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### Computerising the lists of historic buildings in England: a historical case study on initiating a national project

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### 30.1 Introduction

The Royal Commission on the Historical Monuments of England (RCHME) has been in the process of computerising the National Monuments Record of the archaeological and architectural resource for nearly ten years, culminating in the new MONARCH system implemented in 1993 (Beagrie 1993). However, there is a major omission from the computerised national record, i.e. the 500,000 or so records of statutorily protected historic buildings in England maintained as a list by the Department of National Heritage (DNH) in the light of advice from English Heritage (EH).

At one level, the statutory lists of historic buildings in England are one of the most comprehensive records of historic buildings to be found in any country. On another level, in a non-computerised form, they are also one of the least accessible, except for some partial attempts to computerise the information in the lists at central and local levels. The listing activity has been in progress for over 40 years and has suffered from inconsistencies and omissions over time due to the absence of modern data standards and controlled vocabulary, although there have been improvements since 1982 (Clubb and White 1990).

Since 1986, RCHME, EH and the Department of the Environment (DoE, now DNH) have been considering the resource and logistical issues of computerising the lists. Ten major reports (and several smaller studies) were produced between 1986 and 1993:

- 1. Departments of Transport and Environment, Efficiency Services Division. Study into the computerisation of listed buildings records. September 1986.
- 2. Clews Architects Partnership (for DoE). Pilot project on computerisation of listed buildings records. December 1986.
- 3. House of Commons Environment Committee. *Historic buildings and ancient monuments*. 1987.
- 4. Joint EH/RCHME Working Party. Computerisation of listed buildings data. September 1987
- 5. DWH Associates (for EH). Consideration of the case for computerisation of the list of historic buildings July 1989.
- 6. Pannell Kerr Foster Associates (for RCHME) 'Project Landmarks'. May 1990.

- 7. RCHME. Computerisation of historic buildings lists: Report and recommendations following RCHME pilot study. June 1991.
- 8. DoE. Heritage Division information systems planning framework. May 1992.
- 9. National Audit Office. Protecting and Managing England's Heritage Property. July 1992.
- 10. Ernst and Young (for DNH). Heritage database feasibility study Business case and high-level user requirement. April 1993.

Few, if any, heritage computing proposals in England have been subject to so much preliminary scrutiny over such a period of time, involving political, management, operational, cost-benefit, marketing and technical perspectives. This paper consists of a historical study of the process of initiating the project during the period 1986 to 1993 and draws some conclusions about it as a case study in justifying a national project. It does not discuss in any detail the project as currently being initiated (1994) which is likely to form the basis of a future paper or papers.

### 30.2 Context

In England, DNH, EH, RCHME and local authorities all have requirements to compile, manage and exploit information relating to archaeological and architectural monuments and buildings. These requirements match the respective responsibilities of the organisations concerned. Responsibility for statutory control of the archaeological and architectural environment through the scheduling and listing processes is shared between the DNH (formerly DoE) and EH. EH acts as the statutory adviser to DNH which takes the decision to schedule monuments or list historic buildings. EH also has casework responsibilities concerned with monuments and buildings, chiefly in respect of those regarded as important nationally, including scheduled monuments and the higher I and II\* RCHME has a different, but graded buildings. complementary, set of functions as the national body of survey and record for historic monuments and buildings, including statutory responsibility for the emergency recording of threatened listed buildings. functions relate to the curation and provision of access to the National Monuments Record and its associated archive, now managed via the MONARCH database. Both EH and RCHME are 'sponsored', and mainly funded, by Government through the DNH (formerly DoE).

The role of local authorities at county level in the context of archaeology and the planning process and the system of Sites and Monuments Records which supports them is well documented elsewhere (including Burrow 1985 and Lang 1990). The responsibility for coordinating national and local heritage records lies with RCHME which has a lead role for this purpose (see RCHME 1993b). Local planning authorities at district/borough level have primary responsibilities for listed building controls and a related need to access and manage listed buildings data in conjunction with casework systems.

There has been co-operation between RCHME, EH and local authorities in the areas of controlled vocabulary (RCHME & English Heritage 1989, 1992) and data standards (RCHME 1993a; RCHME & English Heritage 1993). In 1994, a group of specialists working within the architectural documentation programme of the Council of Europe's Cultural Heritage Committee recommended to the Council of Europe a core data index to monuments, sites and ensembles of the European heritage (Bold 1993).

### 30.3 The statutory lists of historic buildings in England.

### 30.3.1 Format of the lists

The Secretary of State for the National Heritage, (formerly Secretary of State for the Environment) is required to compile the lists of buildings of special architectural or historical interest for the guidance of local planning authorities in the exercise of their own planning functions under the Town and Country Planning Act 1971. Members of the public may also bring to the attention of the DNH individual threatened buildings for consideration for emergency (or 'spot') listing. The statutory lists of historic buildings in England are issued by DNH (formerly DoE) in the form of around 2000 bound volumes commonly known as 'Greenbacks' or, more recently, 'Bluebacks'. The volumes are organised on a topographical basis, covering all or part of the area of a local authority at the time of listing. Changes in local government organisation, boundaries and names over the period of listing make the volumes more difficult to Traditionally, users of the lists have added amendments to the lists in the form of new listings, revised listing and delistings to the back of the relevant volume. A crude contents list rather than an index forms part of the volume.

The individual list entries consist of two main sections, a 'Header' of more structured information and a free-text description (for an example, see Annex 1). The Header normally consists of the following pieces of information:

Parish/town
Map reference
List entry number
Locality
Number
Street

Name
Side of street
Odd/even
Grade (i.e. grade I, II\* or III)
Date listed
Group value

(Details of county and district council at the time of listing is obtained from the volume title.)

The main development over time has been in the descriptive text. In older lists notes were minimal, often not including the type of building, but usually with a date of origin. By the last phase of the accelerated re-survey begun in 1982, the free-text followed an order reflected in the BDAMPFISHES mnemonic (i.e. Building type, Date, Architect if known, Materials, Plan/development, Facade, Interior, Special features etc. (see Annex 2)). However, the lack of an acceptable thesaurus with national application until 1987, (revised in 1989), (RCHME & EH 1989), meant that no rigour was applied to the terminology used in the free text. The associated free-text listed building description sometimes included standard bibliographic references.

### 30.3.2 List computerisation issues

Much of the debate about list computerisation in England has centred on how to justify the costs retrospectively. There is little doubt that if a programme of fieldwork for listing buildings was initiated today involving 800 person years of data collection at a modern cost of, perhaps, £16 million, computerisation would be considered a mandatory requirement from the outset. Since the listing process extended over a period of 40 years, much effort was spent in justifying a retrospective project.

The several organisations involved, DoE/DNH. RCHME EH and local authorities all have legitimate perspectives on list computerisation which relate to their functions. RCHME saw the lists as a sub-set of the total National Monuments Record although it is also itself a user, for example in conjunction with the casework which arises from the statutory function to record threatened listed buildings. EH has seen list computerisation mainly in the context of the listing process, including fieldwork to compile the lists and evaluating the existing stock of listed buildings, although it is itself a major user of the lists in connection with listed building consent work and grants. The part of DoE which was responsible for listing has seen the benefits of list computerisation for itself as limited to improved management and maintenance of the list itself and for some time took the view that others who benefit more should pay for it. Both EH and DoE were concerned at the prospect of significant funds being earmarked for the computerisation of the lists at a time when there was pressure to continue to fund fieldwork to support the actual listing of buildings. There was a balance to be struck between allocating funds for the listing of buildings and allocating funds for retrospective list computerisation.

A number of local authorities have input details of local listed buildings into computer systems, either into Sites and Monuments Records at county level or into planning information systems at district/borough level. Not all of these reflect data standards agreed at national level and few of these reflect the integrity of the data structure of the statutory list. None of them are validated as a copy of the statutory list. The status of the computerised list at national level has been another issue, with both EH and RCHME taking the view that DoE/DNH as owners of the list must be actively involved in the project to ensure that it has official credibility for statutory purposes. (Copyright in the lists is vested in the Crown and administered by Her Majesty's Stationery Office.)

Several other issues still require resolution. While DNH has determined that the system of issuing list volumes will continue after computerisation, the methodology for disseminating data from the computerised list has to be devised, both in the statutory context of providing guidance to local authorities and in the more general perspective of supplying heritage information in conjunction with the National Monuments Record and other data-sets.

### 30.4 The List Computerisation Reports

The context, scope, recommendations and impact of the ten major list computerisation reports between 1986 and 1993 are reviewed below.

### 30.4.1 Report number 1:

Study into the computerisation of listed buildings records, Departments of the Environment and Transport, Efficiency Services Division (September 1986)

Context. The Efficiency Services Division of the DoE completed a study for the DoE Heritage Sponsorship Division on the feasibility of the computerisation of listed buildings records in September 1986. The report had been commissioned in late 1985 by the section of the DoE with responsibility for compiling the lists on behalf of the Secretary of State in recognition that the opportunity to computerise the lists had not been taken during the accelerated re-survey. It was also carried out to ensure that the Department had a preliminary view on what should happen internally to complement the Clews approach, already in progress (see report number 2 below).

Scope. The scope of the study was to compare the options of producing a limited index with or without the full text of the statutory descriptions, to examine existing systems operated by EH, RCHME and the Clews partnership and to assess the implications for listed building control and in local planning authorities.

Recommendations. The report (unpublished) concluded that the existing procedures for the production and maintenance of the lists were time-consuming and not a cost-effective use of the time of local planning authorities

whose primary use of the lists was the principle reason for their creation. It also concluded that the absence of statistics on listed buildings made the formulation of Departmental policy difficult. It also noted the considerable progress RCHME had made with the computerisation of the National Monuments Record. As the next stage, the report recommended that the DoE should specify the detailed requirement, enter into detailed discussions with RCHME to establish the costs of the options and discuss with EH and RCHME the possibility of sharing the costs of the system.

Impact. The report did not in itself lead to any substantive action. Although produced by the Efficiency Services Division of DoE, it made limited progress in identifying the benefits for the Department itself. These were restricted to reductions in searching time by clerical staff estimated at a mere £12,000 a year, clearly inadequate alone to justify investment in a system whose setting-up costs were estimated at over £1 million. The DoE Heritage Sponsorship Division formed the view that computerisation was desirable but the costs should not be borne by the Department fully and that the initiative should be taken by RCHME and the newly created EH.

# 30.4.2 Report number 2: Pilot project on computerisation of listed buildings records, Clews Architects Partnership (December 1986)

Context. Although the Clews pilot project reported after the DoE Efficiency Services report, (Report Number 1 above), it had been initiated much earlier. Architects Partnership was one of the consultant practices appointed for Phase II of the accelerated re-survey of historic buildings. Because the primary objective was to launch an immediate field programme, computerisation was not an original part of the re-survey brief and had been excluded on the grounds that trial work on computerisation carried out prior to 1984 had indicated that the costs were too great. Clews themselves decided to computerise the re-survey data for the areas they covered, Northamptonshire, Oxfordshire and Warwickshire, in the hope that local planning authorities would be interested in using the system. This demonstrated that computerisation was feasible in the course of listing. Subsequently, DoE funded Clews to extend the brief to assess the prospects for computerising lists already issued. The pilot started in August 1985 and reported (unpublished) in December 1986, by which time EH had assumed some of the DoE functions.

Scope. Clews worked closely with local authorities in the area in designing a pilot system which would demonstrate the value of referencing the list to case-work. It set out a data structure for the statutory ('Header') element of the work. The report investigated methods and options for data collection. The costs of annotation, indexing and input were estimated at between £0.1 and £12.0 per record (excluding computer costs) depending on the level of detail to be indexed and input. The five levels were:

- 1. Statutory identification (SI) only
- 2. SI plus basic index (building category and date)
- 3. SI plus restricted index (building category, date, notable persons, material)
- 4. SI plus comprehensive index (materials, plan, facade, interior, sources)
- 5. SI plus comprehensive retrieval (for example, to the level of chimney and window shapes and staircases)

The costs have built into them some element of fieldwork in respect of pre-1982 (pre-re-survey) lists.

Recommendations. The report recommended that a national project should be initiated to the third level set out above at an estimated cost of £0.8378 per record as the best balance between user requirements and the availability of information from existing sources. It also recommended that the proposed List Review of pre-1982 lists should be computerised from the outset.

Impact. The report had a mixed reception, particularly within RCHME and, to a lesser degree, within EH. RCHME felt that its own data standards and experience in the course of computerising the National Monuments Record should be exploited more fully and that the software used, initially dBase II and later dBase III, was inadequate to the requirements of a national system. Both EH and RCHME questioned the requirement for more field-work; EH did not consider that fieldwork could be justified to progress computerisation alone while RCHME believed that useful records could be compiled from existing sources. DoE were already concerned at the costjustification (over £400,000 for data capture and indexing). Nevertheless, in retrospect aspects of the Clews report have stood the test of time. Clews level 3 is fairly close to the level of indexing now being proposed eight years later (1994) and the List Review which began in 1989 did indeed include computerisation at the outset. On the other hand, the Clews study spent a considerable amount of time on unjustifiable levels of indexing detail which rather clouded the debate.

### 30.4.3 Report number 3: First report from the House of Commons

Environment Committee, Historic buildings and ancient monuments (1987)

**Background.** During 1987, the absence of a computer-based record came to the attention of the Environment Committee of the House of Commons on the much wider subject of heritage management (House of Commons 1987).

Recommendations. The Report of the Committee viewed the position with concern and recommended that the DoE should commission a study into how the lists should be computerised and subsequently analysed.

Impact. The main impact of the report was to bring the subject into a political and public arena, but it did not

change the DoE view that the costs of a project should be shared among those most likely to benefit from it.

## 30.4.4 Report number 4: Computerisation of listed buildings data, Joint EH/RCHME working party (September 1987)

Background. During the early part of 1987, EH and RCHME with the encouragement of DoE established a Joint Working Party in recognition that more justification was required to facilitate the funding of a project and that this was only likely to happen if the two organisations worked closely together. The Working Party united the views of the two bodies on the relatively small number of fields which should be indexed against controlled vocabulary, principally address, building type and period and possibly materials and notable persons.

Scope. The working party report studied the requirements of EH and RCHME for a computerised list in considerable qualitative detail demonstrating the centrality of the list for EH listing recommendations and subsequently casework and for RCHME as an integral part of the National Monuments Record and in close association with the statutory emergency recording of threatened buildings. An important new departure was the employment of a researcher to carry out a survey of the requirements of local authorities. All 391 local authorities in England were sent questionnaires of whom 60% replied. 37 authorities were visited in person. Most local authorities supported the proposal and many also drew attention to the unsatisfactory nature of the map record.

The report examined four options for computerisation:

- 1. Statutory ('Header') record, period and building type
- 2. As 1. above plus notable persons and materials
- 3. As 1. above plus descriptive notes
- 4. As 2. above plus descriptive notes

Data capture costs, excluding accommodation, ranged from £370,000 to £590,000.

Recommendations. The report recommended that the project should commence in September 1988, subject to a pilot study to define working and management procedures, that a Project Team with representatives of DoE, EH, RCHME and local authorities should be set up, chaired by the DoE, to manage the pilot project and decide on the options.

Impact of the report. The report ensured agreement between EH and RCHME that the project had to be a joint one. The DoE requested further information which was produced in a supplementary report in February 1988, but while they supported the efforts of EH and RCHME to initiate a project, the officers of the DoE did not feel it was appropriate for them to take a leading role in steering the project at that stage.

# 30.4.5 Report number 5: Consideration of the case for the computerisation of the list of historic buildings, DWH Associates Ltd (July 1989)

Context. Early in 1989, EH had initiated its List Review programme to review a number of old pre-1982 list volumes and following the recommendation of the Clews report (Report number 2 above), it decided in consultation with DoE to computerise listings from the outset. The review was expected to review a maximum of one-fifth of the records. An interim computer system for use by Field workers and Inspectors in the compilation of list entries was developed by EH as a Clipper compiled version of dBase (see Clubb & White 1990). The data structure employed is close to the Clews level 3.

This EH system was recognised as interim in nature, but had been developed in the context of a study of the functions, activities, information flows and systems architecture relating to the listing process in the EH Listing Branch and Records Office carried out by DWH Associates in March 1988. So far as the substantive project was concerned, methods of justifying projects were becoming more complex as time moved on (for a contemporary example based on the EH scheduled monument record see Clubb 1989). To progress the national project, EH decided to fund a justification report on a computerised data-base of listed buildings based on the activities of all the main users. The study was carried out in close co-operation with RCHME and DoE allowed the consultants, DWH Associates, to assess their own internal procedures and requirements.

Scope. The aim was to assess the costs and benefits to EH, RCHME, DoE at central Heritage Sponsorship Division and regional level and also local authorities in accordance with the objectives of those organisations and their office practices. It also considered methodologies for list compilation, validation and update. It examined the nature of the list itself, listing and associated activities, costs of a project and possible returns.

Recommendations. The report (unpublished) strongly recommended that a computerised copy of the list should be established and that it be certified as a 'master copy' of the list itself by the DoE. It recommended that the project be developed on a agency basis held either by EH, RCHME or a third party. It agreed with the prevailing view that the computer-based list should consist of the statutory record ('Header'), the descriptive notes and a small level of index information. Data capture costs were estimated at £507,000 with running costs of £40,000 pa. Benefits to the main users were estimated at £280,000 pa in terms of improved access to data.

Impact. This was the first report which looked at the needs of the main users, DoE, EH, RCHME and local authorities in one document. EH and RCHME considered that both the costs and benefits required further examination, but it also confirmed their view that a project would only succeed if it received DoE validation as

the owners of the statutory lists. EH and RCHME produced a strong recommendation to DoE that it was of vital importance that the Department should be actively involved in the project and that a marketing study should proceed to provide the final justification for the project.

### 30.4.6 Report number 6: 'Project Landmarks', Pannell Kerr Forster Associates, (May 1990)

Context. By the latter part of 1989, DoE officers were still unconvinced of the need for them to steer or fund a national project and indeed, they were content for the time being that at least new listings were being computerised by EH in the List Review exercise. While DoE supported the principle, there was also the presumption that those who would benefit most from computerisation should fund it. In further discussions with DoE, it was agreed to progress the recommendation of DWH Associates that a marketing study be commissioned to assess the potential for generating revenue from end-users of list data. The marketing study was funded by RCHME, but EH was represented on the working party.

Scope. The study (unpublished) sought to identify the markets which might exist for listed buildings data, the products which needed to be developed, the organisation and resource required to deliver products and to project anticipated revenue. The research was based on a two main elements, a quantitative survey of 649 architects, 271 surveyors and 221 local authorities, representing responses of 30%, 20% and 55% respectively. Group discussions were held with surveyors and architects and interviews with 15 local authorities. In addition, telephone interviews were held with a range of interests, including publishers, property developers, marketing companies, amenity groups and academic bodies.

The identified study universal support for computerisation among all groups of potential users and that professional groups such as surveyors and architects would be willing to pay for the convenience and speed of a good service. Most users would require telephone and facsimile delivery but local authorities tended to favour supply of the data by disk to interface with their own management data. The study believed that revenue projections varied between £600,000 and £2,500,000 pa, depending on the assumptions made about the rate of inquiries received and the amount the market would stand.

Recommendations. The report recommended that a rapid decision was required to demonstrate resolve to develop a national system, otherwise an increasing number of local authorities would develop their own systems. It also proposed that a pilot study be carried out, including marketing and service provision, possibly in conjunction with a local authority. It also stressed that information on listed buildings required enhancement in content and reliability before use would be maximised.

Impact. The assumptions about potential revenue generation met with a mixed reception in DoE, RCHME and EH. While many officers were optimistic about

meeting running costs from revenue, there were doubts about the ability to meet the initial setting up costs. The DoE still felt that it was for EH and RCHME to advance their own proposals. The immediate impact was that RCHME decided to undertake a further pilot study, having obtained the support of EH and DoE.

# 30.4.7 Report number 7: Computerisation of historic buildings lists: Report and recommendations following RCHME pilot study, RCHME (June 1991)

Context. RCHME decided to embark on a six month pilot study as recommended in report number 4 above to test the methodology of list computerisation as a desk exercise in order to deal with the 80% of the list not expected to be reviewed through the EH List Review project. They also wished to demonstrate that, contrary to the implications of the Clews report (2 above), a useful record could be constructed from the lists as they stood without additional fieldwork, particularly if linked to other records held in the National Monuments Record. The intention of the pilot was to computerise both the statutory list and RCHME cataloguing information in a single data-base. The decision to conduct the pilot was announced in the House of Lords by Baroness Blatch and in the Commons by David Trippier on 31 October 1990.

Scope. The study (unpublished) reported on the pilot project for County Durham carried out between October 1990 and April 1991. The study established an Oracle (UK) database capable of storing and making retrievable the categories of information required by the then draft EH/RCHME core data standard for information on historic buildings, list entries retrievable in statutory form and cataloguing information on archival items held by RCHME.

Recommendations. The report recommended that RCHME should compile a computerised list over a period of five years overseen by a joint DoE/EH/RCHME project The full cost of computerising management team. 500,000 list entries was estimated as £4.2 million, but it was argued that the real additional cost would only be £1.6 million since 60% of the information would be captured by RCHME in the course of its continuing cataloguing activity and 90,000 building records were expected to be captured in the course of the EH List Review programme. It was recommended that close links should be developed between the national project and the EH List Review interim system and any proposals EH developed for a geographical information system for listed buildings.

Impact. The report provided detailed data capture (based on scanning the lists) and indexing costs for the project for the first time. It also established RCHME as the likely body to compile the computerised list for existing lists. Although DoE continued to take the view that it was for EH and RCHME to develop proposals, this study did provide the basis for RCHME to submit specific bids to

DoE for additional funding. By agreement, EH decided to focus its energies on computerising in conjunction with list review and new other listings and also on considering the requirements for computerising the map record of listed buildings.

In the event, bids for additional funding by RCHME were deferred by DoE pending two initiatives leading to reports numbers 8 and 9 below.

## 30.4.8 Report number 8: Heritage Division information systems planning framework, DoE (May 1992)

Context. The planning framework report carried out by DoE for its Heritage Division was part of a programme of studies for the main activity areas of DoE to help provide dynamic forward planning mechanisms for information systems. The study was begun in September 1991 and the report was completed after the transfer of a number of heritage responsibilities, including listing, from DoE to the newly created DNH in April 1992.

Scope. The report (unpublished) covers the Heritage Division responsibility for sponsoring bodies such as EH and RCHME as well as its own activities in areas such as listing and scheduling. Listed buildings computerisation was only one of a number of areas covered in the report. The report concluded that existing manual systems relating to the listing and scheduling processes and to support case-work were inadequate and pointed to information technology for solutions.

**Recommendations.** The report recommended that the Heritage Division at a senior level should initiate tripartite discussions with EH and RCHME to agree the management structures for undertaking a feasibility study to validate the project to computerise the lists.

Impact. The timing of the report meant that it was ready for consideration by DNH at the earliest stage on being established. It provided the basis for the new department to develop an information systems strategy and kept listed buildings computerisation on the agenda. Although the first reaction of officers of EH and RCHME was concern that yet another study was being recommended, there was general endorsement of the principle that there was a critical role for DoE/DNH in sponsoring the project which was a major development associated with this report.

## 30.4.9 Report number 9: Protecting and Managing England's Heritage Property, National Audit Office (July 1992)

Context. The report (National Audit Office 1992) dealt with the results of a National Audit Office examination of the arrangements for identifying, recording and protecting heritage properties carried out in 1991 when heritage responsibilities still rested with DoE until April 1992.

**Scope.** The scope was much wider than computerisation of the lists alone. It commented on difficulties in using the lists and the lack of indexes and noted that in spite of

a number of reports on the computerisation of the lists, it had been impossible so far to agree a workable solution at an acceptable cost. The report also noted that the DoE proposed to discuss with EH and RCHME the possibility of a national data-base incorporating statutory constraints, including listed buildings and scheduled monuments in the context of report number 8 above.

Recommendations. The report did not make any specific recommendations on the computerisation of the lists, but in noting the current situation and the number of reports already produced, it implied that progress should be made towards establishing a workable solution at an acceptable cost.

Impact. The National Audit Office reports publicly to Parliament and is an important part of public administration. Any report it produces is taken seriously and is likely to be visited and re-visited by House of Commons committees, perhaps the more so in this case because it was presented so soon after a new government department, was set up, the DNH. Both this report and the report number 8 above were helped to establish the view that the new department had a major role to play in this project.

### 30.4.10 Report number 10:

**Department of National Heritage** 

- Heritage database feasibility study
- Business case and high-level user requirement, Ernst & Young (April 1993)

Context. On consideration of report number 8 above, DNH agreed in principle to fund a project for the computerisation of the lists and appointed Ernst & Young to review the existing documentation, develop the business case and user requirement in order to validate the project prior to submission to HM Treasury for the necessary financial approvals. The study was overseen by a Project Board chaired by DNH and with EH and RCHME representation. The scene had already been set by a RCHME-funded study by Paveprime comparing the RCHME 'pilot' system (see 30.4.7. above) with the EH list review system (30.4.9. above) which concluded that they shared a good measure of data compatibility.

Scope. The report (unpublished) reviews the existing systems, options, costs and benefits, management of the project, risk analysis and impact assessment. For the first time, the report sought to identify the various roles of DNH, EH and RCHME in the project, giving DNH the project co-ordination role, and explored the option of a DNH/EH heritage case-work hardware platform in parallel with and linked to the RCHME National Monuments Record platform, both maintaining identical copies of the statutory lists.

Recommendation. The report recommended that a programme of work should be implemented at an estimated cost of £3 million over ten-years, including maintenance, about two-thirds of the expenditure being related to the capture and indexing of existing lists by

RCHME and one-third to DNH/EH for data-base development. The project was to be co-ordinated by DNH.

Impact. In September 1993, following HM Treasury approval, the Secretary of State for the National Heritage, Peter Brook, announced that the statutory lists of historic buildings would be computerised. Although there has been some questioning of the need for parallel platforms on technical grounds, the broad distribution of responsibilities has enabled the three organisations to work closely on the initiation of the project to date.

### 30.5 The present situation – March 1994

The proposed management structure for the project based on the PRINCE methodology is set out in Clubb and Startin (1993) and is not repeated here. DNH have appointed a Project Co-ordinator, RCHME have appointed a Project Manager to manage the data capture and indexing and EH are procuring a prototype system for document imaging to develop the requirement to manage the list. The substantive project will begin in Autumn 1994 following a review after the prototype system has been evaluated and decisions taken on the nature of the data-base to drive the project and manipulate the indexes to the agreed data standard. The development of the data standard for listed buildings is well advanced based on existing initiatives as set out in Section 30.2. above. The list is due to be fully computerised by 1996, with welldeveloped links to the RCHME MONARCH system. There is an appreciation of the requirement to link the listed building record with other data, both images of the buildings and spatial/geographical information, although these are not currently funded.

As stated last year, two main issues continue to be of interest: the proposal for two main computer platforms and the tripartite management arrangements, and how the proposals work out in detail, given the medium/long-term problems to be solved in co-ordinating the information systems strategies of organisations which may have different priorities and different cycles for budgeting and planning.

The Ernst & Young proposal for the computing platforms is set out in summary form in Clubb and Startin (1993). One computing platform hosted by EH is planned to support the new heritage management database and maintain the records of statutory constraints such as listed buildings and scheduled monuments. This platform is linked closely to the DNH and EH systems which support the process of listing and scheduling on the one hand and their case management systems on the other.

In parallel with the new platform is the RCHME National Monuments Record system, already in place, which, under the proposals of the study, is set to contain an updated copy of the publicly-accessible sections of the heritage database (in effect, a record of statutory constraints) as a sub-set of the total national record. Links to the local authority Sites and Monuments Records are provided through the 'extended' National Monuments Record (see also RCHME 1993b).

As suggested above, the further development of the project, including any future imaging or spatial/geographical elements will be the subject of further papers.

### 30.6 Conclusion

The most obvious conclusion is that the process of justifying significant expenditure can be time consuming and lengthy, particularly where the main costs are in computerising a large data-set retrospectively and there are a number of organisations involved with legitimate, but different perspectives. However, there are positive aspects to the experience. In the event, there was agreement at an early stage on the respective but complementary areas of interest: EH would focus on new listings while RCHME would focus on the large backlog of uncomputerised listings. There was also an early agreement on the data standard. The DoE remained supportive of the principle of computerisation throughout, while feeling unable for some time to take a proactive role because of the limited direct benefits to itself. There was always a likelihood of political pressure, based on the report of the House of Commons Environment Committee (report number 3) and the report to Parliament of the National Audit Office (report number 9). The lack of computerisation was in the political arena and sooner or later the DoE, subsequently the DNH, would be asked to report on progress. This meant that the proposal could not be buried indefinitely and, indeed, it was taken up with some enthusiasm by the new DNH.

It may reasonably be questioned why RCHME and EH did not agree in the meantime to fund a project themselves, independent of any additional funding from DoE. This was considered, but there were fears that a data-base not sanctioned by DoE would lack credibility for the users. In reality, EH saw its priority as spending on the practical conservation of buildings and monuments, while RCHME lacked the resource to allocate funds at the level required. Although all of the ten reports detailed above played a part in advancing the case, the main breakthroughs in the justification followed report number 7 above (RCHME pilot) which provided a basis for bids for funding to be made, report number 8 (DoE planning frameworks) which established a key role for DoE and report number 10 (Ernst & Young) which attempted to establish roles for the three organisations in the national project. While the project itself must be subject to a postimplementation review in due course, one of the most positive aspects of the justification period is that the proposal to computerise the lists was persistent and it continues to be perceived as an essential tool to support both the practical conservation and the knowledge of buildings in England and as a integral ingredient of the national record of the heritage, the National Monuments Record.

### **Acknowledgements**

Acknowledgement is due to a small group of individuals who have persisted with list computerisation over a long period of time. These include John Bold and Simon Grant of RCHME and Peter White, formerly of EH. In more recent years, Paul Heron of DNH (formerly of DoE) and Martin Cherry of EH have also played key roles.

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### ANNEX 1

HENLEY-IN-ARDEN

HENLEY-IN-ARDEN

High Street (East Side)

6.2.52.

5.4.67.

No 79 No 81

SP 1566 29/14

GV

C17. 2 storeys plus attic. Square timber framing above ground floor level. The filling and ground floor walls are of modern plaster. Twin gables with main

Nos 65 to 71 (odd) and Nos 77 to 85 (odd) form a group

I.

2396

HENLEY-IN-ARDEN

HENLEY-IN-ARDEN

High Street (East Side)

No 83

SP 1566 29/15

II

GV

2.

C16/17. Timber frame but modern bricked up front. One storey plus attic. Modern shop and windows.

modern barge boards. Modern splayed bays and other windows. Machine tiles.

Nos 65 to 71 (odd) and Nos 77 to 85 (odd) form a group.

1.

2396

HENLEY-IN-ARDEN

HENLEY-IN-ARDEN High street

(East Side)

No 85

SP 1566 29/16

6.2.52.

II

GV

C16. 2 storey gabled end facing the street, of close set studding, overhanging at 1st floor level. C19 windows and ornamental barge boards. Machine tiles.

Nos 65 to 71 (odd) and Nos 77 to 85 (odd) form a group.

### **ANNEX 2**

TF 90 SW

WATTON

WATTON GREEN

1/338

Green Farmhouse

II

Farmhouse. Late C17 and early C19. Timber framed, partly clay lump and brick infill. Brick facade and black pantiled roof. Single pile plan, now altered. Slightly asymmetrical facade to fit interior disposition. 2 storeys. Central fielded door in pilastered doorcase below broken pediment. One renewed casement right and left with gauged skewback arches. 3 sash windows to first floor with glazing bars also under skewback arches. Dentilled eaves cornice. Gabled roof with internal end stacks. Gable walls weather boarded on brick plinth. Random brick and flint outshut to rear mid C19. Timber door and C20 casements. Timbered first floor with rendered brick. Catslide roof. Interior with complete timber frame. West room retains open fireplace and all ceiling beams. East room with boxed spine beam. Dado decoration and fireplace date from refronting. Roof renewed mid C19.

### BDAMPFISHES MNEMONIC

Building Date (Architect)\* Material Farmhouse. Late C17 and early C19. Timber framed, partly clay lump and brick infill.

### Plan

Facade

Brick facade and black pantiled roof. Single pile plan, now altered. Slightly asymmetrical facade to fit interior disposition. 2 storeys. Central fielded door in pilastered doorcase below broken pediment. One renewed casement right and left with gauged skewback arches. 3 sash windows to first floor with glazing bars also under skewback arches. Dentilled eaves cornice. Gabled roof with internal end stacks. Gable walls weather boarded on brick plinth. Random brick and flint to rear mid C19. Timber door and C20 casements. Timbered first floor with rendered brick. Catslide roof

### Interior

Interior with complete timber frame. West room retains open fireplace and all ceiling beams. East room with boxed spine beam. Dado decoration and fireplace date from refronting.

Special Features
Roof renewed mid C19.

\* (Not relevant in this example)