

BRITISH LIBRARY : OBJECTIVES OF ST PANCRAS PROJECT

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BRITISH LIBRARY OBJECTIVES

The British Library is the world's leading national research library. Its function is to serve scholarship, research and enterprise for the benefit of present and future generations :-

- by building, cataloguing, preserving and promoting the incomparable collections of the British cultural heritage of recorded matter and significant elements of other cultures
- by providing a single focus for services from the world's knowledge base
- by identifying and responding to current and future users needs for a national library service

The Library is committed to maintaining its position of leadership in the world and aims to support this by innovative, flexible and cost effective methods of working.

PROJECT PURPOSE

The new British Library building at St Pancras is planned to provide a base for the consolidation of national research library services currently scattered over many buildings in London in a controlled pollution-free environment bringing together on site material in sciences, social sciences and humanities in all formats and of all ages to aid and encourage scholarship and research and support services to users in more cost effective ways.

BACKGROUND

In response to the recommendations of the Report of the National Libraries Committee (Cmnd 4028, June 1969), Parliament passed in 1972 the British Library Act. The British Library (the Library) now occupies some nineteen buildings in and around London as well as at Boston Spa in Yorkshire and the Library and the British Museum share premises at Bloomsbury.

The search for additional space for the British Museum Library was ongoing more or less since the end of World War II. After the abandonment of plans to construct a new library at Bloomsbury in the 60s, a project to construct a new building at St Pancras was announced to Parliament in March 1978. Ministers decided

construction should proceed in stages with the Library having to review their requirements at each stage in the light of changing circumstances.

In November 1988, Ministers decided to adopt a radically different policy and complete the building in two main stages within a given cost limit. The new building would enable the Library to concentrate most of its main reference collections at one location in a controlled pollution free environment. It would be completed to a standard commensurate with a major heritage building and will allow it to vacate many of the nineteen sites around London.

The second stage of the building was confirmed in July 1990 to be completed within an overall cash limit of 450 million for the completed building. The Board of the Library confirmed that its key requirements would be met although it was disappointed that certain major requirements could not be provided in this second stage. The Library will, however, by the very nature of the building be expected to develop services such as exhibitions and other public events to promote its position in the national cultural heritage and to acquire a high profile previously "supplied" by the British Museum.

After the final occupation of St Pancras in 1996, the only London buildings outside St Pancras which the

Library is presently planning to occupy, will be the Newspaper Library at Colindale, the premises of the National Sound Archive at Kensington, and the Micawber Street book store. The Bindery will also require accommodation.

THE LIBRARY'S OBJECTIVES FOR THE BUILDING

There are three primary objectives for the new building at St Pancras

Access - to provide accommodation and services suited to the needs of readers, remote users, staff and the public to exploit the collections and support scholarship, research and enterprise

Collections Management - to maintain as far as is practicable the quality and unity of the collections in London over all subject areas while maintaining flexibility to respond to changing patterns of use and methods of access; the national research collections will continue to grow and future provision will be needed for further storage capacity

Preservation - to provide a safe, controlled environment to preserve the invaluable research

collections and the national printed archive in order to delay further deterioration and keep the collections intact for future generations.

THE BRIEF - SOME POINTS OF INTEREST

The brief for the Library derived from a strategic study of the major factors influencing the future pattern of operations and workload of the new library including trends in the use of automation and new technology and information on usage patterns, reader characteristics and trends, and growth of collections extrapolating where practical from trends occurring over the previous 20 years. Flexibility to meet future needs was a basic desideratum.

The fundamental pattern of providing closed access book stacks with supporting book delivery services to readers in the humanities and social science reading rooms as opposed to provision of open access classified collections enabling rapid access in the science and technology reading rooms followed well proven traditional lines. This is reflected in usage surveys where users of the science collections come weekly or more frequently spending one or two hours in the Library on each visit whereas humanities readers make visits lasting for longer than a week to several months and on average spend 4.5 hours in the library on each visit. Again usage in the

science and technology collections is concentrated on the most recent material primarily using patents and periodical literature together with the need for rapid access. In the humanities and social sciences, use is made more widely spread over the collections with 17% of use representing material published before 1800, 24% between 1800 and 1889, 24% between 1900 and 1949 and 32% 1950 or later. The spread of usage is further emphasized by the wide range of material consulted with 55% of readers requiring material spread over more than 200 years. These statistics demonstrate the need to have the modern and rare collections together on the same site as humanities users do not normally study narrow sections of the collections. Indeed one of the trends that can be seen in recent years has been the growth of use of original source material.

Conservation concerns have been carefully taken into account in the specification and design of the new building in ways that do not conflict as they have formed an essential part of the main needs of the Library. The most basic level was the specification of environmental standard for air conditioning to control temperature and relative humidity together with air filtration to remove pollutants. Compromises have to be made between human comfort conditions, the need to preserve paper as well as vellum and the need to ensure bindings remain flexible and do not become brittle through dryness. Care has also to be taken to avoid excessive changes in

temperature or relative humidity in moving from storage to reader areas as too rapid changes can also cause damage.

The control of environmental standards in the building is further assisted by the fact that the book storage areas are principally below ground and heat losses and gains through the building fabric will be considerably less than normal.

Fire protection is primarily based on a dry pipe pre-action water sprinkler system where the pipes are filled with compressed air and water enters only after detectors have indicated the presence of smoke or fire. Carbon dioxide extinguishing systems will be used in fireproof basement strong-rooms for especially valuable material in place of Halon.

PROJECT MANAGEMENT

The preparation of an architect's brief and the subsequent construction has followed a long history but is now coming to a climax with the opening of the first phase in 1993. It is just as essential to plan the provision of operations and services to meet long term needs and to direct and control the successful occupation of a new building. Experience in many sectors demonstrates this can more successfully be achieved by

proper project management structures and a review of the British Library's earlier experiences emphasized the need for a top down approach to tackle policy definition and decision making followed by the detailed working out of how these decisions will be implemented whilst ensuring that all decisions are recorded, authorised and made fully available to all members of the library staff. To achieve this two separate projects were identified.

- one concerned with the planning for operations and services including organisational structures, resource assessment and staff development.

- the second, based on the requirements of the first, to plan and execute the set up and transfer of operations and services to the new building

The planning process can be sub-divided into eight discrete phases or stages and is illustrated in Annex 1. The first three stages are concerned with operational planning and with formulating the overall strategy for St Pancras, defining strategies for each operational facility followed by detailed assessment of how each unit will operate and its resource and service requirements.

This is followed by the occupational planning and the control of the moves to implement the plan (stages IV, V

and VI) and will provide project control using computer supported networking techniques. The seventh stage covers the phased introduction of operations followed finally by a post-occupation evaluation (stage VIII) to 'clean-up' after the move, reassess policy and modify services and facilities as appropriate.

OCCUPATION STRATEGY

The key criteria which have influenced the strategy for occupation comprise :-

the requirement to take advantage of the early availability of parts of the building, prior to full handover in 1993.

the commitment to maintain service levels during the course of the occupation.

the need to minimise costs incurred by double moves and damage to the collections caused by transportation.

the need to ensure that the plan for occupation is fully compatible with the plan for the operation of St Pancras.

the requirement that the Library should optimise use of the new building during the period between 1993 and 1996 when services will be offered to readers both at Bloomsbury and St Pancras, with St Pancras acting as the main London focus of the Library

the requirement for the Library over the next decade to offer an integrated pattern of services from two principal sites (St Pancras and Boston Spa), based on a single Library wide collection.

The main features of the plans are :-

a series of book moves starting in 1991 and scheduled for completion in 1993

a closely staged opening of reading areas during 1993. The timing of openings of the reading rooms will be determined by the presence of relevant stock at St Pancras, the availability of the automated systems and the maximum periods during book moving, for which the Library has determined that stock will not be available

the transfer and setting up of support services and operations. The timing of this is influenced by factors such as the opening dates of reading rooms and the need to relinquish existing buildings

the development of a new maintenance and building operations function to support the Library in the new building

the establishment of a communications programme to inform users and staff about progress.

DESIGN OF THE BUILDING

The building design had to meet the overall planning requirements of the local authority and make the best use of the particular shape and area of the site while satisfying the Library's functional requirements, the inter-relationship of various functions and the need for long term flexibility to meet changing needs and technology. It further had to be consistent with the exhuberant Victorian Gothic style of St Pancras station while not imposing on the adjacent housing area. To achieve the building's objectives within the available site it was necessary to provide underground storage for the bulk of the collections. The design has been described by the Royal Fine Art Commission as "a brilliant solution to a complex problem".

The new St Pancras building illustrates the disposition of the principal functions with the building laying back from the main road to provide a piazza leading to the

entrance hall with access to the exhibition galleries and bookshop, a front hall with an information service unit for guidance, orientation and advice, and reader admission facilities. On the West are the reading rooms for the humanities and social sciences primarily dependent on closed access collections stored in the basements and supplied through a mechanical book handling system. On the East are the reading rooms for the science, technology and business collections with major open access provision and the emphasis on rapid service and a wide range of information service support. The majority of offices are above or beside the reading rooms. An auditorium with simultaneous translation facilities and a set of meeting rooms can be separately accessed from the street without going through the main entrance hall. Flexibility to provide for future changes in use is the most difficult objective to achieve and it is neither practical nor economic to make every area suitable for every function in a large and complex building. The air conditioning and floor loading requirements for closed access book storage differ from those of reading rooms and offices and cannot be interchangeable. All office areas are adjustable as they are based on open plan design with flexibility of underfloor cable ducting through use of platform floors. Underfloor ducting is similarly provided in reader areas to ensure flexibility of layout while the option exists to convert some office areas to open access reading space.

around the margins of the open access reading rooms but only to a limited extent.

FACILITIES FOR READERS

Within the completed building readers will be accommodated in eleven separate and fully serviced reading areas as follow :

Rare Books and Music

Manuscripts

Science (five separate areas/levels)

General Humanities (two areas/levels)

Maps

Oriental

For the first time humanities and science readers are contained within the same building with flexibility for readers to consult material where they need it subject to constraints of security and/or conservation with freedom of access between the science and humanities wings.

Desks will be provided for 934 humanities readers and 242 science readers; a total of 1,176 desks. In addition there are up to some 220 seats available within carrels (which could hold up to two readers), typing, catalogue and other desks.

Lounges and coffee areas for readers are provided and in the completion phase full restaurant facilities.

BOOK STORAGE

Within the completed building will be some 24,000 metres of open access shelving, of which some 19,000 metres will be in the reading rooms intended for Science readers. In addition there will be a total of 316,000 linear metres of closed access shelving, and 1800 cabinets for maps, manuscripts and for items from the oriental collections. Of the closed access storage some 200,000 linear metres will be on mobile shelving.

It is planned to move King George III's "Kings Library" in 1993 to be displayed after 1996 in a new purpose built six-storey glass "bookcase" which will be one of the outstanding features of the public areas in the new building.

The bookstorage provides space to bring together on one site the major part of the Library's research collections in all subjects and of all dates from the earliest writing onwards. It has never been expected that over the long term space for future growth would be provided on one site and indeed part of the Library's planning consists of concentrating its holdings on its two principal sites, at St Pancras and at Boston Spa.

Further growth will be provided when appropriate and individual items stored in relation to their usage levels and rarity.

BOOK DELIVERY

The book delivery system contained within the new building will combine computer-based systems - the online public access catalogue (OPAC) and the automatic book request system (ABRS) (being developed by the Library) with a mechanical book delivery system which will collect books from and deliver books to library assistants in the basements and reading rooms. Special material such as manuscripts and large material such as maps will be transported by staff and not go in the mechanical handling system.

The intention in normal circumstances is to reduce the average time taken to deliver a book to a reader from closed access store to half of that achieved at present. Thus the book delivery systems will significantly increase the efficiency of occupation of reader seats.

AUTOMATION

Three key systems are under development by the Library to support Reader Admission facilities, an On-line Public Access Catalogue and an automated Book Request System.

There will need to be a phased development of these principal systems to support the initial opening of public services in 1993 and they will be developed as service needs grow.

STAFF

Offices, lounges and, in the completion phase, a restaurant will be provided for some 1200 staff. The office space is situated so that staff have convenient access to the appropriate parts of the collections.

LAND TO THE NORTH OF THE BUILDING

The overall area of the site purchased in 1975 was 12.7 acres. The original multiphase building would have covered an area of about ten acres.

The present design of the completed building covers an area of some seven acres. Unless the Library can demonstrate that it is essential to retain the land for its future needs, the Treasury's intention is to dispose of the remaining land. Until 1966 this area will be used for construction purposes.

PROGRESS

Planning for St Pancras is making rapid progress and key issues dealt with during 1991 are summarised below :-

- (a) agreement on and implementation of a new organisational structure to reflect the needs of St Pancras
- (b) preparation of user requirements for 3 key automated systems for St Pancras (Reader Admissions, On-line Public Access Catalogues. Automated Book Request System)
- (c) assessment of the units that need to be located in St Pancras in 1993 and definition of the staff numbers that will need to move together with their proposed locations.
- (d) review of the estimated running costs likely to be incurred in the new building
- (e) initiation of a communications programme with staff, users and associated institutions on the planning for St Pancras, the timing of the moves and the effects on operations and services including provision of leaflets, videos and site visits
- (f) revision of reader admissions policy

- (g) completion of a review of administration in the Library and assessment of its effects on the St Pancras project
- (h) review of opening hours and the wish to move to common opening hours at St Pancras subject to resource limitations
- (i) establishment of change control procedures for operational planning and procedures for interfacing with the occupation project

Over the coming years some of the issues that will need to be kept under close scrutiny will include :-

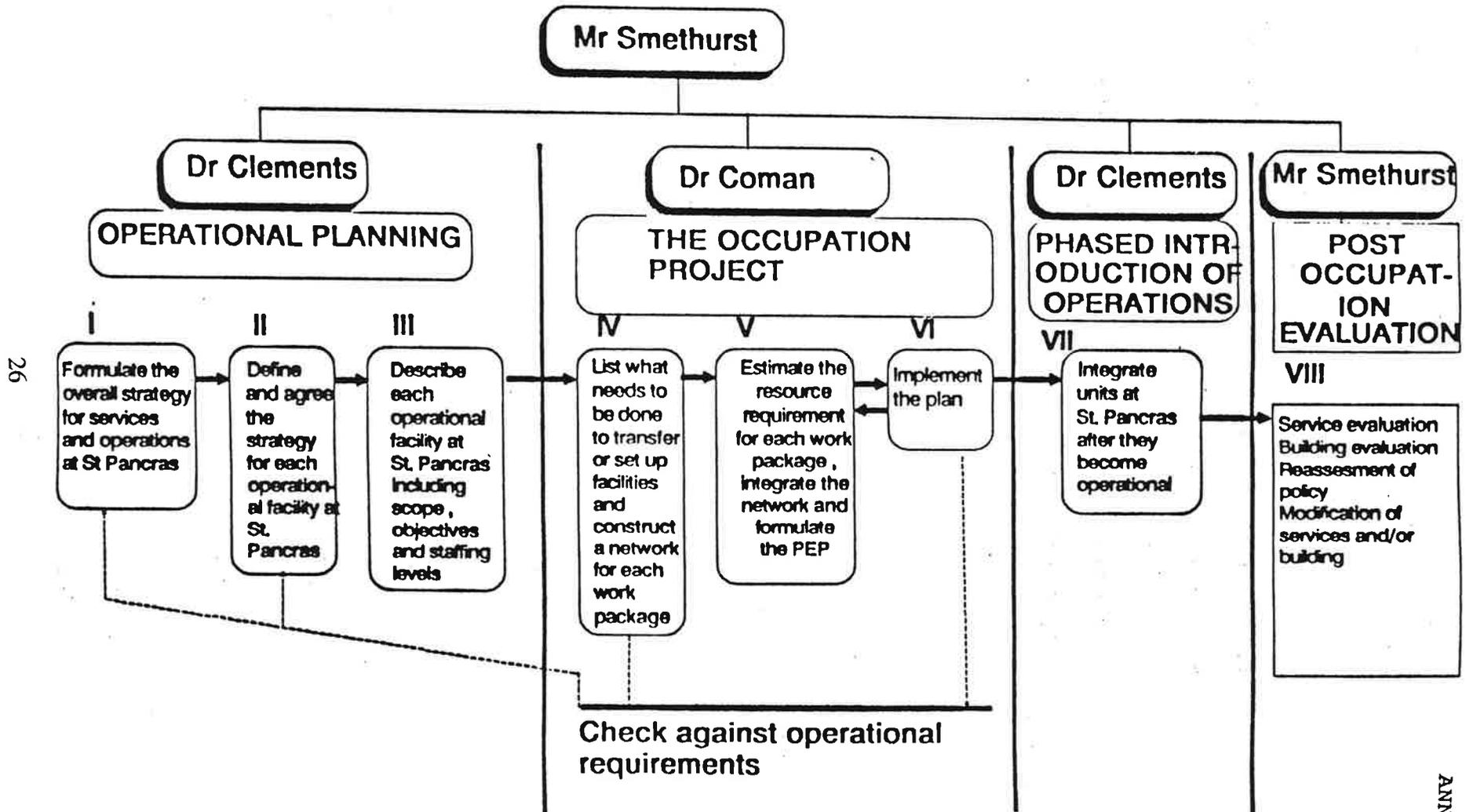
- ensuring building handover dates are maintained
- ensuring quality control of finished areas is adequately maintained as areas are handed over
- the quality and installation of the mobile bookstacks
- monitoring the installation and set up of the mechanical book handling system
- setting up house management systems

- setting up building and plant maintenance systems

- setting up control systems for security, fire alarm and detection, lighting and building environment maintenance

- commencement of detailed planning for the completion phase

Logic diagram for undertaking the St. Pancras projects



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