



Department for Culture, Media and Sport

# Science and Heritage: Response to the House of Lords Select Committee on Science and Technology



Department for Culture, Media and Sport

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Presented to Parliament by the Secretary of State for Culture,  
Olympics, Media and Sport by Command of Her Majesty  
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## Introduction

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1. The Government thanks the Lords Science and Technology Committee for the Science and Heritage Follow-up Report which was published on 11 May 2012, and for its findings and recommendations.
2. In responding to the Report, the Government re-iterates its recognition of the intrinsic value of our cultural heritage, of the sector's importance to the social, cultural and economic life of the United Kingdom and of the role it plays in attracting tourists to this country.
3. The Department for Culture, Media and Sport (DCMS) sees heritage as having a clear role to play in supporting growth and welcomes the emphasis made in the follow up report to the significance of the sector to the UK economy. The Government has recently championed the importance of heritage in its GREAT campaign. DCMS also recognises the importance of the science of caring for heritage collections for now and for future generations, and is clear that preservation cannot be taken for granted.

### Summary of the Government response to the recommendations

4. Each of the recommendations made by the Lords Select Committee on Science and Technology are set out in the section below followed by a response. DCMS and the Department for Business, Innovation and Skills (BIS) have contributed to the response by the Government.
5. The Government acknowledges that the Committee made a number of recommendations intended for Research Councils UK (RCUK) and the National Heritage Science Forum (NHSF). The Government therefore invited these organisations to contribute to the Government's response and this is included at Appendix A. The Government would like to thank RCUK, and the seven research councils within its partnership that responded to its submission, and the NHSF for their contributions.
6. In summary, the Government supports the Committee's work to monitor the heritage and science community's work on heritage science and the conservation of our cultural heritage.
7. DCMS notes the Committee's conclusions about the Department's moral leadership role in championing heritage science but equally feels it would be wrong to assume that Government should be both thought leader and standard setter in a technical and scientific field of this kind, particularly when an increasingly vibrant and capable heritage science academy is developing to provide a pluralist and diverse alternative approach. Encouraging and supporting the heritage science community's continued growth through arms length bodies and other forums should deliver the robust and sustainable

leadership which the Committee rightly recommends, and with which DCMS agrees, but through a different mechanism instead.

8. The responsibility on the DCMS ALBs to care for collections and heritage assets, where appropriate to their remit, is enshrined through robust governance mechanisms. It is set out clearly in the funding agreements as a condition of government funding, and the protection of heritage is included in the governing legislation of the national museums, and the wider heritage sector.
9. With regard to the Chief Scientific Adviser and accessing scientific advice, in this instance heritage science, DCMS is of the view that it is neither appropriate nor workable for the Department to precisely replicate the model and specialist roles existing in other Government departments. DCMS has therefore worked to find an approach congruent with the size of the Department, particular management structure and the continuing programme of staff reductions, which also takes into account the expectation that many activities are best delivered directly by its ALBs.
10. The Government supports the work of its ALBs with a remit for heritage and cultural preservation and the wider heritage community, including the NHSF and RCUK, in their work to disseminate good practice, to collaborate across institutions, to increase capacity across the community, to continue efforts to digitise our cultural heritage and to increase public engagement with heritage science, and will offer support where appropriate.
11. The Government has demonstrated its strong commitment to science and research by protecting the programme budget within BIS in the Spending Review 2010 settlement, including the funding for AHRC. In addition, it has pressed for the clearest possible recognition of the importance of research in the social sciences and humanities in the proposed Horizon 2020 funding programme and has supported a series of amendments to the original proposal which strengthened its role and visibility in the text. The Government believes that cultural heritage research can expect strong support from EU funding through Horizon 2020.

## Recommendations and findings of the Lords Committee Report

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12. In this section the Government sets out its response to each of the recommendations of the Select Committee follow-up report with the recommendations set out in bold.

### Research Councils

13. **Recommendation 1**

**We share the concern expressed by a number of witnesses that funding should be provided to enable the progress achieved to date by the Science and Heritage Programme to continue after 2013 when it comes to an end. We recommend that the AHRC (Arts and Humanities Research Council) and the EPSRC (Engineering and Physical Sciences Research Council) take steps to ensure that the momentum generated by the Programme is not lost.**

14. The Government welcomes the priority the AHRC, working closely with the other Research Councils, has given to heritage science since the Committee's initial report (see Appendix A below for the RCUK's response to this specific recommendation). We note the AHRC's commitment to continuing to recognise heritage science research as a strategically important and valuable subject. In the Spending Review of October 2010, the Government demonstrated its strong commitment to science and research by protecting the programme budget with BIS with a flat-cash, ring-fenced settlement of £4.6bn per annum over this Spending Review period including the AHRC which receives just under £100m.

### National Heritage Science Strategy and Forum

15. **Recommendation 2**

**We welcome the development of the National Heritage Science Strategy (NHSS). However, we urge the steering group to underpin NHSS objectives with detailed specifications of the actions required to achieve those objectives, identifying who is responsible for their achievement and according to what timescale. We encourage the National Heritage Science Forum to take responsibility for ensuring that heritage institutions give "institutional buy-in" to the NHSS objectives and we encourage heritage institutions to consider how they can contribute to the achievement of NHSS objectives.**

16. The Government supports this recommendation and notes that whilst the NHSF is at its development stage, it has already attracted institutional members as noted in point 6 of Appendix A.
17. The Government encourages its ALBs to consider their appropriate level of participation in the NHSS objectives, noting that English Heritage is contributing through the development of its Science Strategy which was initiated in late 2011. This Science Strategy will set out how English Heritage will respond specifically to the NHSS objectives and act as a powerful catalyst for sharing of information among English Heritage's scientists engaged in practicing and advising on archaeological science, interiors and collections conservation and structural conservation. It will also underpin the operation and development of the National Heritage Protection Plan.
18. **Recommendation 3**  
**Whist we acknowledge that the Forum is still only in the early stages of development, we recognise that it has significant potential as a collective voice and vehicle for the leadership of the heritage science community, and as a means of stimulating collaboration between members of the community. It is time for the Forum to provide clear leadership and to enable the community to demonstrate that it is committed to acting upon the NHSS as well as discussing priorities.**
19. The Government also recognises that NHSF is at the early stages of development and welcomes the start-up funding provided by AHRC to allow the NHSF to be hosted at the Science and Heritage programme office at University College London. We note that NHSF is not yet at a stage to respond to this recommendation specifically, as noted in point 6 of Appendix A.
20. As with the NHSS, the Government encourages its ALBs to respond to the NHSF as appropriate within the scope of their own remits and objectives. We note that English Heritage, as a member of NHSF, has committed to help to provide leadership through the direct actions arising from its Science Strategy as well as support the wider objectives of the NHSS.

DCMS and its arm's length bodies

21. **Recommendation 4**  
**We recommend that, before the next round of funding negotiations with its arm's length bodies, the Department for Culture, Media and Sport sets specific departmental objectives for heritage science related to its departmental objectives to "protect our nation's cultural heritage". Similarly, DCMS ALBs should set out how they will help achieve these objectives in funding agreement negotiations with the department. At the appropriate time, fulfilling these objectives should be taken into account in negotiations prior to the next Comprehensive Spending Review.**

22. The DCMS Business Plan sets out a number of significant structural reforms that the Department will be making over 2012 to 2015. In addition to the reforms listed in the Business Plan, the Department has a number of other major responsibilities, including protecting the nation's cultural heritage.
23. This was also reflected in the last Spending Review 2010 when the Secretary of State for Culture, Olympics, Media and Sport set out the four principles that he used to make decisions on funding for the Department's ALBs. One of these principles was the protection of cultural, heritage and sporting assets for the long term. It was on this basis that spending review decisions were made, including the decisions to limit cuts to the national museums to 15% in real terms over the spending period and to ask English Heritage to protect spending on funding for planning advice, grants for heritage at risk and the conservation and maintenance of sites in its care, and cut no more than 15% in real terms.
24. This principle was set out in the spending review allocation letters which were sent to each body in 2010 and will feature in the Management Agreements that will be issued to the ALBs to cover the period of 2012/13 and to 2014/15. In addition to this, the protection of heritage assets is included in the governing legislation of the national museums, English Heritage and the Churches Conservation Trust and the Royal Charter of the British Film Institute. Protection and conservation are fundamental elements of protecting cultural and heritage assets for the long term. As such, it is clear to the DCMS ALBs through their spending review allocations, Management Agreements and legislation that heritage science is an integral element of their responsibilities.
25. DCMS agrees performance indicators with many of its ALBs, which will be set out in their Management Agreements for this spending review period. We are currently discussing these Agreements with ALBs and the policy is to set a maximum of two key performance indicators and a small number of other indicators which will be used to monitor progress and enable the body to focus on key priorities. DCMS will discuss with the relevant ALBs whether a specific indicator relating to heritage science is appropriate in their Management Agreements.
26. **Recommendation 5**  
**Given the importance of heritage science to the sustainability of the contribution heritage makes to the economy, failure to find the resources to enable the appointment of a Chief Scientific Adviser (CSA) would amount to negligent short-termism. The CSA post has been vacant since 2010 – more than sufficient time for DCMS to find a “workable solution”. We recommend that DCMS appoints a CSA without further delay.**
27. We agree with the importance of finding a workable solution, and believe we have done so. DCMS is a small department which has undergone a significant reduction in staff numbers since 2010 so a standard CSA appointment is not affordable. But we are now in a position to look to recruit a principal scientific adviser with the title of Head of Analysis (at Civil Service Grade 5 level) who will

perform the main function of a CSA which is ensuring that the Department accesses relevant scientific advice to inform policy making, working with CSAs from across Whitehall and beyond.

28. DCMS is working with the Government Chief Scientific Adviser and the Government Office for Science to establish mechanisms for the post-holder to draw on the advice and varied expertise of the CSA network. This will strengthen the Department's capacity to access wider scientific advice, including on heritage science, via the Science and Research Advisory Committee where we are simultaneously working to add to the expertise available to us by recruiting further members. DCMS expects to have the role filled by autumn 2012.

#### Dissemination of best practice

29. **Recommendation 6**

**We encourage Icon to develop their website to contain an up-to-date online catalogue of scientific literature relevant to heritage science, where possible including abstracts, which should be accessible to all heritage scientists and users of this research across the UK.**

30. We understand that Icon will be writing to the Select Committee with a formal response to this specific recommendation in due course.

#### European Union Funding

31. **Recommendation 7**

**We recommend that DCMS and the Department for Business, Innovation and Skills (BIS) make the case for the inclusion of heritage science in European Commission Framework Programme 8 (Horizon 2020). We encourage the heritage science community and research councils to make every effort to secure funding for heritage science from European Union sources.**

32. The UK has been actively pressing for the clearest possible recognition of the importance of research in the social sciences and humanities in the proposed Horizon 2020 funding programme and has supported a series of amendments to the original proposal which strengthened its role and visibility in the text.

33. In addition to an overarching statement which clearly recognises the need to integrate such research (including that in the cultural heritage area) in all parts of the Horizon 2020 programme, the text of the proposed Horizon 2020 Regulation now contains specific references to the role of cultural heritage in several places. In particular cultural heritage is explicitly mentioned in the "Climate Action, Resource Efficiency and Raw Materials" part of the Societal Challenges pillar (reflecting the valuable work already being undertaken by the Joint Programming Initiative in this area in which the UK Research Councils are very active). In addition the list of Societal Challenges has been modified in

negotiation with the UK's support. This now contains one on "Europe in a Changing World - Inclusive, Innovative and Reflective Societies". The "Reflective Societies" part of this Challenge is focused on cultural heritage and European identity. The Government therefore believes that cultural heritage research can now expect strong support from EU funding through Horizon 2020.

34. This recommendation is also responded to by RCUK in point 14 of Appendix A.

#### Private funding

35. **Recommendation 8**

**Philanthropic and industry funding has the potential to make an important contribution to meeting heritage science funding needs. We urge the Forum to explore the possibility of obtaining private, possibly matched, funding – consulting, where appropriate, bodies (such as university museums, the research councils and the Getty conservation Institute) which have demonstrated an effective track record in this area. We also recommend that DCMS make every effort to increase private (both philanthropic and industry) funding for heritage science and to communicate these efforts to the community.**

36. We agree that philanthropy has an important part to play in supporting heritage science. DCMS will continue to play a leading role in promoting philanthropy across its sectors and in tandem with other Government Departments. Government has taken significant steps to encourage philanthropy through measures to encourage legacy giving, simplify gift aid and establish a new Cultural Gifts Scheme. In partnership with the Heritage Lottery Fund and Arts Council England, our £100 million programme of match funding will strengthen fundraising capacity and expertise across our sectors. We have recently announced endowment grants totalling over £25 million to sixteen museums and heritage bodies. We are also working closely with the Heritage Alliance to boost giving to smaller heritage bodies. We have facilitated access to historic reserves for our national museums, the British Library and English Heritage. All of these activities have the potential to strengthen philanthropic giving to the benefit of heritage science, but while Government can create the conditions for effective donor cultivation, it cannot substitute for the leadership which needs to be demonstrated by the heritage community if it is to compete effectively for private donations.

#### Capacity

37. **Recommendation 9**

**Although new scientists have been attracted into heritage science there is some concern about the loss of senior posts and long-term maintenance of capacity in the field. We recommend that the AHRC, as lead research council responsible for heritage science, should ensure that steps are taken to assess and monitor the health and discipline. We anticipate that this will be an area of work to which the Forum will wish to make a**

**contribution. If these concerns prove to be founded, we recommend that DCMS, the research councils, the Forum and heritage institutions take appropriate action to ensure that the long-term health of the heritage community is assured.**

38. The Government notes that RCUK have responded to this recommendation in points 16 to 17 of Appendix A. In this, AHRC explains that the need to build capacity in the heritage science research has been established and that heritage has been identified as one of the three priority areas for specific support.
39. The Government supports the recommendation to ensure the long term health of the heritage community through attracting new scientists to heritage science and encourages its ALBs to contribute to RCUK and the NHSF's research into this as appropriate. English Heritage's Science Strategy will be informed by its sector intelligence on skills gaps and losses and the organisation's own efforts to ensure that its staff expertise is sustained and enhanced.

#### Collaboration

40. **Recommendation 10**

**We commend the efforts which have been made by the heritage science community to increase collaboration. We encourage the heritage science community to explore how they can best work together to share resources, expertise and experience throughout the UK. Given the objectives of the NHSS, we anticipate that the Forum will wish to assist in promoting these collaborative efforts.**

41. The Government encourages those ALBs with a remit for heritage preservation to increase their collaboration and explore shared resources, expertise and experience, working with the NHSF as appropriate.
42. English Heritage is working actively with AHRC to seek areas for fruitful collaboration and in May 2012, the two organisations co-hosted an academic workshop to consider priorities for heritage conservation in the context of AHRC current and future themes and programmes, and English Heritage's National Heritage Protection Plan.

#### Independent Research Organisation Status

43. **Recommendation 11**

**We acknowledge that there is an issue for those organisations which are unable to access funding because of their ineligibility for Independent Research Organisation status (IRO). We encourage organisations within the heritage science community who would like IRO status to explore whether it would be possible to develop consortia, perhaps on a regional or thematic basis, to apply as a collective for IRO status and bid for funding. The research councils should offer assistance to any group of organisations intending to form a consortium to help them achieve IRO status.**

44. The Government notes this recommended approach and also notes that RCUK are able to consider consortia applications where the bidding organisations comply with IRO status criteria. RCUK's response to this recommendation is set out in points 20 – 21 of Appendix A.

Public engagement

45. **Recommendation 12**  
**Public engagement with heritage science provides a mechanism for stimulating interest in science, engineering and technology. We commend the activities that have been undertaken in this respect and urge the community to work together to plan programmes for public engagement, avoiding overlap and sharing resources wherever possible.**

46. The Government acknowledges the importance of public engagement with heritage science and therefore supports the recommendation for the heritage science community to collaborate on their planning. We note that one of the key aims of the NHSF, set out in point 4 of Appendix A, is to demonstrate the public benefit of heritage science and to increase public engagement and support for it.

A UK digitisation framework

47. **Recommendation 13**  
**We recommend that DCMS and BIS, with the involvement of the Forum, facilitate the development of a digitisation framework to promote and manage digitisation of cultural heritage.**
48. The Government recognises that digitisation has huge potential to facilitate wider and higher quality access to and understanding of cultural collections and artefacts. It also recognises that ALBs such as The National Archives, the National Museums and the British Library have led innovative programmes to promote and manage digitisation of our cultural assets. English Heritage is developing additional capacity building strategies to complement the English Heritage Science Strategy, one of which specifically covers improving access to information through digital technologies.
49. There is therefore evidence to show that museums, libraries and archives have a clear priority to make cultural assets accessible digitally and that public /private partnerships are proving to be an effective and productive funding model for digitisation on cultural heritage.
50. The Government does not wish however to impose a top-down centralised structure to any digitisation framework and will therefore ask its ALBs and the sector to work with the NHSF on a national or international framework as appropriate to their remit.

**Appendix A Research Council UK (RCUK) response to the House of Lords Science and Technology Committee Science and Heritage Follow Up Report.**

1. Research Councils UK (RCUK) is a strategic partnership set up to champion research supported by the seven UK Research Councils. RCUK was established in 2002 to enable the Councils to work together more effectively to enhance the overall impact and effectiveness of their research, training and innovation activities, contributing to the delivery of the Government's objectives for science and innovation. Further details are available at [www.rcuk.ac.uk](http://www.rcuk.ac.uk)
2. This response is submitted by RCUK and represents its independent views. It does not include, or necessarily reflect the views of the Department for Business, Innovation and Skills (BIS). The submission is made on behalf of the following Councils:  
  
Arts and Humanities Research Council (AHRC)  
Biotechnology and Biological Sciences Research Council (BBSRC)  
Engineering and Physical Sciences Research Council (EPSRC)  
Economic and Social Research Council (ESRC)  
Medical Research Council (MRC)  
Natural Environment Research Council (NERC)  
Science and Technology Facilities Council (STFC)
3. The following is the RCUK response to each of the recommendations, made in the Lords Science and Technology Committee 'Science and Heritage: a follow-up report', which are relevant to the Research Councils.
4. There are also a number of recommendations in the report which concern the National Heritage Science Forum (NHSF). The NHSF emerged as the key recommendation of the sector-led National Heritage Science Strategy. It has two clear aims:
  - (i) to demonstrate the public benefit of heritage science and to increase public engagement and support for it, and
  - (ii) to improve partnership with the sector and with others by increasing collaboration and to help practice make better use of research, knowledge and innovation and to enhance resources, funding and skills. The Forum is intended to be a membership organisation supported in the first instance by cultural organisations such as museums, heritage agencies and universities involved in cultural heritage research.
5. The aims of the NHSF resonated with those of the AHRC/EPSRC Science and Heritage programme. Because of this, the AHRC agreed to provide start-up funds for the Forum to be hosted by the Science and Heritage programme office at UCL. These funds were for a part-time coordinator with the expectation that the Forum would become self-sustaining after 18 months.
6. The Forum has now been in development since November 2011 and is already attracting paying institutional members. To provide guidance, a transitional board

is being formed to advise the coordinator on issues to raise with new and potential members such as the governance structure and activities, including realising the relevant recommendations from 'Science and Heritage: a follow-up report'. As the Forum is at an early stage of development and membership, and is not yet truly representative of the sector, it would be premature for the Forum to provide a detailed response at this stage.

7. **Recommendation 1: We share the concern expressed by a number of witnesses that funding should be provided to enable the progress achieved to date by the Science and Heritage Programme to continue after 2013 when it comes to an end. We recommend that the AHRC and the EPSRC take steps to ensure that the momentum generated by the Programme is not lost.**
8. RCUK welcomes the committee's recognition of the commitment of the Research Councils to heritage science and the response of the AHRC to the first report, in particular the establishment of the Science and Heritage programme in conjunction with EPSRC. The success of the programme so far is demonstrated by the positive feedback provided to the committee by organisations involved with heritage science. The AHRC will continue to work with the EPSRC to ensure that the benefits of the Science and Heritage programme are maximised up to its completion in 2013 and beyond.
9. Building on the progress made by the Science and Heritage programme and the increased research capacity it has brought, the AHRC is now also supporting heritage science through programmes developed in the current spending review period.
10. Heritage is one of three key areas, along with Design and Modern Languages, earmarked in the AHRC Delivery Plan 2011-15 for specific support to sustain national capability. The second round of the Collaborative Skills Development scheme will be launched later this year to support innovative training programmes for postgraduate students and early-career researchers in the three key areas, including heritage. The second phase of the AHRC's Block Grant Partnership (BGP), starting in 2014, will include a specific route for applications in the three key areas, again including heritage.
11. The AHRC Delivery Plan 2011-15 also makes provision for developing new areas for cross-disciplinary heritage research through the research themes, 'Care for the Future' and 'Science in Culture'. The themes encourage multi-disciplinary approaches which can include heritage science. Care for the Future, for example, will support research looking at the adaptation of heritage to future challenges such as climate change.
12. In the longer term, the Research Councils will assess priorities for future support through the next Spending Review process and heritage science will be included in this review. Until then the AHRC will continue to recognise heritage science research as a strategically important and vulnerable subject and will continue to act as the lead Research Council responsible for this area, working with the other Councils as appropriate.

- 13. Recommendation 7: We recommend that DCMS and BIS make the case for the inclusion of heritage science in FP8 (Horizon 2020). We encourage the heritage science community and research councils to make every effort to secure funding for heritage science from EU sources.**
14. The AHRC, working with BIS, has been very actively involved with the consultation on Horizon 2020 and has consistently made the case for the inclusion of heritage research in the Horizon 2020 Societal Challenges in particular. BIS have been supportive of this position and it has been put forward as part of the negotiation process; some other member states are also keen on its inclusion. Although still under negotiation and not yet finalised, the text does now currently include reference to Cultural Heritage in two of the seven grand challenges.
- 15. Recommendation 9: We recommend that the AHRC, as lead research council responsible for heritage science, should ensure that steps are taken to assess and monitor the health of the discipline. We anticipate that this will be an area of work to which the Forum will wish to make a contribution. If these concerns prove to be founded, we recommend that DCMS, the research councils, the Forum and heritage institutions take appropriate action to ensure that the long-term health of heritage community is assured.**
16. As set out in the AHRC Delivery Plan 2011-15, the AHRC works closely with the Funding Councils to monitor national capability across the range of arts and humanities disciplines, including core areas where reduced capacity has been identified. As noted above, the need to build capacity in the area of heritage science research has been established and Heritage has been identified as one of three priority areas for specific support to sustain national capability.
17. Informally, the AHRC, through its advisory groups and the steering committees for its programmes, and through its relationship with bodies like English Heritage, obtains information about reduced capacity and skills gaps in the heritage sector. However, the AHRC will investigate the value of including the National Heritage Science Forum (NHSF) more closely in these discussions. The AHRC has provided start-up funds for the NHSF via the Science and Heritage programme.
18. It is important to note that Research Councils are not generally the employers of heritage science research staff.
- 19. Recommendation 11: We encourage organisations within the heritage science community who would like IRO status to explore whether it would be possible to develop consortia, perhaps on a regional or thematic basis, to apply as a collective for IRO status and bid for funding. The research councils should offer assistance to any group of organisations intending to form a consortium to help them achieve IRO status.**
20. Individual organisations applying for IRO status must demonstrate an existing in-house capacity to carry out research that materially extends and enhances the national research base and an independent capability to undertake and lead research programmes. They must also satisfy other criteria related to their financial and legal status. RCUK are able to consider consortia applications

where the organisations involved meet these requirements and there is an appropriate governance framework with a lead organisation.

21. Outside of IRO status, non-academic organisations are able to collaborate on many forms of Research Council funding grant as project partners, with a Higher Education Institution (HEI) or IRO as the lead organisation on the grant.

*Research Councils UK, June 2012*



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