CONTENTS

PREFACE 4
FOREWORD 6
INTRODUCTION 8
STRATEGIC PRIORITIES

Grow science capital in individuals and society 12
Grow our audiences and exceed their expectations 16
Sustain and grow our world-class collection 20
Extend our international reach 24
Transform our estate 29
Harness the potential of digital 32
Increase income 35

MONITORING PROGRESS 38

An Explainer leads a live science demonstration at the Chemistry Bar in Wonderlab, the Science Museum’s interactive gallery

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Each of the museums within the Group has international stature, as well as a fierce sense of pride in its regional heritage. As a result, we have immense potential for increasing ‘science capital’ across large and diverse audiences. Investment in our museums across the UK has long been part of our plan to move the Group’s centre of gravity northwards.

The strategic priorities identified in Inspiring Futures will not only encourage and empower the Group to aim higher, but will also enable us to sustain our role as a world leader in both the science and museum sectors, and to deliver world-class and inspirational experiences. As a Group, we will continue to push boundaries and in turn grow in confidence, energy and ambition. Over the next decade and beyond, we will sustain the impact and breadth of our science, technology, engineering and mathematics (STEM) offer; develop, grow and increase access to our extraordinary world-class collection; extend our international reach; transform our estate; become digital world leaders; increase our self-generated income — all the while exceeding our audience’s expectations.

We succeed through our people. Inspiring Futures touches every part of the organisation and is the responsibility of all our teams. Running throughout this document is appreciation of what we have achieved together so far, and confidence that we will continue to adapt and develop in future. In order to deliver our aspirations, we do need to increase capacity, not merely in numbers, but in skills and behaviours such as digital and entrepreneurship. We also need to be able to share skills and people appropriately across the Group. We will also increase the sum of our human resources, and create more routes to participation through a broader range of opportunities, including volunteering and new apprenticeships.

The five museums of the Science Museum Group are a key national resource. With our unparalleled collection in the fields of science, technology, engineering, mathematics and medicine, we are uniquely placed to draw people of all ages to engage with science in an inspirational and informal way. Over 600,000 of the Group’s nearly 6 million visits each year are part of education groups, so we have an extraordinary capacity to open people’s minds to the creativity and wonder of science.

We extend our warm thanks to Trustee and former Science Minister Lord Willetts, who chaired the strategy review group, and to all Trustees and external experts who advised, guided and challenged us throughout the review process. We embark on the implementation of Inspiring Futures with confidence and optimism, encouraged by the continuing support of our Trustees and external advisers, colleagues, key stakeholders and the visiting public.

Dame Mary Archer, Chairman
Ian Blatchford, Director

Dame Mary Archer, Chairman of the Science Museum Group and Ian Blatchford, Director
INSPIRING FUTURES: STRATEGIC PRIORITIES 2017–2030

SCIENCE IN SOCIETY

From the post-war era we have ‘Baby’, a working replica of the earliest stored-program computer. Crick and Watson’s model of the structure of DNA, and one of the Apollo capsules that took men to the Moon and back. These are objects of profound significance for all of us – they tell a global story, not just a British one, and one that continues to influence our future.

The deliberations for Inspiring Futures have reminded us of the obligations that follow from holding this extraordinary collection – curating and explaining it, continuing to add to it at a pace which matches the speed of technological and industrial change, and making the collection easy to access online. Over the next 15 years we will be investing in new galleries and buildings across the whole Group on a scale greater than ever before to discharge those obligations even better. Our objects are imbued with meaning and significance and we will do more to explain this. These are the classic obligations of a world-class museum. But there is more.

The objects in our great historic collection are not necessarily beautiful (though it is striking how many of our objects are things of beauty); they were made to do something, and the things they did fundamentally changed people’s lives. The museums were founded to do something as well – to place science at the heart of our culture. The Science Museum was founded in the early 20th century during one of those periodic British scares that we were falling behind in scientific research and technological innovation. Too many of us reach adulthood and realise that our education has left us shockingly ignorant of these disciplines – and what better way for us to educate ourselves than by going to the Science Museum? It is a great way to learn and to ignite curiosity about science.

There is a barely suppressed sense of excitement about our objects and events – the past 12 months have seen the first journey of the restored Flying Scotsman and the real-time link to the launch of Tim Peake’s flight to the International Space Station. Educating and enthusing people of every age about science and technology is a crucial part of our mission.

We also place science and technology at the heart of the history of our nation – and the world. One of the planned new galleries in the Science Museum shows that the rise of London in the 17th and 18th centuries was intimately linked to its becoming a centre of science, which depended on the instrument-makers who made much of the science possible. This in turn was driven by a mixture of royal patronage, independent-minded scientific curiosity and plain commercial currying. The world’s oldest passenger railway station was at Liverpool Road, Manchester, and the Museum of Science and Industry’s plans for its site will once more put that station at the heart of Manchester’s civic life.

The bold plans for the transformation of York around the National Railway Museum will make it far more accessible than ever before. The National Science and Media Museum has refocused its mission on the science and technology of sound and image, and on connecting more to local communities. Henry Wellcome’s medical collection, which will be at the heart of the Science Museum’s new Medicine Galleries, shows the extraordinarily diverse ways in which people have hoped to be cured of disease.

Technology is science put to use, and for every object in our collection there has been a person who designed it or used it. So these museums full of scientific objects also tell us about our humanity. They place science at the heart of society – where it belongs. And that means we must do more to illuminate today’s controversies. We will invest more in exhibitions which are vivid and contemporary, following on from our recent successes. How does fracking work and does it pose any environmental threats? What is climate change? What are GM crops? How does the brain work?

In the following pages we set out the mission for the Science Museum Group and how we will fulfil this through our museums in the period up to 2030. Our priorities will obviously adjust and adapt in the light of changing circumstances, but we hope this gives you a sense of the high ambitions which everyone working in the Science Museum Group has for the future.

April 2017

David Willetts was Minister for Science from 2010 to 2014 and, as a Trustee of the Science Museum Group, chaired the strategy review in 2015/16.
INTRODUCTION

The Science Museum Group comprises:
• The Science Museum, London
• The Museum of Science and Industry, Manchester
• The National Railway Museum, York and Shildon
• The National Science and Media Museum, Bradford
• Science Museum Wroughton, Wiltshire

This document sets out our priorities for the period 2017–30. It concentrates on areas of change, identifying where we want to be by 2030, and what it will take to get there. It is not a comprehensive list of everything that we will do. Indeed, it could never be because we intend to do a lot – more than could ever be contained within such a document. Also, it covers a long period and the later years cannot be anticipated with certainty. Our annual business plans will sit within this overarching framework, with each year coming into sharper focus as it approaches. This framework is further supported by a number of strategies and plans that cover specific areas of activity (e.g. audience development or digital) and typically span periods of two to five years.

Inspiring Futures reflects our intention to make more of the potential of the Group while retaining the distinctive remit and character of our individual museums. We have a venerable history originating – like so many of our great cultural and educational institutions – in the Great Exhibition of 1851. But we have always been a dynamic organisation, responding to change and opportunities. Over more than a century we have innovated and developed into the world’s most significant museum group for science, technology and engineering, and the most national of the UK’s national museums, with five of our six sites outside London. We know that the world will look different by 2030, and so will our Group; this document will probably be superseded by then, but it captures our aspirations now and provides a road map for our future.

Structure

Vision, mission and values
The long-term strategic priorities that will drive our activity in this period are founded upon a vision, mission and values that are shared across the organisation.

Our vision, Inspiring Futures, acts as our ‘North Star’ to ensure consistency in all our discussions and decisions. Each museum also has a distinctive focus that reflects its own remit.

Group vision
A society that celebrates science, technology and engineering and their impact on our lives, now and in the future.

Group mission
We inspire futures by:
• Creative exploration of science, technical innovation and industry, and how they made and sustain modern society
• Building a scientifically literate society, using the history, present and future of science, technology, medicine, transport and media to grow science capital
• Inspiring the next generations of scientists, inventors and engineers

Group values
We will:
• Think big
• Reveal wonder
• Share authentic stories
• Ignite curiosity
• Be open for all

Focus of each museum
• The Science Museum explores the science, technology, engineering, mathematics and medicine that shape our lives
• The Museum of Science and Industry explores how ideas can change the world, from the Industrial Revolution to today
• The National Railway Museum explores the huge impact of railways on Britain and the wider world
• The National Science and Media Museum explores the transformative impact of image and sound technologies on our lives

Clockwise from top left: The Science Museum; the National Science and Media Museum; the National Railway Museum, York and Shildon; the Museum of Science and Industry


Strategic priorities
Seven key priorities will drive our activity in this period:

Core priorities
1. Grow science capital in individuals and society
2. Grow our audiences and exceed their expectations
3. Sustain and grow our world-class collection

Supporting priorities
4. Extend our international reach
5. Transform our estate
6. Harness the potential of digital
7. Increase income

The first three – science capital, audiences and collections – are designated core priorities, fundamental to our statutory responsibilities and all we do. The other four – international, estate, digital and income – may be considered as supporting priorities: that is, areas in which a need for significant growth or change has been identified for the period covered by this document, even where the activity might otherwise be seen as ‘business as usual’. This may arise from a need to make a step change in order to address previous under-investment (e.g. in digital infrastructure), from a change in external circumstances (e.g. declining Grant in Aid or the vote to leave the EU), or from the scale and significance of the activity itself (e.g. maintaining and developing our estate).

The main part of this document is structured around these seven priorities. Under each one our aspirations for where we want to be by 2030 are articulated, followed by a short rationale that includes the current position and key challenges, and a summary of what we will do in this strategy period. The document concludes with a note on accountability and monitoring progress.

This document concludes with a note on accountability and monitoring progress.
Curatorial approach

Alongside these core and supporting priorities, our museums share three core principles that guide our approach to curation and display, and capitalise on the unique opportunities we have as collections-based museums that include both sciences and arts. A common approach fosters cooperation across the Science Museum Group and will be used to deliver a consistent mission and standards.

Core principles

• Connecting the past, the present and the future: we illuminate the history of science, technology and engineering through our unparalleled collections, but we also provide contemporary context and look to the future.

• A broad definition of science: we showcase and explain science as a method for securing a deeper, systematic understanding of our world, and we demonstrate the fertile relationships between different scientific disciplines.

• Science as culture: we explore science, technology and engineering as creative and entrepreneurial pursuits, and reflect science as a facet of broader culture.

Science and technology themes

A number of important scientific and technological themes will also inform our curation, research and programming across the Group in this period. They will act as a backbone, while retaining flexibility to develop creative and nimble responses to change, and acknowledging the distinct appeal and remits of our individual museums.

• Understanding the universe: capturing, analysing and interpreting the physical world

In addressing fundamental science (matter, materials, forces, maths) we will tell enthralling stories around light and sound, space and the cosmos, and measurement. We show how humankind has sought – and continues to seek – to understand and visualise the world around us.

• Technology, engineering and innovation: how ideas become reality and impact on people’s lives

We show how science, technology and engineering have changed the world and how they are addressing today’s – and tomorrow’s – big societal challenges and opportunities. These include energy, sustainability and adaptation to climate change; artificial intelligence and robotics; power and locomotion; data and informatics; computing and telecommunication; materials and manufacturing. Such a list may look different several years from now, but our Group will be the nexus for public interaction with research and innovation.

• Biosciences: the history and future of life sciences and medicine

We explore how humans perceive and interact with their world, and how we can lead better lives through medicine, technology and design. We will foster discussion of the controversies and ethical questions these technologies create. We will present the issues arising from dramatic advances in biomedical sciences, including neuroscience, agrisciences, synthetic biology, genetics and genomics.

Opposite: Visitors get up close to the Mallard locomotive in the Great Hall at the National Railway Museum
GROW SCIENCE CAPITAL IN INDIVIDUALS AND SOCIETY

Our offer and reputation for lifelong informal STEM learning and engagement will be the best in the world.

By 2030:
- We will be recognised as being of strategic importance to the UK STEM agenda and sought out by policy-makers, funders, peers and partners.
- We will reach many more people beyond our walls through outreach and new programmes, including through national and international partnerships, compared with the 2014/15 baseline.
- The Science Museum will remain the number-one UK museum destination for school groups; the number of young people visiting Wonderlab: The Statoil Gallery at the Science Museum free of charge on a school trip will be sustained at a minimum of 200,000 per year from 2019.
- Our online learning resources will be highly regarded for quality and widely used throughout the UK and around the world.
- Our museums will be key destinations for adult audiences.

Igniting curiosity in science
The Science Museum Group plays a central and irreplaceable role in deepening and expanding science literacy in the UK. The breadth of resources in the Group, the diversity of the audiences and communities we serve, and the expertise embedded in our teams, collections and exhibitions are world-class resources for public engagement in STEM. Our organising principle is to build science capital to enrich people’s lives and enhance their contributions to society. Science capital is a recent concept that encompasses the myriad factors that influence people’s attitudes towards science, including who they know as well as what they know, past experience and exposure, and education.

We have been working with King’s College London and BP since 2014 to define and measure science capital, and to devise effective ways to increase it. This research project, Enterprising Science, focuses on young people and how their interests and career choices are shaped, but measures for adults’ science capital are also in development. Our ambition is bigger: we are concerned with the whole of society. Progress here may be indicated by large-scale, long-term national projects such as the regular Public Attitudes to Science surveys conducted by the Department for Business, Energy & Industrial Strategy.

Research confirms that informal STEM experiences have a deep and sustained effect on people. Our impact as the most visited set of museums by education groups, combined with strengths in teacher professional development and millions of public visitors, affords us a unique position within the UK’s STEM learning ecosystem.
In 2016 we agreed a new Group-wide learning strategy that builds upon our strengths and deepens our impact, efficiency and effectiveness. It is founded on a set of learning principles:

- We ignite curiosity in science. We do not teach or lecture our audiences about science, but seek to inform and inspire.
- We play our part in an ecosystem of STEM learning where we support and encourage our audiences to extend their learning within and beyond our museums.
- We put audiences at the heart of everything we do and aspire to provide people with life-enhancing experiences.
- We use the principles of science capital to shape our learning programmes and live events, and inform our interpretation for exhibitions.

Amplifying reach and impact

Our overarching challenge is to offer even greater access across all platforms and audiences. In particular we need to extend the riches of our museums beyond our walls into classrooms and homes through digital initiatives, and to strengthen national and international partnerships. For example, the National Science and Media Museum has started working with local communities and organisations to engage underserved communities with science and technology, and aspires to become a national centre of expertise in this field. The National Railway Museum launched a series of initiatives to capitalise on its unique opportunity to inspire future engineers, starting with a new festival series in 2016. The Museum of Science and Industry STEM Ambassador programme (delivered on behalf of STEM Learning) was the biggest in the UK, with more than 1100 volunteers working in almost every one of Greater Manchester’s state secondary schools in 2015/16.

Diversity

30% of UK visits made in education groups in 2015/16 were by visitors with a black, Asian and minority ethnic (BAME) background.

From top: An Explainer engages with family visitors at the National Science and Media Museum; visitors to the Wonderlab: Graphene and Beyond exhibition at the Museum of Science and Industry; TeachFirst seminar on STEM education held at the Science Museum.
GROW OUR AUDIENCES AND EXCEED THEIR EXPECTATIONS

We will understand and consistently meet or exceed our visitors’ expectations; we reach and reflect the communities we aim to serve.

By 2030:
• Total visit numbers to our sites will be sustained at more than 6 million per year.
• The quality of visitor experience will consistently exceed baseline 2014/15 levels at all museums.
• Exhibitions and programmes at all sites will be recognised for excellence in content and presentation, indicated by visit numbers, positive feedback from visitors and reviewers, and the receipt of awards.
• Visitor profiles will reflect the communities we aim to serve, for the museums in general and for targeted programmes.
• Exhibitions and other public programmes will routinely be shared and co-developed between museums.
• We will be the leading national museum for volunteering and apprenticeships.

Who, what, why – and how many?
Since 2011/12 we have welcomed well over 5 million visits per year to our museums. Millions more experience our offer online and elsewhere, e.g. at touring exhibitions, schools and festivals.

Our audiences vary between our museums, for different events, at different times of year and even at different times of day. We know a lot about their demographics, why they visit, what they do when they are here and what they think about it. We also investigate why some people do not visit. We use this research in planning and evaluating our activities, and constantly add to the body of knowledge. But there is always more to do. Each of our museums has an Audience Development Plan that identifies areas for improvement and potential growth.

Opposite: Young visitors go wild watching Tim Peake’s launch into space during a day-long TV broadcast from the Science Museum

We aim to do science and technology exhibitions better than anywhere else. Temporary exhibitions and programmes provide reasons to visit and revisit. The Science Museum has had some notable successes such as *Collider: Step Inside the World’s Biggest Experiment* and *Cosmonauts: Birth of the Space Age*. Roberta demonstrated our ability to use rigorous scholarship, authentic objects and excellent design in popular exhibitions. The Museum of Science and Industry regularly shows Science Museum-originated exhibitions, and plans to send *Wonder Materials* in the opposite direction.

The Museum of Science and Industry is also investing in a new dedicated space for special exhibitions and has a partnership with the Wellcome Collection. The National Railway Museum’s major successes have been through events, such as the Mallard 75 and Flying Scotsman seasons, and productive collaboration with York Theatre Royal. The National Science and Media Museum has changed its focus to meet the needs of local audiences and the broader STEM agenda.

While visit numbers are important, and there is scope for increases at our northern museums, we also focus on the quality of the museum experience. We want people to be entertained, but also to leave thinking that they have learned something, seeing the world differently. Sector-leading audience research informs the development of our exhibitions and programmes throughout major projects, and evaluates outcomes after opening. We know that visitors want clear explanations of the science, technology and engineering on display, and why the selected issues and artefacts are important. Visitors want different levels of interpretation, and artefacts embody multiple stories. Digital is a means of providing multi-layered information, by which users can go as wide or deep as they wish, and may make their own contributions.
We are committed to diversity and inclusion. We seek to eliminate or minimise barriers to engagement and participation everywhere. We also offer dedicated programmes for a range of audience groups where the numbers hardly impact on our overall figures, but where the experience is immensely valued by the participants. Examples include Early Birds early morning openings for families with members who have an autistic spectrum condition, the Museum of Science and Industry’s targeted offer for low-income families, and the National Science and Media Museum’s increased engagement with local communities that previously have been under-represented.

The Science Museum receives 3.4 million visits per year. Here the emphasis has been on countering the common perception that the museum is ‘just for kids’ and attracting more adults – in addition to those who come with children in family and school groups. By, for example, tailoring the content of the public programmes and the commercial offer, opening at different times and improving our facilities, we have doubled the number of adults visiting without children: 1.26 million in 2014/15 compared with 0.63 million in 2004/05.

Deepening understanding, meeting needs, exceeding expectations. Notwithstanding growth in online visits, our primary means of engaging and serving our audiences are our five museums. Our museums in the North offer the greatest opportunities for increasing visit numbers. Each has targets to be achieved by 2020; the National Railway Museum has looked further ahead and aims for 1 million visits per year in the longer term.

Temporary exhibitions afford opportunities to focus on particular topics or issues, to look at our collection in different ways and to bring in artefacts and expertise from elsewhere. Over time, a broad range of audience segments may be targeted. No single gallery or exhibition can be all things to all people, and we need to ensure that our entire offer is integrated and consistently high quality, both free and paid-for, and from basic facilities to specialist content. We need to explain the choices we make about acquisitions and display: what is significant about the objects and ideas on display and what stories can they tell?

The Science Museum is working towards a regular pattern for programming major exhibitions that attract big audiences, alongside a suite of other content streams of varying scale to keep the offer fresh. The Museum of Science and Industry will do the same with its Special Exhibitions Gallery. Across the Group, we want to share the development and presentation of exhibitions to a much greater degree; the challenge is to reflect the individual remit and character of each museum and its audiences. This requires continued support for colleagues to enable more sharing of ideas, expertise and resources among our teams.

As well as developing our employees, we know that our users have much to offer. The contribution of volunteers to our public programmes has been much appreciated by visitors and colleagues. We plan to extend this programme so that every major exhibition and certain behind-the-scenes projects (e.g. collections digitisation) are enhanced by volunteers, who themselves have a rewarding experience.

Audiences are increasingly sophisticated in the technology they use, the places they go and the rewarding experience.

We need to build on our commitment to diversity and inclusion, to ensure that our entire offer is integrated and consistently high quality, both free and paid-for, and from basic facilities to specialist content. We need to explain the choices we make about acquisitions and display: what is significant about the objects and ideas on display and what stories can they tell?

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Audiences are increasingly sophisticated in the technology they use, the places they go and the rewarding experience.
SUSTAIN AND GROW OUR WORLD-CLASS COLLECTION

Our collection will be the best in the world for our fields: well understood, well housed and accessible (physically and digitally), and used effectively by us and others for research, display, learning and pleasure.

By 2030:
- New collection facilities at Wroughton will provide improved accommodation by 2023; safe, secure and with appropriate environmental conditions and physical access.
- Almost all (c. 425,000) of our artefacts collection will be digitised by 2023, so that more of our collection is accessed and used online.
- Our collection will be well documented and understood, not only through professional research and scholarship, but also through the contributions of diverse users.
- The Group’s collection will retain its pre-eminent status through active acquisition and disposals.

One collection, one approach
Custodianship of our collection on behalf of the nation is our raison d'être. In recent years we have made big strides in collections-based scholarship and research, creating a new Dana Research Centre and Library, establishing the online Science Museum Group Journal and building a strong network of partnerships with universities. We share our expertise and enthusiasm through our new galleries and exhibitions.

In addition, in this period we aim to improve service for our users by addressing three areas of historic under-investment in collections: preservation, acquisition and digitisation.

In the past our collection was treated as a set of separate collections ‘belonging’ to our individual museums. In 2015 we adopted a single-collection approach, establishing a new department for collections services and shifting towards common processes and practices. In 2016 the One Collection project began, one of the biggest programmes of change we have undertaken in recent times, and one that will reinforce and make manifest our pan-museums approach. This will deliver a new purpose-built collection facility at Wroughton that will apply the latest in collections management thinking to help us to use our collection better. It will provide improved and appropriate physical conditions for our collection, including...
some 320,000 items currently held at Blythe House in west London, and enhanced access for the public. Moving the collection creates opportunities to review our holdings and improve our records and digitisation. Better organisation of the collection will support its more effective use for research and display throughout the Group and beyond, via digitisation, loans, touring exhibitions and visiting researchers. Mostly funded by Treasury, and delivered in partnership with the Department for Culture, Media & Sport (DCMS), the project will be completed by 2023.

Effective collections management for better access and use

The challenge of constructing a new building to house a large and diverse museum collection, and of moving hundreds of thousands of objects and records, hardly needs to be stated. Moreover, a significant amount of funding remains to be raised. We continually improve our holdings through acquisition and ethical disposal. We have resolved to be more ambitious in collecting, especially in contemporary science and for gallery developments and exhibitions. This will often require funding, which we will attract from a range of sources. Researchers in universities and the private sector rarely have posterity in mind when disposing of their equipment and records, so important parts of our science heritage are at risk. Through pre-emptive communications in identified areas we will encourage the deposit of relevant items at our museums. In reactive collecting we need to be persistent and imaginative when important acquisition opportunities arise.

A sustainable approach to collections requires disposals as well as acquisitions. Disposals are never undertaken lightly and call on extensive subject expertise and sector knowledge. However, we have a duty to ensure that we do not keep items that, for a range of reasons, are not relevant to or suitable for our collection. We will be increasingly proactive in reviewing our holdings and, where appropriate, transferring items to organisations where they may be better accessed and used.

Collections digitisation provides the fundamental building blocks of digital access and interpretation. We have not been sufficiently active in this area and in 2015 determined to step up the scope and rate of digitisation, and other work that enables use of our assets.

We will:

• Complete the One Collection project by 2023.
• Prioritise our holdings through a rigorous programme of collections review and ethical disposal.
• Significantly increase the scope and pace of collections digitisation, using collections moves for gallery developments, exhibitions and research as prompts to populate the Collections Online service launched in 2016.
• Seek out opportunities for significant acquisitions, with particular emphasis on contemporary science and technology.

Opposite: Electronic ocean model developed by Shizuo Ishiguro, 1960–83, on display in Mathematics: The Winton Gallery at the Science Museum

Some collection highlights

The Science Museum Group holds the nation’s pre-eminent collections in the fields of science, technology, engineering, medicine, transport and media.

Our collection comprises 7.3 million items. These include:

• 7 million items of photographic, archive and library material
• 140,000 medical items, including the long-term loan of the Wellcome Collection of 114,000 items
• 49,000 items relating to commerce and industry
• 26,000 scientific instruments
• 20,000 items relating to railway locomotives and technology
• 18,000 items relating to railway life and work
• 17,000 items of photographic, cinematographic and televsion technology
• 7000 artworks

Among the standout items are: Stephenson’s Rocket, Alan Turing’s Pilot ACE computer, Crick and Watson’s 1953 DNA molecular model, Charles Babbage’s drawings and models, William and Lawrence Bragg’s X-ray machine, the apparatus with which J J Thomson discovered the electron, Amy Johnson’s Gipsy Moth aircraft, the record-breaking locomotives Mallard and Flying Scotsman, the world’s earliest known surviving photographic negative (William Henry Fox Talbot’s ‘Latticed Window at Laycock Abbey’), the earliest recording of British television (the Baird Phonovision disc), Richard Arkwright’s textile machinery and John Dalton’s surviving apparatus.
EXTEND OUR INTERNATIONAL REACH

We will have a very strong international profile and reputation for excellence that enhances our offer, promotes the UK and generates income.

Valentina Tereshkova, Russian cosmonaut and the first woman to have flown in space, opens the Cosmonauts exhibition at the Science Museum.
By 2030:

- We will have a small number of strong, sustained, mutually beneficial partnerships in different regions of the world, including China.
- The core partnerships will be supported by a wider network of cooperative relationships that support and deliver our vision.
- We will be sought out by international agencies for our content, expertise and influence.
- We will be recognised as a vital means of promoting the UK, both directly and through soft power.
- Income from international working will increase compared with the 2014/15 baseline and deliver profit.

An international organisation

As well as being a group of national museums, in both name and action, we aspire to be an international organisation. This is important for enhancing our museums’ offer through international cooperation on research and lending; building capacity and improving standards in the sector globally; growing and strengthening our spheres of influence at home and abroad; developing our own people and organisation; and generating income. Presenting ourselves as an international, inclusive organisation supports audience diversity and can be attractive to funders. Working internationally promotes not only our organisation, but also the cities and regions in which we operate, and the UK as a whole.

Since 2013 we have transitioned from an organisation that undertook pockets of international work, usually centred on a discrete project or on individuals, to one with a global outlook and presence that is widely recognised and whose expertise and services are sought out.

Touring exhibitions are the most visible manifestation of our re-entry into the international arena. From a standing start and a single exhibition (Collider) on offer, we have developed a diverse repertoire on the road and in development. In 2015/16 there were nearly 300,000 visits to our exhibitions overseas. The new touring capability also enabled sharing of exhibitions within the Group and further afield in the UK.

In addition, we have established a number of new partnerships in Russia, Brazil, China, South Korea, India and Europe, and forged supporting links with government departments and agencies, both in the UK and in the countries where we are active. UK public bodies with whom we engage regularly via formal committees, specific projects and general liaison include, in addition to DCMS, the Foreign & Commonwealth Office and embassies (especially the Science and Innovation Network), the Department for International Trade, the Department for Business, Energy & Industrial Strategy, the British Council and the UK National Commission for UNESCO.

International collaboration enriches our programmes in the UK by bringing in new artefacts and insights. In the wider context, it promotes understanding and cooperation between nations. Such cultural diplomacy was demonstrated by the exhibition Cosmonauts: Birth of the Space Age in 2015/16. This was the most complex and ambitious exhibition project ever undertaken by the Science Museum, and at a time of great political sensitivity. Not only was it a popular and critical triumph, it enabled valuable lines of top-level communication between the UK and Russia to be kept open.

Digital is a key means of reaching audiences throughout the world, including many who will never make a physical visit. Online engagement is already strongly international, with almost half (45%) of the c. 12.5 million visits to Science Museum Group websites in 2015/16 originating overseas, and players from 208 countries taking part in the Museum of Science and Industry’s citizen science project Hooked on Music.

Sustaining the UK’s leading position for soft power through international working is one the four key planks of the DCMS culture white paper (2016). We were credited with adding the ‘Science is GREAT’ strand to the government’s GREAT campaign and we expect to continue our support for this initiative and other activity that promotes the UK and our museums’ localities. We are enthusiastic participants in bilateral national celebrations such as the Cultural Olympiad between London 2012 and Rio 2016. For the 2017 UK–India Year of Culture we will present a season of exhibitions and events focused on India.

An international future

International collaboration will become more and more important to the Group and to the UK. The challenges for the future of our international working can be characterised as factors that we cannot control, and those that we can.

Externally, the UK’s relationships with the EU and other parts of the world remain unclear following the European Union membership referendum vote in 2016. The impacts of this decision within the time frame...
of the Inspiring Futures period are still being worked through. International relations are also influenced by major geopolitical events, natural events, global economics and so on. We need to develop even stronger, wider networks that will help to anticipate such events so that we can mitigate negative impacts and exploit opportunities.

Within the Science Museum Group we have reached a pivotal point in our international ambitions. Recent success has raised expectations, internally and externally, and we need to determine our appetite for further investment and expansion. For example, our success in touring exhibitions so far has been through exhibitions primarily developed for our sites; in future we may develop exhibitions solely for touring, with content tailored for particular regions and emphasis on income generation.

We also believe that our Group can take an even more prominent role in promoting British innovation and manufacturing abroad, and dedicated travelling displays could be an effective means of doing this. Another example of a potential growth area is in provision of professional training and advice, where we know that there is a greater demand for our services than we can currently meet.

In extending our reach we will work with other bodies, such as the British Council and the Foreign & Commonwealth Office, to explore opportunities in new territories: opportunities for interesting partners with whom we can learn; opportunities where the local need is greatest and where our inputs can add the most value; and opportunities to grow income.

China is a clear priority; we have several existing links upon which to build and this work should develop rapidly from 2017.

We must be clear about the purpose and value of international working and where it sits within our other priorities. We believe that there will be opportunities to increase income from existing and new activities (e.g. touring exhibitions and consultancy respectively) and will proceed where there is a strong business case. But we will also undertake international cooperation where it enhances our profile and reputation, and where it enriches our offer for UK audiences.

We will:
• Undertake market analysis for designated regions and activities, and initiate new collaborations accordingly; China will be the first priority.
• Grow our touring exhibitions programme according to a sustainable business model.
• Strengthen networks for communication and advocacy of our international working.
• Work closely with UK public sector agencies to add value to each other’s work and help maintain the UK’s soft power ranking.
• Devise specific programmes to promote UK innovation and manufacturing.

Collider on display in Hong Kong as part of its hugely successful international tour

Opposite: Mathematics: The Winton Gallery at the Science Museum

TRANSFORM OUR ESTATE

Our buildings, public spaces and facilities will be welcoming and inspiring places to visit, effective and accessible housing for the collection, and great places to work.
By 2030:
• Our high standards of architecture and design will be reflected in the quality of responses to our briefs, positive critical reviews and high visitor satisfaction.
• We will have the capacity and capability to consistently deliver capital projects at all our sites that are sustainable, effective, good value and beautiful.
• Our capital projects will be supported and facilitated by a strong network of stakeholders (including funders, planners, politicians, developers and communities).
• Our estate will be consistently well maintained and efficiently run, and will deliver an excellent customer experience.

Integrated long-term planning
At every site a long-term framework for capital development is in place, described in our overarching Masterplan. These plans encompass some back-of-house functions and essential services as well as galleries, public facilities (e.g. lifts, lavatories and circulation spaces) and exterior spaces. Across the Group we aim to combine strong visitor focus with high standards of design and finish, as embodied in the Dana Research Centre and Library and Mathematics: The Winton Gallery, the latter designed by Zaha Hadid Architects, both of which opened at the Science Museum in 2016. Wonderlab: the Statoil Gallery opened at the Science Museum in 2017, further demonstrating this approach and a step change in children’s interactive galleries that will be extended to each of our museums.

Masterplans drive development and change across the entire organisation, from new academic research to improved infrastructure, and from increased efficiency to increased inclusivity.

For people and place
Each site and each project presents its own masterplanning challenges, including areas of historic under-investment in estate maintenance. Wherever possible, improvements to buildings, facilities and services (e.g. lifts) are incorporated into capital projects. We are also investing in a strategic, prioritised programme of repair and maintenance.

Sustainability is an important consideration and we seek to follow – sometimes to lead – best practice in our procurement and operations. We also recognise the special responsibility we hold in respect of listed historic buildings. Reducing the operational and maintenance burden of our estate both reduces energy consumption and saves costs; we will continue to drive this down as a priority, and to seek opportunities to generate income through our estate.

Our museums need to work in their local and regional contexts. Multiple stakeholders may be involved, including local authorities, other public bodies and commercial interests. In York and Manchester in particular, museum developments sit within and alongside bigger neighbourhood developments. Here, and in Bradford and Shildon, our museums have a particular role to play in place-making and regeneration.

For the National Railway Museum in York, the primary goal is to unite the two parts of the site by diverting the road that bisects it. This would transform the museum by creating a new entrance and gallery spaces within the museum and a generous public “piazza”. This highly significant project enjoys the support of a wide range of stakeholders. The museum will also build on its relationship with Durham County Council for the development and potential expansion of our site at Shildon.

The Museum of Science and Industry is seeking synergies with new commercial and cultural developments on its boundaries, as well as exploring ways to integrate Manchester’s aspirations for STEM education into its own plans. Work on a new Special Exhibitions Gallery was well under way by the end of 2016, and on completion in 2020 it will hugely increase the museum’s capacity to deliver world-class exhibitions.

In Bradford, the National Science and Media Museum has been building strong links with local organisations and communities while refocusing its vision on STEM. This was physically manifested from 2017 in a new Wonderlab interactive gallery and, in future, a new gallery will showcase highlights of the collection related to image and sound technologies.

Between 2014 and 2019, over one-third of public space at the Science Museum will have been transformed through the Masterplan. The task is never finished, though, and the next phase is already being considered.

To thrive, we must remain ambitious and energetic. This inevitably requires funding. As well as increasing unrestricted income, we need to nurture a virtuous circle whereby successful projects and fruitful relationships with funders sustain each other.
HARNESS THE POTENTIAL OF DIGITAL

Our digital offer will be acknowledged as one of the best in the world and our websites will be a global destination for their subjects.

By 2030:
- Our websites will attract 40 million visits per year (12 million in 2015/16).
- The objects in the collection will almost all be digitally accessible to an acceptable standard.
- Digitisation of photographic and archive collections will be under way according to an agreed, prioritised plan.
- Our websites will be the number-one destination for information, ideas and debate in our subject domains.
- On-gallery digital interactives will remain at the forefront of technology and include ‘centrepiece’ experiences.
- Digital will be integral to the visitor experience: we will have the knowledge, skills and capability to realise the potential of digital across all Group activities and across all channels.

Museums in the digital age
We have had some notable digital successes to date, such as innovative on-gallery interactives and games at the Science Museum. However, we recognise that the digital offer is uneven across our museums and within the museums themselves. We also know that the status of our museums, the strength of our collection and within the expertise of our people means that there is vast dormant potential for the Group digitally. Together these factors make digital an urgent priority and there is appetite for change throughout the organisation.

The first phase (2015–17) of a new digital strategy is establishing a set of digital principles and practicable objectives. These principles will continue to inform our progress in digital throughout the period of Inspiring Futures. Our digital offer will be:
- Audience-centred to ensure highest impact
- Sustainable and scalable for longevity and growth
- Entrepreneurial and innovative to provide audiences with unique experiences
- Open and generous to empower audiences
- Embedded across the organisation to build capacity

By the start of 2018 this phase of the strategy will have addressed a great deal of the essential behind-the-scenes infrastructure work that will underpin future growth, and started the cultural change in ways of working that will bring it about. Digitisation is a fundamental means of accessing the collection via online catalogues, and provides the building blocks for other digital content. It can add layers of information and explanation for users to explore at their own pace and via their own routes. Our holdings have been insufficiently digitised in both quantity and quality, and a key aim of the digital strategy is to redress this. Priorities for digitisation have been determined based on audience demand, research potential, collections strengths and project opportunities. Our collection comprises c. 7.3 million items, of which the vast majority are photographs and archives. We hold about 425,000 objects and by 2023 almost all of these, plus the most significant items from the photographic and archival collections, will be accessible online to at least a minimum consistent publication standard; this includes c. 120,000 new object records arising from the Medicine Galleries and One Collection projects.

We also deliver digital outputs through partnerships. An initiative in active development and with tremendous potential is the BBC’s new digital science platform, on which we are also collaborating with the Royal Society and the Wellcome Trust. We are also collaborating with the Google Cultural Institute on capturing our exhibitions and providing the building blocks for other digital content. It can add layers of information and explanation for users to explore at their own pace and via their own routes. Our holdings have been insufficiently digitised in both quantity and quality, and a key aim of the digital strategy is to redress this. Priorities for digitisation have been determined based on audience demand, research potential, collections strengths and project opportunities. Our collection comprises c. 7.3 million items, of which the vast majority are photographs and archives. We hold about 425,000 objects and by 2023 almost all of these, plus the most significant items from the photographic and archival collections, will be accessible online to at least a minimum consistent publication standard; this includes c. 120,000 new object records arising from the Medicine Galleries and One Collection projects.

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**DIGITAL HIGHLIGHTS**

**Numbers**
- 12.5 million website visits in 2015/16
- 45% of Science Museum website visits are international
- Over 1.8 million game app downloads, including 200,000 of Rugged Rovers and 800,000 of Transmission
- Over 3 million plays of the Museum of Science and Industry’s Hooked on Music game, across 208 countries
- 5.2 million video plays on YouTube
- 671,000 Twitter followers
- 529,000 Facebook likes
- 69,000 Instagram followers

**Awards**
- Hooked on Music: Silver Award, The Davey Awards, 2014
- Launchball: Best Game and Best in Show, SXSW, 2008
An evolving digital landscape
The qualities of our digital spaces shape the audience experience as much as the museum spaces. The digital landscape and audience behaviour evolve rapidly, presenting us with exciting new ways to fulfil our mission through increased reach, interactivity and participation, but also presenting the challenge of how to keep up with ever-changing digital technologies. The increasing prevalence of digital should also prompt us to reflect on the value and presentation of our physical collections, and on how the two streams complement and support each other.

There is vast potential to extend our digital reach in an age when museums are global online places, accessible to all. For some, the digital visit will be their only visit. If we are to become the go-to destination for our subject domains, we need to put online presentation of the collection and increasing use of digital at the heart of our global ambition. Digitisation of the artefact collection will be practically complete by 2023. Systematic digital records for the bulk of the archives and photographs remain to be tackled, presenting both a huge challenge and a huge opportunity.

We will:
- Increase audience reach by:
  - Investing in continued digitisation of the collections.
  - Ensuring that every programme and project has a digital aspect.
  - Undertaking analysis and research into digital audiences.
- Enhance the audience experience by:
  - Responding to changes in technology and audience behaviour, and proactively managing the life cycle of digital interactives.
  - Communicating more effectively with audiences, using increased data capture and customer relationship management tools.
  - Establishing the Digital Lab to foster new forms of partnerships and funding that enable innovation.
- Enable audience participation by:
  - Adopting an open-by-default approach to increase the use and distribution of our digital content.
  - Establishing platforms for audience contribution to the museums’ work and building (digital) communities of interest.
  - Using the museums’ convening powers tied to digital channels to create two-way engagement with audiences.
  - Encouraging our own people to publish online to engage audiences, attract talent and volunteers, and establish the Group as a centre of expertise.

A virtual reality headset demonstration at the press preview for Mathematics: The Winton Gallery

A corporate hire function at the Science Museum

INCREASE INCOME

Sustainable unrestricted income from a variety of sources will be significantly greater than in 2015/16 and will be used efficiently to realise our vision.
The new normal
Entrepreneurship is valued throughout our Group and opportunities for income generation are actively sought out. We seek to grow all our income streams, including philanthropic income, but the emphasis is on increasing sustainable unrestricted income. The prize is greater freedom to determine our own future as reliance on government funding diminishes.

The biggest part of our income is direct Grant in Aid (GIA) from the UK government via our sponsor department, the Department for Culture, Media & Sport. GIA declined in recent years (by 30% in real terms between 2010 and 2015) and in response we achieved efficiency savings worth millions of pounds. We will continue to bear down on the cost of operations, but there are diminishing returns. Museums must become more financially resilient in order to remain sustainable. We are more ambitious than that, and in order to fulfil our goals on behalf of our visitors we must prioritise income generation to an even greater degree.

Funding for investment in the future
The Science Museum Group is already very successful at generating income through corporate sponsorship and philanthropy. We will continue to pursue these sources, which are vital to realise our ambitious vision for major exhibitions, acquisitions and capital projects across the Group. But in order to invest in our people, our collections and our buildings for the benefit of our millions of users, we need to both diversify and grow sustainable unrestricted income.

In 2015/16 GIA formed 80% of all our unrestricted income. The challenge here lies not only in generating more income in a very testing economic climate, but in adjusting our organisational culture and developing the skills of our teams. All parts of the organisation need to be enabled to contribute to income generation against targets that are meaningful and transparent.

We have some good foundations on which to build. Recent initiatives have included:
• Individual giving – visitor donations generated almost £3 million in 2015/16.
• Wroughton solar array – one of the largest photovoltaic panel arrays in the UK generates annual income of £250,000 (from 2016), as well as more energy per year than we use.
• Paid-for major exhibitions were reintroduced and in 2016/17 are expected to generate £1.5 million in ticket sales and touring fees.
• In 2016 the new interactive gallery, Wonderlab: The Statoil Gallery, opened at the Science Museum as a charged-for gallery (free for school groups).

We will:
• Implement the recommendations and targets of our Strategic Income Plan agreed in 2016; areas identified as having potential for growth include:
  • Our events business, especially using new custom-built facilities at the Science Museum
  • Our educational activities
  • Greater exploitation of our estate, particularly at Wroughton
  • Membership/subscription schemes
• Increase revenues through digital channels.
• Use the new customer relationship management system to provide a holistic customer offer that encompasses both the free and paid-for elements and encourages increased spend per head.
• Develop commercial skills more widely across the organisation.

By 2030:
• Self-generated unrestricted income will grow in absolute terms with reference to 2015/16 results, and Grant in Aid will represent less than 70% of our total unrestricted income.
• The Group will hold sufficient funds for investment, meaning that we can plan and implement continued improvements to public services with greater confidence and likelihood of success.
• Every part of the Group will understand its role in ensuring financial sustainability and actively contribute towards it, according to agreed targets.
• The Group will be an exemplar among museums for commercial activity and entrepreneurship.

Top: A visitor enjoying afternoon tea at the Countess of York, a luxury dining experience in a restored railway carriage at the National Railway Museum
The Group has the status of a Non-Departmental Public Body (NDPB), operating within the public sector but at arm’s length from its sponsor department, DCMS. It is also an exempt charity under the Second Schedule of the Charities Act 1993, with DCMS acting as its principal regulator for charity law purposes.

The Board of Trustees is our senior decision-making body, supported by a system of specialist sub-committees that comprise both Trustees and external advisers. The Board has led, through a dedicated working group, the review of long-term strategy that resulted in this document. The Board also approves both the Annual Plan, and the Annual Report and Accounts. Production of the latter is a statutory requirement, audited by the National Audit Office. The report is laid before parliament and published both by HMSO and on our Group website. The Annual Report and Accounts are the primary formal means of reporting on the Group’s performance against its statutory purposes and objectives, and against certain indicators required by DCMS.

The priorities and goals in Inspiring Futures will be reflected in Annual Plans from 2017/18, which will set out specific actions and deliverables. This overarching strategic framework will also inform the subject-specific strategies and plans that are produced from time to time. A new regime of performance monitoring and reporting will be instituted to enable us to assess progress, and reports will be made regularly (at least annually) to the Board. The strategic priorities themselves will be reviewed at five-yearly intervals.

We have dedicated a good deal of time and thought to Inspiring Futures. For such a complex and evolving organisation, it was difficult to decide what – out of all the many and diverse things we do – should be included. This document captures the top-level long-term priorities and is to be used actively as a touchstone for decision-making throughout the next decade or so. We anticipate looking back from 2030 onto a period of continued challenge and hard work, but also one of sustainable growth and success.

The Science Museum Group was established under the National Heritage Act 1983 with its own Board of Trustees, appointed by the Prime Minister. The Group has the status of a Non-Departmental Public Body (NDPB), operating within the public sector but at arm’s length from its sponsor department, DCMS. It is also an exempt charity under the Second Schedule of the Charities Act 1993, with DCMS acting as its principal regulator for charity law purposes.

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