMR covers a very large area in Argyll, the Clyde Valley and Ayrshire. It includes about half the national population and a third (11) of Scottish Councils. They contribute equal shares of the cost (with Argyll & Bute double). Both the environmental character and periods / types of evidence are wide ranging. Development pressures are uniformly high across much of the area. WoSAS serves a large rural hinterland as well as a large conurbation, and has particular problems of access, time and cost in covering the Argyll Islands.

Technically, it is potentially a high quality regional SMR, but is unable to develop this role properly through structural under-funding and a tight financially-driven restriction to the planning role.

Overall: upper part of Band K-L (45%-54%); strongest on *System Organisation* (I) and *Data / System Quality assurance* (J); weakest on *Users* (O) and *Management Context* (L).

Some strengths

- computerised indexing and cross-referencing of about 9,000 colour slides is well under way
- access to OS 1st edition; poor copies of the Pont / Bleau survey and library access to Roy; partial coverage of some 18th and 19th century county maps; holds a few estate maps
- SMR archive can be searched on its own or referenced from SMR sites
- Historic Scotland monument classifications finished for 'non-statutory register', 13,000 of 20,000 records; ACT maps regarded as exemplary by HS and Councils served
- exchange with many local societies and the Association of Certificated Field Archaeologists
- register of users is kept
- National Trust for Scotland keeps WoSAS informed of management plans. Historic Scotland copies all SMC approvals or refusals. WoSAS has copies of Forestry Enterprise's management plans for SAMs
- about 2 person-years put into data-cleaning for GIS
- anti-virus procedures, a disaster recovery plan and full back-up procedures for digital material but none for non-digital.

Some weaknesses

- limited to NPPG5 planning service: little conservation management because no money
- few museums in area with archaeological capability; detached from environmental education
- work on SMR data has to be externally funded, or done by existing staff or volunteers; IT development work has to be paid for separately
- WoSAS office has neither the space nor the staff for external physical access
- no standard documented requirements for accepting material for accession to the SMR from field projects
- field checking has been extremely limited and on a case-by-case basis only
- retrieval system allows complex querying digitally, but the data is often not up to it
- Historic Scotland Field Monument Warden reports received after 8 years wait, but without explanatory documentation and promised annual updates
- no systematic exchange with local museums, archive services, local history libraries, university archives or private documentary collections
- no systematic liaison on Conservation Areas, HLF applications or grants schemes; SMR is not used for heritage education or interpretative services.

Some opportunities

- experimental data-exchange on other environmental topics with some Councils
- field-checking some areas improving rapidly through large developer-funded surveys on, for example, open-cast coal, wind farms etc.

Some threats

- planning is seen as negative; archaeology gets that association
- unsustainable deficit projected for 2001-02
- withdrawal of further Local Authorities threaten viability of federal service.