A Thematic Research Strategy for the Historic Industrial Environment

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Although this document refers to English Heritage, it is still reflects the Commission's current research approach and will in due course be rebranded as Historic England.

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English Heritage Thematic Research Strategies

A Thematic Research Strategy for the Historic Industrial Environment

July 2010

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The historic industrial environment is the cumulative product of mankind's industrial intervention on his environment. It is all around us having fashioned much of the present landscape and its below ground element while less obvious, may contain the only physical evidence of historic industrial processes that have long since disappeared. Its investigation is vital to our understanding of the development of industry generally and the impact of industry on society. It encompasses the extraction, production and processsing of all types of raw materials – mineral and organic, the working, manufacturing and marketing of those products and the supporting infrastructure – settlement, utilities, transport and communications. It is also constantly changing. Many of the industries that developed over the last three millenia have, in the last century, contracted enormously and their environmental legacy is extremely vulnerable and fragile. New industries have developed in the last century to replace many of the traditional industries but the significance of their legacy is still to be gauged.

Britain is justly proud of its industrial heritage not least because it is a heritage which is universally recognised as being of profound international significance in the development of global industrialisation. It is a heritage with which we can still identify and share and the understanding and appreciation of this heritage must be passed on to future generations.

SUMMARY

PART ONE: ENGLISH HERITAGE AND RESEARCH

PART TWO: THE ENGLISH HERITAGE THEMATIC RESEARCH STRATEGY FOR THE HISTORIC INDUSTRIAL ENVIRONMENT

APPENDICES

SUMMARY

1. This draft Thematic Research Strategy for the Historic Industrial Environment is primarily intended to serve English Heritage's needs by identifying research which underpins corporate objectives. English Heritage works in close partnership with many other agencies, and the draft strategy also seeks to express wider concerns and reflect views from the different communities engaged in the understanding, care and protection of the historic industrial environment.

2. Dissemination of the Strategy at this time is intended to assist in the most effective use of resources by directing support to the most critical aspects of research. It informs the development of the National Heritage Protection Plan (NHPP) and prepares the ground for a research strategy that will complement and underpin the NHPP when it emerges; it will be a major contribution to English Heritage's development of a responsive research-active agenda. The development of this working document, with both internal and external consultation, has helped shape perceptions about issues for inclusion in NHPP without pre-judging the outcome of that Plan. It provides a framework for the study of the historic industrial environment that will make a valuable contribution to the debate about the best way of protecting the historic industrial environment and will inform the assessment and thinking that will underpin relevant sections of the NHPP.

3. It is one of a suite of draft strategies which will feed directly into the NHPP process outlining what we need to know more about specific themes and subjects and will in due course need further revision to reflect the conclusions of the completed NHPP.

4. The document: sets out the need for a research strategy for the historic industrial environment and relates this need to the threats that face that environment. Amongst other things it:
   - locates the strategy within the wider EH research agenda;
   - outlines criteria for prioritising research projects;
   - gives guidance on establishing research projects and;
   - identifies key topics and projects for the present Plan Period and until the completion of the NHPP.

5. The Strategy is arranged is two main sections.
   Part I outlines the place of research in English Heritage and places the Thematic Research Strategy for the Historic Industrial Environment within this corporate framework and explains how the thematic strategies will be implemented and refreshed. **Appendices 1 & 2** provide the detail of the corporate aims, objectives and research themes and programmes and **Appendix 3** lists the current Research Frameworks relating to the historic industrial environment.
   Part 2 presents the Thematic Research Strategy for the Historic Industrial Environment itself. It explains the need for this specific strategy and the underlying principles that have led to the identification of threat-led priorities and criteria. The resultant priority research programmes focus on three main themes – the *Origins of Industrialisation,* the *Impact of Industrialisation* and the *Legacy of industrialisation.* The Strategy suggests preferred topics for research within these themes which will

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contribute to achieving a better public understanding of the resource, enhance HERs and other databases, mitigate the threats to vulnerable building types, skills and processes and provide the evidence base for better protection of the resource. **Appendix 4** gives further detail of 27 preferred topics mapped across to corporate objectives, research themes and SHAPE sub-programmes. Within these, a dozen key topics for the present Plan Period are highlighted. These include:

- Understanding the impact of industry on the landscape:
  - Multi-disciplinary survey and analysis of extensive extractive industry landscapes
  - Recording and assessment of distinctive industrial districts and settlements especially of 20th century industry.
  - Studies of workers housing providing national comparisons for assessment and benchmarking
  - Recording and assessment of harbours, dockland areas and specialist ports
- Sustaining the legacy of industrialisation and providing the evidence base for the understanding, protection, re-use and management of the industrial heritage:
  - The enhancement of HERs and NMR and other national databases with industrial material to provide 'front-line' information for the planning system.
  - The collation and synthesis of grey literature including the studies produced through the provisions of the planning system to inform better protection and management.
  - The detailed recording, excavation, scientific investigation and analysis of historic industrial sites to inform their assessment of significance and protection.
  - The provision of Thematic Research Frameworks (such as that being undertaken by NAHMO on extractive industries) to pose the relevant questions to assist curators in setting briefs for work undertaken under the provisions of the new PPS.
  - The production of more thematic studies such as SHIERs, characterising industries and providing a national context for protection and management
  - The undertaking of foresight work to identify, record and protect key vulnerable sites, processes and artefacts.
  - The support of studies which provide an understanding of the risks to industrial sites and, by anticipating these, to counter threat and facilitate the subsequent monitoring of condition.
  - The communication of specialised sector work in a popular form to the public through, for example, the publication of 'informed conservation' volumes.
  - The identification and analysis of best practice in the re-use and regeneration of historic industrial sites.

Finally, guidance is provided on establishing research projects consistent with MoRPHE and SHAPE guidelines.

English Heritage Thematic Research Strategies

A Thematic Research Strategy for the historic industrial environment

PART ONE: ENGLISH HERITAGE AND RESEARCH

1   Introduction

The value of the historic environment to our national life is acknowledged in many Government programmes and most recently has been set out in the draft Planning Policy Statement 5: Planning for the historic environment,[1] which states its importance to our cultural heritage and its contribution to key policies such as sustainable development. English Heritage exists to identify and protect nationally significant aspects of England's historic environment. A broad spectrum of research activity underpins English Heritage's functions and activities, helping to provide new insights into the historic environment, establishing and explaining significance and values, supporting local communities and partners in the heritage sector, and underpinning conservation and protection. Part One of this publication explains:

- the role of research within English Heritage;
- the relationship of Thematic Research Strategies to corporate aims and objectives;
- the means of implementing the Thematic Research Strategies; and
- arrangements for ensuring that the Strategies reflect changing priorities.

Part Two then sets out the detailed English Heritage Thematic Research Strategy for the Historic Industrial Environment, identifying the threats and challenges that are faced, the need for research in formulating our response to these, and the specific criteria relevant to the subject that will underpin those responses. It also outlines the critical priorities for the plan period and provides brief guidance on the formulation of proposals for research. Appendices include the primary research topics to be addressed and their links to corporate objectives.

2   English Heritage research policy

English Heritage research activity is diverse, embracing socio-economic investigations, techniques for restoration, presentation of historic sites, and research into the historic environment ranging from landscapes to individual sites and objects. It falls into a number of categories of research described by the Frascati Definitions, covering basic research, applied research and experimental development.[2]

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[1] PPS: Planning for the Historic Environment (dcms July 2009):
http://www.communities.gov.uk/documents/planningandbuilding/pdf/consultationhistoricpps.pdf
[2] see *SHAPE 2008: A Strategic Framework for Historic Environment Activities and Programmes in English Heritage*, p 96

Research carried out or supported by English Heritage is directed towards the achievement of the organisation's strategic aims and objectives, set out in the **Strategic Plan** for the period 2005-2010[3] (see Appendix 1). The strategy is built around the concept of the 'heritage cycle' (Fig 1).

The six high level aims for the plan period are:

- Help people develop their understanding of the historic environment
- Get the historic environment on other people's agendas
- Enable and promote sustainable change to England's historic environment
- Help local communities to care for their historic environment
- Stimulate and harness enthusiasm for England's historic environment
- Make the most effective use of the assets in our care

A new Corporate Strategy is currently in preparation covering the period 2010-2015.
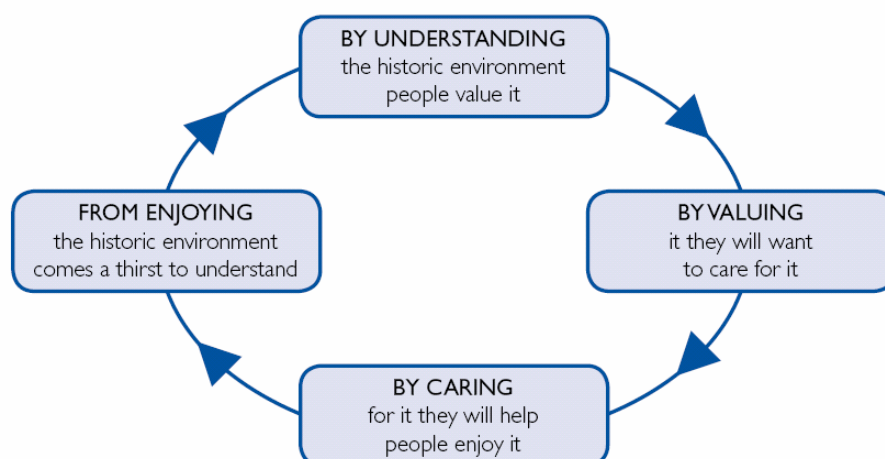
Figure 1 The Heritage Cycle diagram

English Heritage's current **Research Strategy**, *Discovering the past, Shaping the future*[4], sets out high level priorities to be addressed by English Heritage in its research activity. These are to:

- Develop new approaches which improve understanding and management of the historic environment;
- Provide better evidence of the importance and value of the historic environment;
- Provide better advice to improve the care of the historic environment;
- Develop policies, guidelines and exemplars to promote better management of change in the historic environment;
- Stimulate access to, interest in and enjoyment of the historic environment.

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[3] *English Heritage Strategic Plan 2005-2010: Making the Past Part of Our Future*
[4] *Discovering the Past, Shaping the Future: Research Strategy 2005-2010* (English Heritage 2005)

The accompanying **Research Agenda**[5] sets out seven *Themes* which support these priorities, each comprising a number of *Programmes* that define the types and scope of work required to enhance understanding of the historic environment (Appendix 2). The Themes and Programmes are underpinned in turn by more detailed *Sub-Programmes* which are outlined in English Heritage's Strategic Framework, known as **SHAPE**[6]. **Thematic Research Strategies**, one of which is presented here, provide more detailed analysis of key aspects of the historic environment within the framework established by the Strategic Plan and corporate Research Strategy. The relationships within this complex hierarchy are shown in diagrammatic form in Figure 2.

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Historic Environment          English Heritage
Sector Activity                  Strategy
                                    │
      │         Conservation Principles    English Heritage
                                           Research Strategy
      │                                          │
Historic Environment               English Heritage
Research Frameworks                Research Agenda
                                          │
                                   Research Themes
                                          │
   THEMATIC RESEARCH              Research Programmes
       STRATEGY                           │
          │                            SHAPE
   Research Priorities                    │
          │                        Sub-Programmes
       Topics
          │                          MoRPHE
       Projects
```
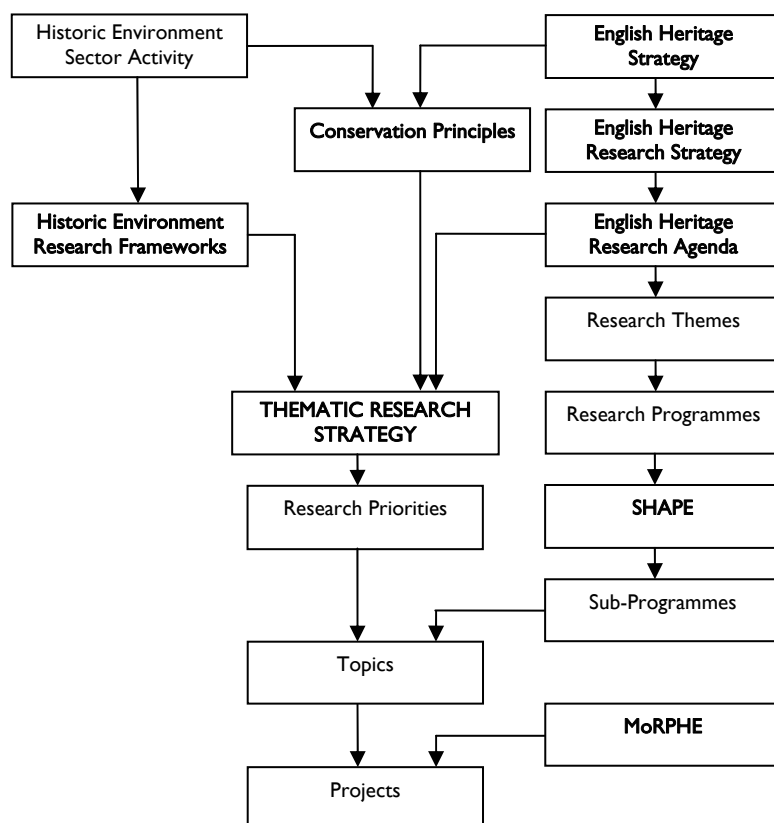
Figure 2
Diagram showing how the thematic research strategies are informed by other relevant documents (in bold); and how projects are generated in relation to the research topics identified in the strategies, the framework set out in SHAPE and the management principles outlined in MoRPHE

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[5] *English Heritage Research Agenda: An Introduction to English Heritage's Research Themes and Programmes* (English Heritage, 2005)
[6] *A Strategic Framework for Historic Environment Activities and Programmes in English Heritage* (English Heritage, 2008)

3   Thematic Research Strategies

Individual Thematic Research Strategies have been developed to address key aspects of England's historic environment. They share the aim of supporting English Heritage's strategic goals and seek to address common issues such as the impact of major change, both natural and planned, on the historic environment. The subject areas are, however, very diverse in terms of chronological scope, academic discipline, relationship to conservation, management and protection, and the threats and opportunities affecting them.[7] Research responses in each field will, therefore, differ, and the Thematic Research Strategies set out specific priorities for research designed to address the particular needs for each theme. Where interests overlap (for example, the shared concern for industrial remains in historic towns), this is indicated in the description of the priority research programmes within each document.

The Thematic Research Strategies are primarily intended to serve English Heritage by identifying research which furthers corporate goals but, since English Heritage shares its responsibilities with many other agencies, they seek also to express wider concerns and reflect views from the different communities engaged in the understanding, care and protection of the historic environment. Publication of the Strategies is intended to assist in the most effective use of resources by directing support to the most critical aspects of research. The aim is to ensure that English Heritage research makes a difference to the protection, care and enjoyment of the historic environment, whether through new understanding, support of partner organisations, wider engagement, or better informed decision making leading to effective conservation and management.

The different nature of each Thematic Research Strategies means that the criteria used to identify priority research programmes will vary from strategy to strategy, with different weight given in different measures to considerations such as risk, vulnerability and significance, the level of existing knowledge, and the potential for enhancing access, understanding and appreciation. Common to all the strategies, however, is the need to address the most urgent and important issues affecting the historic environment in order to improve our collective ability to provide it with better care and protection.

4   Implementing the Thematic Research Strategies

In its Research Strategy, English Heritage has set out generic criteria for the prioritisation of research.[8] English Heritage will seek to implement the Thematic Research Strategies through supporting research programmes and projects in a number of ways. These include:

- using English Heritage staff resources;
- using English Heritage's grants for funding external projects;

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[7] Companion strategies to the present document are English Heritage Thematic Research Strategies for Prehistory, the Roman Period and the Urban Historic Environment. In preparation are strategies for Freshwater Environments, Places of Worship, Characterisation and the Archaeology of the Contemporary Past

[8] *Discovering the Past, Shaping the Future: Research Strategy 2005-2010* (English Heritage 2005), p.20

- working with universities and academic funding bodies (AHRC, ESRC);
- working with government agencies, regional development agencies and local authorities;
- working with developers and owners;
- working with amenity groups and societies;
- working with the voluntary sector.

Whatever the approach, it is essential that the heritage sector has the ability to undertake research of a high quality. An underpinning objective is, therefore;

- *To support English Heritage's training and capacity building strategy so that projects leave a legacy of expertise and skills which can be used for the benefit of the historic environment.*

5 Refreshing the Thematic Research Strategies

The publication of this and companion Thematic Research Strategies is intended to encourage debate about priorities. The documents are statements rooted in their time, and it is envisaged that research needs and the drivers for research will evolve as circumstances change. Dialogue about research priorities is therefore essential to maintain relevance to current needs, and periodic refreshment of the strategies is an important part of the programme. This will be informed by ongoing consultation and horizon-scanning to identify the changing needs of the sector, the development of collaborative approaches, and regular reports on progress. The Strategies therefore represent iterative documents under constant review and will be regularly updated on-line.

PART TWO

The English Heritage Thematic Research Strategy
for the Historic Industrial Environment

Understanding of the historic environment is crucial to our lives: it tells us what is important and why, it explains how our society has developed. An understanding of the role that industry has played in that development helps people to care for and value the industrial heritage. Understanding is based on sound research, and this research strategy is designed to address the need for better awareness of the interest and importance of the historic industrial environment. Britain's industrial heritage is internationally recognised as being of outstanding international significance in the development of global industrialisation and it is incumbent on us to be effective stewards and champions of that legacy. English Heritage therefore seeks to ensure that all sections of the community can identify with its interpretation and protection and that we support research that addresses understanding the development of past and present industries, their influence internationally and their affect on the natural and cultural landscape.

1   The need for a research strategy

The four cardinal points on the English Heritage 'heritage cycle' – understanding, valuing, caring and enjoying – depend heavily on high quality research. Identification of significance and knowledge of values allow better decision making in protection, conservation and management, and the presentation of new research findings is a powerful way of drawing in a wide audience to a better appreciation of the historic environment. Perspectives on values change continually, and it is vital to present the historic environment through new thinking on what is important and why. English Heritage's lead role depends on its policies being up-to-date and based on the latest research findings. In *Conservation Principles* English Heritage sets out a logical approach to making decisions and offering guidance about all aspects of England's historic environment and emphasises that this is based on a thorough understanding of the resource.

Research is most urgently needed where there are significant gaps in knowledge and where threat and change to the historic environment is anticipated. The industrial heritage over the last three decades has been particularly vulnerable to lack of appreciation, to widespread obliteration and to drastic change and therefore qualifies for attention on all three counts. There is much to be discovered about the origins of industrialisation, about its impact on society and on the landscape – both rural and urban – and about its surviving legacy. The development of a number of key research programmes drawn from priorities identified below will, over time, lead to appreciable benefits:

♦ we will know a great deal more about how our industries have evolved and about the forces which have shaped them and given them individual character;
♦ we will be better able to appreciate how industry has shaped our present day culture through past exploitation of natural and human resources, through colonial expansion and the slave trade and through technological advances;

- we will be better able to evaluate the impact of past industry on all aspects of the environment, including the climate;
- we will understand more about the relationship between industrial sites, settlements and their surroundings informing the characterisation of industrial landscapes;
- we will recognise that the factory is more than just a machine for producing goods; it is a complex organism blending many factors such as surveillance and control of the workforce with improvements in the structure and layout of buildings, power provision, working patterns and working conditions;
- we will have shown how scientific analysis of residues and artefacts can illuminate our knowledge of past industries;
- we will have articulated the threat to the historic industrial environment and demonstrated the importance of considering it in the planning of change, its positive contribution to our rural and urban landscapes, and revealed it to a wide audience, able to enjoy it on a more informed basis.

Throughout all this, vulnerability and change are constant themes. Aligned to English Heritage's At Risk initiatives, research must be fit for purpose. It should be designed to identify threat, inform the management of change, develop English Heritage policy on conservation and to engage a wide audience in considering the interest and importance of the historic environment in this process. Among the range of likely outcomes are the enhancement of HERs with industrial material; the additions and changes to the coverage provided by designation as new light is thrown on significance; better integration of the historic industrial environment into the planning process; and enhanced public awareness and enjoyment of the industrial heritage. Cumulatively these will lead to the better protection of the historic industrial environment.

2   Identifying threat-led priorities and criteria

The underlying principle at work in the identification of research priorities for the historic industrial environment, at this time, is the consideration of the vulnerability of different aspects of the resource in the face of threats and anticipated change. This vulnerability may be expressed in different ways.

- Many traditional industries have been affected, or are being threatened by, obsolescence, long-term contraction and change in their processes. Entire landscapes of coal and metal mining, of iron and steel making, of metal working, of textile mills and of transport infrastructure have largely disappeared or are 'at risk' while knowledge of the processes and skills employed is in danger of being lost. Their associated close-knit communities having lost their *raison d'etre* have been diluted or dispersed.
- The modern requirements of many industries are no longer compatible with the sites they have historically occupied and the latter have been vacated while many other industries have simply ceased operation. The result has been disused, derelict or empty sites with the potential of yielding valuable evidence but often classified as brownfield sites and subject to major regeneration projects.
- Conversely, some thriving industries in historic buildings occupy prime sites whose real estate value is greater than the financial returns from their products

and they therefore also experience redevelopment pressures with the consequent loss of historic fabric and evidence.

- Some types of industrial classes of building, for example, workers housing are subject to wholesale change from government programmes.
- Some types of industrial sites suffer from insufficient knowledge of the extent and importance of their historic fabric or archaeological potential. Improvements are needed in archaeological techniques, metallurgical analysis, and the assessment and recording of historic buildings and landscapes in order to understand the techniques of production and manufacture, technological change and process flow.
- The redevelopment of poorly-regarded recent industrial sites often reveals evidence of, hitherto unrecognised, earlier industrial activity of potential significance.

Targeted research, combined with the precepts and guidance of *Principles of Conservation* and draft PPS 15: *Planning for the Historic Environment* can help mediate this vulnerability and proposals for research will therefore be assessed against criteria which are consistent with those documents:

- Is the resource at risk? If so, how vulnerable is it?
- Is the resource of high significance?
- Does existing information and knowledge provide a sufficient basis for effective management of change and/or protection and is there an opportunity to enhance the appropriate HERS?
- How will the proposed research deliver management and conservation benefits?
- Is there potential to widen appreciation of the importance and significance of the resource?
- Does the proposed research build on and/or synthesise existing work otherwise inaccessible in 'grey' literature or in site reports?
- Will the proposed research help to build skills and capacity in the heritage sector?
- Does the proposal offer opportunities for the development of new approaches or methodologies which will enhance our apprciation of the historic industrial environment?

Failure to qualify on these criteria will not automatically mean that proposals will not be considered for support, but assessment against these primary criteria introduces a means of identifying which areas of research qualify as immediate priorities and is consistent with the approach advocated by national planning and conservation guidance.

The identification of research priorities for English Heritage has both a sector-wide context and internal drivers. English Heritage has supported the production of Regional Research Frameworks which have provided detailed assessments on a region-by-region basis of the priorities for future research[9] and these with other Research Frameworks such as those developed by the Association for Industrial Archaeology and the Historical Metallurgy Society have informed the development of the present strategy for industrial research. Change to the Heritage Protection system has focused English Heritage

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[9] http://www.algao.org.uk/Association/England/Regions/ResFwks.htm See also Appendix 3

attention on the priorities for designation and the need to take a more strategic approach to this activity, and these have been taken into account in the present strategy. In addition, internal consultation with professional groups, the Industrial Archaeology Strategy Group and the Industrial Archaeology Panel on early drafts of this paper has tested the suggested priorities against perceptions within English Heritage of where the greatest needs lie. This direction of prioritisation has been further confirmed and strenthened by re-newed emphasis within English Heritage on heritage protection and anticipates the requirements of the forthcoming National Heritage Protection Plan.

3 Priority research programmes for the historic industrial environment

The following research programmes have been identified by English Heritage following the development by the sector of a *Strategic Vision for the Stewardship of Industrial Heritage 2008-13* [10] and with the principal research questions identified by the Regional Research Frameworks and the thematic research frameworks in mind. It is anticipated that priorities will evolve as external circumstances change and as research findings fill the most significant gaps in knowledge. Continuing discussion, both internally within English Heritage and externally with the sector, will allow new programmes to be identified, especially where they can be seen to anticipate need (horizon scanning). Something should be said at the outset about the archaeological investigation, including excavtion, of historic industrial sites. English Heritage itself undertakes some small scale investigations of industrial sites and has published *Science for historic Industres: guidelines for the investigation of 17th to 19th-century industries* [11] but rarely funds large scale excavation or the recording of threatened historic buildings, which has been principally funded through PPGs 15 and 16. [12] This will continue to be the case.

Concerns about the quality results of developer-funded work related to the historic environment can be addressed in part by undertaking excavation and historic building recording with the principal research questions identified by the Regional Research Frameworks and the national thematic research agendas in mind. The emphasis within the new draft PPS: *Planning for the Historic Environment* will encourage approaches which place the gaining of new knowledge and understanding as a clear public benefit above those which simply set out primarily to provide a record of evidence in advance of its destruction. However it is inevitable, in many cases, that, despite the informed efforts of curators, contributions to research agenda are likely to be limited by the scope and nature of much of the planning-derived developer-funded work. This shift away from preservation by record towards gaining understanding will be underpinned by projects which synthesise the results of past investigations and seeks to imbue them with broader research values.

The following research programmes have been identified as those which will most directly support English Heritage's strategic aims. They are grouped into three broad

[10] English Heritage, Association for Industrial Archaeology and the HLF *Strategic Vision for the Stewardship of Industrial Heritage* (AIA website 2008)
[11] English heritage, Dungworth D and Paynter S 2006 *Science for historic industries: guidelines for the investigation of 17th- to 19th-century sites* (Swindon). http://www.helm.org.uk/upload/pdf/Science-Historic-Industries.pdf
[12] Ref English Heritage 2008

themes and it is anticipated that each programme may be addressed through a number of individual projects addressing different aspects of the subject. There is scope within each programme for projects which have as their primary aim the provision of new understanding, the identification and protection of nationally significant aspects of the historic industrial environment, the application of new knowledge to conservation practice, the development of new ways of managing the historic industrial environment, or the engagement of a wide audience in valuing, caring for and enjoying our industrial heritage. Many projects will embrace more than one of these objectives. Opportunities will also exist to harnes research to the development of educational material related to both the National curriculum and to wider learnig activities. The priority programmes are set out in tabular form in Appendix 4, which identifies potential research projects, links these to strategic aims and the Corporate Research Strategy and highlights key topics for projects designed to contribute towards effective conservation.

Theme – The Origins of Industrialisation

Industry has its origins in prehistoric times and flourished in Roman Britain and the complementary English Heritage thematic research strategies for Prehistoric and Roman periods embrace the industrial elements of those periods. This strategy therefore focuses on the succeeding periods. Although within this long time-scale the impact of early industry on the landscape may have softened and become less starkly obvious it must nevertheless be considered alongside the more prominent impact of more recent industry and an understanding of its development, guided by the research agenda's identified by the Regional Research Frameworks and the thematic research frameworks is equally important. We need to know about this because there are fragile and vulnerable remains yet unrecorded and unidentified which we need to understand better so that we can properly protect them.

3.1 Understanding early industry and its organisation and the evidence of early trade and transfer of technology.

The investigation of the remains of early industries such as the extraction and smelting of metals and the production of salt and ceramics from the Anglo-Saxon period onwards, through the 'first industrial revolution' in medieval times with the widespread adoption of water-power and the introduction of the blast furnace, is crucial to the understanding of the evolution of the industries that in the post-medieval and modern periods were to lead to widespread industrialisation and trigger far-reaching social change. Some recent studies of early industries, such as the monastic organisation of industry and the analysis of trade patterns, have begun to illuminate this period, but national and regional syntheses are generally lacking. Survival of early industrial remains tends to be fragmentary while the extent and survival of buried remains are by their nature unknown. Nevertheless, this evidence represents a valuable source and the potential for discovery by archaeological scientific methods is considerable. It is likely that a programme of research into early industry will significantly modify our view of industrial development in later periods thus increasing our contextual appreciation vulnerable remains. New investigation should be undertaken on a thematic basis with the aim of producing local, regional or national syntheses.

3.2 Examining the evidence of Proto-industrialisation.
The dramatic expansion of industries from the 16[th] century onwards, fuelled by the trebling of London's population in the 17th century and the growth of colonial trade, witnessed tens of thousands of people employed on industrial sites and in workshops in the capital and throughout the country. The capitalisation and growth of industries such as mining, glass, chemical and ceramics, the substitution of coal for wood or charcoal as a fuel, and the expansion of the naval dockyards to service imperial expansion led to vastly increased industrial production. Therefore work:

- investigating the remains of 16[th], 17[th] and early 18[th] century industries;
- establishing the material evidence for the transition from domestic to factory;
- examining the continuity of the domestic system and its longevity;
- recording the evidence for dual economies in rural areas;
- tracing the influence of Atlantic trade
- and providing national and regional syntheses of these studies;

is to be welcomed as setting the scene for the social, economic and physical transformation of the nation from a rural-based to an industrialised, urban-based society. Studies which provide this understanding, and inform the protection of the evidence for this transformation, are particularly welcome.

Theme - The Impact of Industrialisation

The widening of perspectives from the traditional emphasis on the Industrial Revolution does not in any way diminish the significance of the latter. 'Industrialisation' is an influential theme of social and economic history and its study has to be rooted in an appreciation of many economic, social and technological factors. Thus international trading patterns, the maritime heritage and the slave trade must be embraced along with the improvements to inland transport, the large-scale exploitation of raw material and the creation of wealth from these sources as expressed in the landscape. The impact of these and of technological inventions and scientific discoveries, the growth of civil engineering and the development of technical education must be identified and assessed. The impact on landscape and settlement must also include the flourishing and subsequent decline of domestic and workshop production, the introduction of the factory system and mass production, the exploitation of steam and electric power and the development of distinctive industrial areas. The programmes English Heritage will support should be derived from the investigation of the physical manifestations of these disparate phenomena where these remains are judged to be poorly understood, particularly fragile or vulnerable to change.

3.3 Industrial landscapes (shared in part with Thematic Research Strategies for the Urban Historic Environment)
The accelerating pace of expansion of industries throughout the 18[th], the 19[th] and the early 20[th] centuries had a dramatic impact on both rural and urban landscapes. Much of the landscape of upland England is a product of the boom in extractive, water-powered and domestic industries while the growth and infrastructure of our town and cities have largely been shaped by transport and industrial developments. Work studying the impact of extractive industries, the manifestation of dual economies, the harnessing of water-power, the rise of distinctive industrial settlements, quarters and suburbs, the locational effect of the introduction of steam power, the effect on the layout of sites of

specialisation and of mass production within industries, the provision of workers housing and the impact of different modes of transport is to be encouraged. The study of historic ports would be such a topic and this programme is shared with the Urban Research Strategy as ports are among the most complex and important types of historic landscapes with industry at their heart. The dockland and waterfront areas of towns and cities have developed their own strong characteristics as a result of their specialised economy and infrastructure and their environments are highly sensitive to change. In these, and in other distinctive industrial landscapes, research can address a number of issues to provide better appreciation and a better understanding of significance leading to a better basis for protection of specific assets and their management.

3.4 Transport systems, communications and public utilities. *(shared in part with the Thematic Research Strategy for the Historic Urban Environment and for Freshwater and Maritime Archaeology)*

Over the last three centuries improvements in inland transport systems have impacted greatly on the location and pattern of industry and associated settlements and are an integral part of the study of both industrial and urban landscapes (3.3 above). Similarly the provision, distribution and consumption of energy and clean water has also impacted greatly these landscapes. They are therefore all deserving of study in their own right. The improvements to harbours and river navigations, the creation of turnpike roads, the construction of canals and railways, the adoption of motorised road transport and the development of air transport all required specialised engineering organisation and technology and the introduction of novel building types. While there is a vast body of work on individual specific modes of transport, the inter-relationship between the various modes and their effect on their immediate environments is less well studied. Similarly the invention of tele-communications, from the telegraph to the internet, has revolutionised society and has produced not only its own heritage of structures and artefacts but also new patterns of workplace and workstyles. The provision of gas, electricity and water supply has also demanded novel building types and, at times, huge modification of the landcape. The pace of many of these developments has been so rapid that much of the evidence for those developments is extremely vulnerable and studies that address this issue and inform the better protection and management of the historic assets are to be favoured.

3.5 Understanding Industrial Sites and Buildings.

Industrial sites are workplaces and need to be analysed as such – combining structural and technological understanding with an appreciation of their social, historical and geographical context. Some types of buildings, in particular textile mills, have received a considerable amount of attention over the last two decades demonstrating how much there is to learn from their detailed study while archaeological methods and techniques have provided a further tool to this understanding. Local and regional syntheses of this work have greatly increased our knowledge of the evolution of the various building types on mill sites, and, though there is still further work to be done on textile mills, there is an urgent need to extend this type of detailed study to other distinctive and vulnerable building types such as workshops, engineering works, buildings of the food and drink industries and transport installations. Many of these building types are particularly threatened by the change from an industrial to a consumer society and, again, projects that provide better understanding of the significance of these historic assets are needed.

The Legacy of Industrialisation

Immense changes have taken place in the industrial environment in the last quarter of the 20th century. The traditional industrial heart-lands based on coal and steam, iron, steel and textiles have virtually disappeared while the industries that came to typify the 20th century – car manufacture, the petro-chemical industry, power generation etc – have also witnessed wholesale reorganisation, contraction or concentration. Much of what survives is under threat. Industrial sites and landscapes feature strongly in most urban regeneration and rural land use programmes and are a vital element of our tourist industry but by their very nature they are particularly susceptible to changes that can destroy their character and evidence. That change must be managed in a fashion informed by thorough research, its progress recorded carefully and the opportunity taken for scientific investigation prior to destruction of evidence.

3.6 Achieving a better public understanding of the resource and the enhancement of HERs and other databases. (shared in part with the Thematic Research Strategy for the Archaeology of the Contemporary Past)

Though great advances in our understanding of the industrial heritage have been made over recent years within the sector, the role of past industrial activity in shaping our modern society and landscapes is still little understood by decision-makers and the public in general. Much of the knowledge and material on the subject has originated at local level or emanated through the planning process and exists in grey literature or local publications and some has been incorporated into OASIS – what is needed are works of collation and synthesis and their dissemination and publication to promote good practice. The compilation of regional archaeological research frameworks over the last decade has demonstrated the value of far-reaching consultation and further research strategies and characterisation and assessment studies on particular themes or areas are to be welcomed. The incorporation of this up-to-date and comprehensive industrial heritage data into HERs and national databases such as the one managed by the National Monuments Record is an essential building block in the better management of the industrial heritage. The success of work such as English Heritage's 'informed conservation' series in heightening the public appreciation of distinctive industrial districts and building types and in influencing decision-makers involved in their management, demonstrates the need for further work of this sort. There is also a huge amount of cultural evidence available – oral, written, photographic and film – to nurture this understanding, but much of it is untapped. There is consequently a need for projects which build upon this memory-base and translate it into easily interpreted and accessible form. In addition, analysis of the industrial content of the Regional Research frameworks arranged in period sections has shown that there is a need for complementary national thematic research frameworks undertaken with continuous chronologies.

3.7 Providing the evidence base for designation, regeneration, re-use and sustainability (shared in part with the Thematic Research Strategy for the Historic Urban Environment)

Both redevelopment and the decline of traditional industries make the historic industrial environment particularly vulnerable while recent research has shown that the sustainability of many preserved historic industrial sites is open to question. It is vital that designation, conservation, regeneration and re-use schemes are based on a sound

understanding of the particular significance of the historic industrial resource. The provision of a historic environment layer to the evidence base and an understanding of the skills and processes involved are essential to protection, sustainable planning, identifying opportunities and constraints and helping to provide an historic context for the planning of change. There is a need for studies such as English Heritage's SHIER programme (Strategy for the Historic Industrial Environment Reports) characterising specific industries, quantifying the surviving resource and analysing the effectiveness of its current management. There is also a need for studies examining the state and sustainability of preserved historic industrial sites and identifying best-practice in investigation and recording schemes of adaptive re-use, conservation, management, interpretation and promotion.

3.8 Threatened or vulnerable sites, building types, skills and processes (shared in part with the Thematic Research Strategies for the Historic Urban Environment)

Priority programmes for research into the historic industrial environment should have the scope for both anticipating threat to specific classes of site and responding to a threat once it has taken a clear form. The emergency recording of threatened sites often is often undertaken when the industrial production has ceased and emphasis is on recording the evidence provided by the building's fabric. English Heritage experience in recording in the Swindon Railway Works, the Birmingham Jewellery Quarter and in the workshops of the Sheffield metal trades has demonstrated that recording vulnerable sites which were still in operation is much more productive. It not only allows much better understanding of the industry and its processes but also can inform protection of, or mediation of damage to, vital evidence and may lead to rescue of part of, or even the whole, asset. Work which anticipates threat to skills and production processes as well as buildings and proposes projects which comprehensively record those processes will therefore be encouraged.

4   Establishing research projects

The publication of this strategy for research into the historic industrial environment is intended to indicate to the heritage sector those areas which are currently of primary concern to English Heritage. Approaches relating to collaboration in those areas are welcomed from the sector. Informal discussion as a preliminary can often help to develop cogent proposals for research: the primary point of contact is:

Keith Falconer, Head of Industrial Archaeology (Tel: 01793 414631 email keith.falconer@english-heritage.org.uk)

Guidance on developing a research proposal compatible with current guidelines (MoRPHE and SHAPE) is provided on the English Heritage website: www.english-heritage/heep. A hard copy version of SHAPE guidance is also available: SHAPE 2008, A STRATEGIC FRAMEWORK FOR HISTORIC ENVIRONMENT ACTIVITIES & PROGRAMMES IN ENGLISH HERITAGE: Guidance for external grant applicants (product Code 51435). Decisions on funding will be based upon the criteria set out in this document (Part One, Section 3) and upon the importance of the proposal relative to other demands on English Heritage resources.

Appendix 1: English Heritage aims and objectives 2005-2010[13]

1. HELP PEOPLE DEVELOP THEIR UNDERSTANDING OF THE HISTORIC ENVIRONMENT
1A Ensure that our research addresses the most important and urgent needs of the historic environment
1B Enhance public understanding and appreciation of the histoirc environment and its conservation through education and training
1C Make sure our professional expertise and knowledge is more accessible to others who need it
1D Develop new approaches which improve understanding and managemetn of the historic environment
2. GET THE HISTORIC ENVIRONMENT ON OTHER PEOPLE'S AGENDAS
2A Provide better evidence of the importance and value of the historic environment
2B Lead campaigns and national debates to influence policies which affect the historic environment
2C Engage with key stakeholders on issues affecting, or affected by, the historic environment
2D Identify and cultivate new public and private sector partnerships and sources of funding and support for the historic environment
2E Develop cross-Government recognition of the value of the histiorc environment
3. ENABLE AND PROMOTE SUSTAINABLE CHANGE TO ENGLAND'S HISTORIC ENVIRONMENT
3A Promote better legislation, policies, guidance and good practice to improve the system of protection
3B Ensure that the condition of the most significant parts of the historic environment is recorded and monitored to enable their better protection
3C Provide better and more accessible advice to help people appreciate the benefits of maintaining and caring for historic places
4. HELP LOCAL COMMUNITIES TO CARE FOR THEIR HISTORIC ENVIRONMENT
4A Help local authority members and officers develop their skills, knowledge, adavice and capacity to make the most of the historic environment
4B Develop and disseminate policies, principles, guidelines, standards and exemplars to promote better management of change in the historic environment
4C Provide support and guidance to other organisations engaged in the care, study, and promotion of the historic environment
4D Use our role in the planning process to develop appreciation of the historic environment and its relevance to the sustainability, planning and design of new development
4E Ensure that our grants to third parties are used in the most effective way to regenerate, protect adn enhance the historic environment
5. STIMULATE AND HARNESS ENTHUSIASM FOR ENGLAND'S HISTORIC ENVIRONMENT
5A Increase public awareness of the historic environment
5B Broaden access to the historic environment and engagement with diverse communities
5C Stimulate access, interest and enjoyment through the sites and collections in our care
6. MAKE THE MOST EFFECTIVE USE OF THE ASSETS IN OUR CARE
6A Use our financial resources efficiently and maximise the commercial benefits we gain from our assets
6B Invest in the development of our staff
6C Invest in the development of our operating systems
6D Maintain and conserve our properties, collections and archives to a standard consistent with their importance
6E Increase the income generated by our properties to meet the cost of opening them to the public
6F Develop the English Heritage brand as a symbol of authoritative advice, responsible custodianship, first class service and the leading source of knowledge and understanding of England's historic environment
6G Implement the recommendations of the National Monuments Record Review, *Unlocking Heritage Information*

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[13] English Heritage Strategic Plan 2005-2010: *Making the Past Part of our Future*

Appendix 2: English Heritage Research Themes and Programmes

A: Discovering, studying and defining historic assets and their significance
A1: What's out there? Defining, characterising and analysing the historic environment
A2: Spotting the gaps: Analysing poorly understood landscapes, areas and monuments
A3: Unlocking the riches: Realising the potential of the research dividend

B: Studying and establishing the socio-economic and other values and needs of the historic environment and those concerned with it
B1: Valuing the historic environment: Quantifying the economic and social value of
   historic assets
B2: Gauging the mood: Establishing perceptions and attitudes to the historic
environment
B3: Understanding the needs: Delivering 'sector intelligence'

C: Engaging and developing diverse audiences
C1: Opening doors: Understanding public participation in the historic environment
C2: Making friends: Building understanding and appreciation through education and
outreach

D: Studying and assessing the risks to historic assets and devising responses
D1: Heritage at risk: Quantifying and analysing the condition of the historic environment
D2: Measuring threat: Studying the reasons for risk and devising responses
D3: Keeping it safe: Protection and conservation
D4: Rescue! Threat-led last resort analysis

E: Studying historic assets and improving their presentation and interpretation
E1: Presenting the past: Research to inform the presentation to the public of historic
places

F: Studying and developing information management
F1: Navigating the resource: Developing standards for Historic Environment Records
F2: Wired! Studying and developing information management

G: Studying and devising ways of making English Heritage and the sector more effective
G1: Sharpening the tools: Developing new techniques of analysis and understanding
G2: Defining the questions: Devising research strategies, frameworks and agenda
G3: Impact and effectiveness: Measuring outcomes and effectiveness of English Heritage
   and the 'sector'

Appendix 3: Current Research Frameworks for the historic industrial environment

1   **English Regional Research Frameworks**
       (* incomplete; ** currently under revision/review)

- *The Archaeology of South-West England: resource assessment and research agenda* (Somerset County Council, 2008)
- *Bedfordshire Archaeology - Research and Archaeology: resource assessment, research agenda and strategy* (Bedfordshire Archaeological Council, 2007 [aligned with Eastern Counties RRF])
- *The Undiscovered Country: the earlier prehistory of the West Midlands* (Oxbow Books, 2007) [*resource assessment only; seminar papers at http://www.iaa.bham.ac.uk]
- *The Archaeology of the East Midlands: an archaeological resource assessment and research agenda* (Leicester University Press, 2006; draft documents at http://www.le.ac.uk)**
- *Shared Visions: the North-East Regional Research Framework for the Historic Environment* (Durham County Council, 2006)
- *Research and Archaeology in North West England. An archaeological research framework for north west England* (Archaeology North West, 2006 [resource assessment], 2007 [research agenda and strategy]; draft documents at http://www.liverpoolmuseums.org.uk)
- *The Archaeology of Yorkshire: an assessment at the beginning of the 21st century* (Yorkshire Archaeological Society, 2003 [*resource assessment only])
- *A Research Framework for London Archaeology 2002* (Museum of London, 2002)**
- *Research and Archaeology: a framework for the Eastern Counties* (East Anglian Archaeology, 1997 [resource assessment], 2000 [research agenda and strategy]; http://www.eaareports.org.uk)**
- *An Archaeological Research Framework for the Greater Thames Estuary* (Essex County Council, 1999)**
- *Solent-Thames Archaeological Research Framework* (*draft documents at http://www.buckscc.gov.uk)
- *South East Research Framework* (*seminar papers at http://www.kent.gov.uk)

2   **Other Research Frameworks**

- Association for Industrial Archaeology: M. Palmer 1991(ed) *Industrial Archaeology: Working for the Future*

- Association for Industrial Archaeology: D. Gwyn & M Palmer (eds) 2005 *Understanding the Workplace: A Research Framework For Industrial Archaeology in* Britain Industrial Archaeology Review Vol XXVII No.1
- Historical Metallurgy Society: Bayley, J Crossley, D and Ponting, M (eds) *Metals and Metal Working; a research agenda for archaeometallurgy* (HMS Occasional Publication, London)

There are a number of further research frameworks under development including one for extractive industries by the National Association of Mining History Organisations and for the Cornish Mining World heritage Site.

Appendix 4: Priority research programmes and projects [key topics and projects for the present Plan Period highlighted in bold]

EH Research Priority	Focus topic	Supporting comments	Corporate objective	Corporate Research Strategy Programme	Possible SHAPE sub-programme	SHAPE number
IND1 Origins of industrialisation: Understanding early industry	Anglo Saxon and medieval industry	Projects identifying, collating and providing syntheses of the evidence of early industrial sites and transfer of technology from Europe and providing the context to the understanding of later industry.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing the national resource	11111.140
IND 2 Origins of industrialisation: Examining the evidence of proto-industrialisation	Examining the material evidence for the transition from domestic to factory production and dual economies	Projects providing national and regional syntheses of investigations of post-medieval industrial sites and better understanding of the evidence for these economies leading to better assessment of the significance of their remains and the protection of those remains.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing the national resource	11111.140
	Tracing the influence of Atlantic trade and the development of maritime power	Projects examining the evidence for trade with the colonies and its influence on domestic industry, shipbuilding and naval supply provide the background to the take-off of industrial production that was to eventually constitute the Industrial Revolution. A bettter understanding of this context would generate more adequate protection of what are commonly only slight remains.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing the national resource	11111.140
	Technological and scientific advances – in the use of fuel, mining methods and manufacture	Projects studying the site evidence for technological advances in industrial production such as the development of chemical based industries, the use of explosives in mining and engineering, the substitution of coal for wood and charcoal and the more efficient harnessing of water power. These would inform better conservation and management of the evidence.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing the national resource	11111.140
IND 3 Impact of	The impact of extractive	Multi-disciplinary projects examining the scale and	1A Ensure that our	A1. What's out	Understanding Place:	11111. 140

Industrialisation: Industrial landscapes	industries on the landscape – coal, metal and other mineral mining	technology involved in the extraction of raw materials, the refining of those materials on site and the infrastructure required and leading to a better understanding of significance of these distinctive and vulnerable landscapes. They would inform appropriate protection and management regimes by English Heritage and partner agencies.	research addresses the most important and urgent needs of the historic environment	there? Defining, characterising and analysing the historic environment	Assessing the national resource	
	Manufacturing and the rise of industrial towns and cities	Projects studying the improved harnessing of water power, the transition to steam power and the introduction of the factory system and mass production would enhance our understanding of the process of industrialisation. They would therefore improve the assessment of significance of the physical evidence for these phenomena.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing the national resource	11111.140
	Workers Housing	**Projects studying the provision of, and little understood variations in, workers housing are urgently needed to inform the current housing rehabilitation programmes.**	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A2. Spotting the gaps: Analysing poorly understood landscapes, areas and monuments	Understanding Place: Assessing the national resource	11111.140
	Distinctive industrial districts and company settlements including those of the 20th century.	**Projects studying the occurance of distinctive districts of all periods specialising in specific trades and industries and studying the creation of company settlements dependent on single industries are needed to frame appropriate protection and management regimes. Greater emphasis should be made on the industries of the 20th century in these studies.**	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing historic areas	11111.150
	The development of harbours and ports and the rise of specialist ports	**Projects which study the development of harbours and explain why, in some cases, they evolve into ports should provide much needed information to inform their protection and management. This would provide the context for a national asessment of specialist ports (coal, fishing canal and railway etc)**	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing the national resource	11111.140
IND 4 Impact of	The impact of transport	The effect of canals and railways in shaping towns	1A Ensure that our	A1. What's out	Understanding Place:	11111.140

Industrialisation: Transport systems, communications and public utilities	systems on the landscape	and cities has been studied for many years but has not been adequately extended to rural landscapes and other forms of transport. Projects analysing the effect of transport generally in shaping of both rural and urban landscapes are to be encouraged to provide context for planning frameworks.	research addresses the most important and urgent needs of the historic environment	there? Defining, characterising and analysing the historic environment	Assessing the national resource	
	Early railways	Projects which examine the evidence for the occurance, technology and operational effectiveness of pre-1830 railways. The series of Early Railway conferences has greatly augmented our knowledge of the origins of the railway system and, building on this, work that informs the assessment of early features for protection is welcome.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A2. Spotting the gaps: Analysing poorly understood landscapes, areas and monuments	Understanding Place: Assessing the national resource	11111.140
	River navigations and canals	Projects studying the evidence for evolution of the inland waterways network – its technology and infrastructure of basins, warehouses, dry docks, settlements and culture – can valuably inform waterside developments.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing the national resource	11111.140
	Roads and motorised transport	Projects examining the evidence for the development of the road system and its supporting infrastructure from the evolution of the turnpike network to the present system focussed on motorised transport can provide the context for the assessment of significance of road related infrastructure and for planning frameworks	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing the national resource	11111.140
	Aviation	The development of air transport in the 20th century called for the development of very specialised facilities. Projects studying the evolutionof these facilities and their relationship to other forms of transport and markets should inform protection and planning decisions.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing the national resource	11111.140
	Tele-communications	Communication over distances has evolved from the visual – beacons and telegraph towers through electric telegraph and telephone to the present day digital systems and each stage has left	1A Ensure that our research addresses the most important and urgent needs of	A1. What's out there? Defining, characterising and analysing the historic	Understanding Place: Assessing the national resource	11111.140

		evidence of these advances. Projects which study the evidence for these stages their technology and survival are to be supported to anticipate protection issues.	the historic environment	environment	
	Public Utilities	Gas, Electricity and Water Supply have all been the subject of EH MPP reports and Nuclear Power the subject of a SHIER. Building on this material, further more detailed work could strengthen the case for protection of specific sites.			
IND 5 Impact of Industrialisation: Understanding industrial Buildings and sites	**Recording, excavation, scientific investigation and analysis of building types**	**Industrial processes call for specialisised buildings, structures and layouts. Investigation and analysis of these illuminates not only technological advances but also cultural aspects of the workplace. Projects that provide detailed information for the assessment of signifiance of such sites and their protection are needed.**	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A2. Spotting the gaps: Analysing poorly understood landscapes, areas and monuments	Understanding Place: Assessing the national resource	11111.140
IND 6 Legacy of Industrialisation: Achieving better public understanding and enhancement of databases	**Enhancement of HERs with industrial material**	HERs inform the planning system and despite huge improvements under the HIPs scheme, many are still deficient in industrial material. Projects that seek to redress this situation are to be supported. Material from EH's past thematic programmes and earlier sector surveys should be assimilated into the relevant records.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing regional historic environment components	11111.170
	Collation and syntheseis of grey literature	The provisions of the planning system generate a considerable amount of records of industrial sites – mostly site specific. There is an urgent need to analyse, interpret and synthesise this material this material to inform future research agendas and conservation strategies.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A3: Unlocking the riches: Realising the potential of the research dividend	Realising the research dividend from past unpublished historic environment investigations	11113.110
	Communicating in a popular form	There is a need to make the results of detailed research accessible in an attractive yet authoritative form to a popular audience. Work leading to publications such as the 'informed conservation' series is to be supported to informdecision-makers and to engage the public	1B Enhance public understanding and appreciation of the historic environment and its conservation	EMPOWERMENT A2: educating communities: giving people the ability to perceive the importance of their	*Informed conservation* books	12212.210

		in general.	through education and training.	own historic environment	
	Thematic Research Frameworks	To complement the Regional Research Frameworks there is a need for national thematic research frameworks with continuous chronologies. The research questions posed by these would assist curators in setting briefs for work undertaken under the provisions of PPS15.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	G2 Defining the questions: Devising research strategies, framworks and agendas	Supporting research frameworks: national, regional, local and thematic frameworks	11172.110
IND 7 Legacy of Industrialisation: providing the evidence base for designation,re-use and sustainability	Thematic Studies	Building on English Heritage's past thematic programmes new studies should provide characterisations of specific industries and types of site and the context for assessment of significance, protection and management.	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding Place: Assessing historic areas/Understanding Place: Analysis of specific historic assets and locales	11111.130
	Understanding the condition of our industrial heritage	The effective conservation of historic industrial sites requires topical sector intelligence and reliable data on the current condition of the sites. Hence the need for projects which provide this information and build on the current HAR initiative and past BARs and SM@R to assess the state of the historic industrial environment in comparison to other heritage assets.	3B Ensure that the condition of the most significant parts of the historic environment is recorded and monitored to enable their better protection	D1 Heritage at risk: quantifying and analysing the condition of the historic environment	Researching historic environment sector support requirements	32141.110
	Understanding and responding to threats to the industrial heritage	There is a need to analyse the condition monitoring and consider trends and promote solutions to anticipate threat and reduce the level of risk.	3B Ensure that the condition of the most significant parts of the historic environment is recorded and monitored to enable their better protection	D2 Measuring threat: Studying the reasons for risk and devising reponses	Heritage at Risk: identifying threats and developing responses	32142.210
	Exemplary re-use of industrial sites	Studies identifying and analysing best-practice in the re-use of industrial buildings and in the regeneration of industrial sites are needed to persuade the sector as to the effectiveness of these measures.	2A Provide better evidence of the importance and value of the historic environment	B1 Valuing the historic environment:Quantifying the economic and social value of	Socio-economic values of the historic environment	21121.110

					historic assets.	
IND 8 Legacy of Industrialisation: vulnerable sites, skills and processes	**Recording and assessing vulnerable sites**	**Projects which assess the signfiicance of poorly understood threatened or vulnerable industrial building types and/or record sites which fall outside the planning process are to be encouraged. These would provide the necessary understanding for appropriate management of the assets.**	3B: Ensure that the condition of the most significant parts of the historic environment is monitored to enable their better protection	D4 Rescue! Threat-led last resort analysis	Heritage at Risk: Recording historic buildingsand monuments under imminent threat outside the planning process	32144.110
	Recording and understanding vulnerable artefacts, skills and processes and collating and interpreting associated sources of evidence	**Projects which study the artefacts and record operating industrial sites, capturing the processes on various media, and provide essential information for sustaining skills in the future. A vast amount of evidence for past industry is already captured in various undigested sources – oral, written, photographic and film. There is a need for projects which build upon this memory-base and translate it into easily interpreted and accessible form to inform protection and conservation initiatives.**	1A Ensure that our research addresses the most important and urgent needs of the historic environment	A1. What's out there? Defining, characterising and analysing the historic environment	Understanding artefacts and material culture	11111.510

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