

NMSI

Policy and Procedures for Selecting and Operating Historic Objects from the Collections of the National Museum of Science & Industry

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Related Science Museum Documentation:	Science Museum Collecting Policy, 10 July 2007
	Science Museum, Indemnity & Insurance Management, draft policy 2007 (M. Rollo)
	National Museum of Science & Industry, Corporate Plan 2006
	Science Museum Human Remains Policy, draft August 2005 (L. O'Sullivan)
	Collections Management Policy, National Museum of Science & Industry, April 2005
	Conservation of objects in the care of the Science Museum, Policy statement, January 2005 (H. Newey)
	Increasing access to the Science Museum's collections through live interpretation, draft policy, 19 June 2003

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1. POLICY STATEMENT

The National Museum of Science and Industry, through its institutions The Science Museum, The National Railway Museum and The National Media Museum, holds one of the world's pre-eminent collections in science, technology, industry, transport and medicine. These collections provide an unequalled record of the first and second industrial revolutions and beyond. They contain not only unique icons of international significance but also the everyday items that show the impact of science on how human lives are lived.

As leaders in science and technology communication and learning, the NMSI remains committed to operating historic objects, recognising that the high levels of interest and the educational value in "working objects" make a meaningful connection between the museum's visitors and the collections

The NMSI's selection, risk assessment and review processes (based on the tenets of the National Heritage Act, 1983) are to ensure that working objects are used in a safe, secure and sustainable way, according to best practice, now and for the future, letting the importance and condition of the object and the quality of the evidence for an earlier state guide the decision.

2. PROCEDURE

The procedure for selecting an object for operation follows detailed proposal and selection criteria

2.1 Proposal

At each museum, an object may be proposed for operation by staff from any department- as all are stakeholders in the museum's vision. Additionally, proposals may come from outside groups- researchers, engineers, special interest groups, artists and filmmakers

Each operation will be approved by the appropriate museum management team (see Appendix A) after consideration of all of the following:

- the object's cultural significance, which is the aesthetic, historic, scientific, social or spiritual value that it has for past, present and future generations. Objects which are considered rare will not be considered for operation as use is mutually incompatible with preservation of the whole.
- the significance of the object's function(s), including its alterations, repairs and modifications, if any. Any new use of an object will be compatible with original function with minimal change to fabric, respect of meanings and associations and continuation of practices which contribute to the cultural significance of that object.
- the object's current condition and state of preservation, the likely impact of wear to significant parts, the need to update to current safety standards and the requirement to remove hazardous materials and/or functions. Objects which are beyond their economic life (ie: in a state of accelerated wear) will not be chosen for operation unless physical integrity is deemed insignificant in relation to significant function.
- the benefit to the public and to the museum, in order to inspire innovation, engage understanding, motivate learning or preserve the collections.
Publicity, direct revenue generation, sponsorship attraction or special interest group gratification may be considered as supplemental reasons for proposal for operation but are not acceptable motivations on their own.
- the resources required for maintaining the functionality for both the short and long term. Money, time, facilities, equipment and skilled staff are required for treatments, maintenance and repair programmes. Thorough documentation including photography of all processes from decision-making to maintenance logs and handling requirements must be kept and be made accessible. Where resources cannot be committed to the long-term maintenance, repair and replacement programme, an object shall not be selected for operation.
- museum needs in terms of frequency of operation and number of objects operating. One operating object can be a focus for visitors but several operating objects can become a distraction or have minimal impact on public programmes
- restrictions of museum context (available space, exhibit design, health & safety requirements).
- opportunities to record through the media of film and photography the return to operation, use and maintenance in order to maintain knowledge of craft and traditional skills.

2.2 Selection

A “working object” can be anything that originally had an operational function and can be either stationary or mobile.

Operating a working object can mean anything from demonstrating only one particular function to running the full functional complexity.

Every object in the collections with an operational function is assumed to be suitable to be a working object unless it is considered “rare”. Rare is defined as unique, an icon, of incomparable significance, nationally important or bearing important historic evidence such as developmental information, significant use, original fabric.

The decision about whether an object is considered rare and therefore not a “working object” will be made by the relevant curator and endorsed by the chief Curator or relevant Head of Collections.

2.2.1 Selecting Functions for Display

The selection of functions for display, educational and access purposes will be driven by an explicit evaluation of the significance of different functions. Operation will contribute to building individual and meaningful connections with science and technology through:

- adding to the understanding of function, purpose and significance
- showing the sensory aspects of sound, sight, feel and smell
- illustrating technological, social and/or economic change
- preserving significant function
- preserving or rediscovering traditional skills associated with the fabrication, operation and repair of working objects
- inspiring and sustaining an interest in science, industry, engineering, history and/or museums

2.2.2 Risk Factors

Risk factors which must be considered are:

- possible loss of historic information, including significant evidence of use, during restoration to working order
- potential replacement of original parts or alterations of original design for operational or health and safety reasons and regulations or through wear caused by operation
- potential difficulty in determining originality of parts or original appearance
- increasingly unavailable historic materials and craft skills making accurate reproduction of parts or appearance difficult or impossible
- potential deterioration of historic fabric caused by the substitution of modern materials and techniques
- potential increased deterioration of historic fabric caused by uncontrollable operational environments, particularly outdoors, or through accident, inappropriate use or abuse or insufficiently trained operators
- insufficient resources allocated to restore an object to working order or to completing the project as a result of underestimating needed allocation, escalating costs, project shortfall or changing priorities and long-term plans.
- imbalance of resources required to maintain and demonstrate the working object and to train the operators against the return in benefit to the museum in terms of public interest or educational value.
- non-refundable costs of minimising risk through loss or damage to an working object as the museum may not be able to find the resources to purchase commercial insurance (see Appendix B)

3. SELECTION PROCESS

3.1 Curatorial, Conservation and Information Assessments:

- The Curatorial Assessment will be the responsibility of the relevant curator, with input from the chief Curator or the relevant Head of Collections, and will define what the object is and what its function(s) were/are. It will fully detail an object's history and provenance and will include research into similar objects to enable comparisons of rarity, condition, integrity and interpretive potential.
- The Conservation Assessment will be the responsibility of the relevant Conservation Manager and will focus on the material(s) of the object and its condition and functionality. It will include a description of the physical fabric and function(s), analysis of samples as required, identification of alterations and an appraisal of the wear level(s). It will outline the resource implications for treatment, maintenance, environment, security, health & safety regulations, access, exhibition, storage, handling and object movement, with input from relevant museum departments (see Appendix A).
- The Information Assessment will be the responsibility of the Registrar and will assess the issues of indemnity and insurance and the financial and legal responsibilities of the museum.

3.2. Statement of Significance

A statement of significance, drawn from the curatorial, conservation and information assessments, will give a reasoned clear summary describing the values, meaning and importance of the object. It will include:

- cultural significance- context, history and uses
- significant values- aesthetic, historic, scientific, social, spiritual
- significant alterations, modifications and repairs

It will be the responsibility of the relevant curator to produce the statement which will be a formal document retained as part of the historic record of the object, filed in a format designated by Collections Documentation.

3.3 Conservation Objectives

The conservation objectives, based on the conservation assessment, will outline all aspects of the object's care and use, so that treatment and operation does not compromise the significance of the object

- The level of operation acceptable for the object's preservation will be established:
 - no operation
 - mothball, shutdown or freeze
 - minimal operation- for maintenance purposes only under tightly controlled conditions
 - low levels of operation for occasional demonstration under controlled conditions

- medium levels of operation for infrequent demonstration under medium controls
- high levels of operation for regular demonstration
- The appearance objectives appropriate for the object will be defined.
- The proposed future use will be determined:
 - permanent display, including demonstration on or off-site, visitor access or static exhibit
 - long-term loan for operation or demonstration
 - temporary display, including demonstration, visitor access or static exhibit
 - storage

The conservation objectives will be an itemised Conservation Management Plan produced by the relevant Conservation manager/ Conservator and will be used to inform the treatment plan.

3.4 Treatment Plan

The treatment plan will establish all potential options to satisfy the conservation objectives including:

- alterations required for compliance with regulations, including removal of hazardous materials
- preservation of internal components
- safety and stability of the object
- works to achieve appearance
- replacement of like with like or with modern materials, and conservation, retention or disposal of original components depending on an assessment of their significance
- use of traditional skills or modern methods for repairs and replacement manufacture

The treatment plan will determine the resources required for all the treatment options:

- skills
- equipment
- materials
- space
- continued availability and commitment of resources
- projected maintenance including tasks, schedules, costs, skills and supplies
- future sources of suppliers

The treatment plan will identify the options for operation and display and/or storage with details of space, resources and logistics included for each option.

The final stage of the treatment plan will be to select the approach to be implemented after review of the options. This review will be undertaken by the initiator of the proposed project, the relevant curator, the relevant Conservation manager and the Registrar. Resource considerations, both for achieving and sustaining the decision, will be a priority.

The Treatment Plan will be included in the Conservation Activity in MMXG.

The final decision will be endorsed by the appropriate museum executive managers (Appendix A) and the justifications for the decision will be a formal document retained as part of the historic record of the object.

3.5 Treatment Implementation

The treatment implementation will include both the treatments as specified by the Treatment Plan and the production of an Operating and Handling Guideline and Inspection Record and Maintenance Plan.

The Operating and Handling Guideline will include:

- parameters and limits of operation
- operation methods
- authorised operators and required training
- operation logbook template
- moving and handling instructions
- identified hazards

The Inspection Record and Maintenance Plan will include:

- inspection plan and schedule
- maintenance plan and schedule
- specified fuels and lubricants
- the treatment plan decision to replace like with like or with modern alternatives
- inspection record and maintenance record templates

4. OPERATION

The Operational Logbook, produced as part of the Operating and Handling Guideline, and the Inspection and Maintenance records, based on the Inspection Record and Maintenance Plan, are to be rigorously kept and updated throughout the object's working life and the documents retained as part of its historic and technical record.

Resources, allocated as determined in the treatment planning, will ensure that the Inspection Record and Maintenance Plan can be carried out as specified. Where adequate resources cease to be available for ongoing maintenance, necessary repairs or legislated modifications, a review of the operational plan will be held.

Periodic reviews will also be undertaken to determine whether an object should continue to be operated, whether the operation should or must, by reason of changing regulations or legislation, be modified or whether the object is no longer suitable for operation.

A project manager or project owner will be given the responsibility for the programme for continued operation of the historic object and will conduct the reviews consulting with all relevant stakeholders,

The programme and methodology for operating an object will not be modified or altered without review.

4.1 Records

Treatment and operating records will be kept in these formats:

- Initial and on-going object treatment in the Conservation Activity in MMXG
- Up-to-date maintenance record in the Working Object Database, Conservation Server which can then be linked to MIMSY as a separate MS Excel file. This file can be retrieved and edited inside MIMSY or independently as a common MS Excel file.
- Maintenance history in the hard-copy Logbook held in the object's green file.
- Where there is a statutory requirement for a specific format of record this will be adopted as the standard for NMSI record keeping (for instance a Rail Vehicle Maintenance & Operation Policy)

APPENDIX A

Selection Management Teams:

The Science Museum

Science Museum Policy and Operations Committee:

Chief Curator
Head of Conservation & Collections Care
NMSI Head of Corporate & Collections Information
Head of Library & Archives
Security Manager

- The Conservation Assessment will be the responsibility of the relevant Conservation Manager, with input from Logistics, Security and the Collections Hazards Management Group.

The National Railway Museum **Collections Development Group:**

Head of Knowledge & Collections
Senior Curator Rail Vehicle Collections
Engineering & Rail Operations Manager
Registrar
Curator of Railways
Curator, Archive & Library Collections
Learning Manager
Professor of Railway Studies

- The Conservation Assessment will be the responsibility of the Conservator and/or the Engineering & Rail Operations Manager with input from the Senior Curator, Rail Vehicles Collections; Head of Knowledge & Collections; Collections Development Group.

The National Media Museum

Collections Group

Head of Collections & Knowledge
Conservator
Collections Manager
Curator of Photographs (x2)
Curator of Photographic Technology
Curator of Cinematography
Curator of New Media
Curator of Television

- The Conservation Assessment will be the responsibility of the Conservator with input from the Collections Manager, relevant subject Curator, Head of Collections & Knowledge and the Collections Hazards Management Group.

APPENDIX B

The factors which must be considered before proposing to operate an object on loan in:

Collections Registration must be consulted before any object on loan in is considered for operation.

The owner's approval will have to be sought and obtained in writing. In the case of some historic loans, it may prove difficult or impossible to identify a current owner.

The Government Indemnity Scheme does not cover loss or damage arising while objects on loan are driven, piloted, flown, sailed, ridden, operated and so on unless the Secretary of State has given specific written approval permitting indemnity to apply while a borrowed object is in motion or exhibited as a working display or while it has to be set in motion in order to maintain it in running order. Written approval must be sought from the Secretary of State before the object is operated but the Government Indemnity Scheme does not cover loss or damage arising or flowing from normal wear and tear.

Resources must be allocated from a pre-determined budget in order to care for a borrowed object during preparation for/and operation by purchasing commercial insurance. Commercial insurance may only cover the asset value of the object in the event of loss or damage and not the losses due to repair, restoration or operation.

APPENDIX C

Research Documentation and Reference Material

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