



Spending review submission Autumn 2020

The National Heritage Science Forum is a registered charity that promotes collaboration between organisations that carry out heritage science research and those that use it so that there is wide public benefit from how science and technology can improve our understanding of heritage, our knowledge and methods of looking after heritage for the long-term, and our ways of engaging with heritage.

The Forum welcomes the opportunity to make a written representation to HM Treasury in advance of the 2020 Comprehensive Spending Review. It notes the published priorities of the CSR.

In this representation to HM Treasury the Forum focuses on two areas that will deliver benefit across the CSR priorities, particularly:

- Levelling up economic opportunity across all nations and regions of the country by investing in infrastructure, innovation and people - thus closing the gap with our competitors by spreading opportunity, maximising productivity and improving the value of each hour worked.
- Making the UK a scientific superpower, including leading in the development of technologies that will support the government's ambition to reach net zero carbon emissions by 2050.
- Strengthening the UK's place in the world.

1. Support for UKRI investment in a distributed research and innovation infrastructure for heritage science and conservation research

The Forum would like to express its support for the work by UKRI to understand and address the research and innovation infrastructure needs of the UK. The report 'Opportunities to Develop Our Capability' and the accompanying 'Landscape Analysis Report' record the contribution of Heritage Science research and innovation to Themes 2 (geoarchaeology archives), 3 (blended heritage study facilities), 4 (physical storage, conservation and access) specifically. The Arts & Humanities Research Council (AHRC) has scoped a proposal for investment in a distributed research and innovation infrastructure for heritage science and conservation research (from the Infrastructure Fund) that would create a central Hub and integrate an estimated 50+ facilities of research equipment and expertise.

The Forum asks Government to support this investment which would:

- Contribute to levelling up across the UK by bringing together currently fragmented research infrastructure and maximising access to it and return from it, including investment in areas which have historically seen low investment so that geographical and intellectual access to facilities is more equitable and delivers against strategic need. Investment as a distributed infrastructure will be transformational in terms of the step-change in access by researchers in other disciplines and sectors, including the commercial sector, and will enable the widespread use and re-use of assets, archives and research data particularly in digital form.
- Contribute to the UK's position as a scientific superpower by transforming the research and innovation potential of the UK's significant heritage assets. Research based on heritage assets not only reveals information about collections, landscapes and archaeology from a historical

perspective but also addresses current societal challenges. Investment in a coordinated access-infrastructure made up of new and enhanced facilities, expertise, and development of techniques and instrumentation will leverage the value of heritage assets answer questions being asked in key areas such as climate change and the contribution towards achieving net zero (Historic England research into [embodied carbon and the reuse and adaptation of historic buildings](#) Heritage Counts, 2020) or health (e.g. the work of [bioarchaeologists on how pandemics spread](#)).

2. UK government (BEIS) to sign-up to the European Infrastructure for Heritage Science (E-RIHS) ERIC (European Research Infrastructure Consortium)

Participation in the E-RIHS ERIC will contribute to the UK's position as a scientific superpower and strengthen the UK's position in the world. It will help the UK to maintain its internationally recognised strength in the field of Heritage Science. The sector has strong ties with European colleagues and has actively participated in European-funded research programmes. Participation in the ERIC is not just about access to physical and digital research facilities but it is about securing access to the two-way intellectual knowledge-exchange and partnerships that come from being part of the research infrastructure. Although the UK has much to contribute to this exchange it also stands to benefit considerably from it. E-RIHS is in the closing stages of its preparatory phase and the establishment of the ERIC is imminent. This is a prime opportunity to take part in an 'oven-ready' initiative that will strengthen UK research, complement investment in UK facilities (through the integrated infrastructure if the current bid to the Infrastructure Fund is successful, but also existing investment in individual facilities), and put the UK on a strong footing to engage more widely globally. For example by providing a stepping-stone to establishing bilateral research infrastructure agreements with other areas of the world.

Submitted on behalf of the National Heritage Science Forum, 24th September 2020

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