SCIENCE MUSEUM GROUP

Annual Report and Accounts 2015–2016

Science Museum Museum of Science and Industry, Manchester National Railway Museum in York and Shildon National Media Museum SCMG Enterprises Ltd

Science Museum Group

Annual Report and Accounts 2015–2016

Report and Accounts presented to Parliament pursuant to Section 9(8) of the Museums and Galleries Act 1992 Ordered by the House of Commons to be printed 14 July 2016

HC 420

Science Museum Group (SMG) members: (Formerly known as National Museum of Science & Industry)

Science Museum Museum of Science and Industry, Manchester National Railway Museum in York and Shildon National Media Museum SCMG Enterprises Ltd

© Science Museum Group 2016

The text of this document (this excludes, where present, the Royal Arms and all departmental and agency logos) may be reproduced free of charge in any format or medium providing that it is reproduced accurately and not in a misleading context

The material must be acknowledged as Science Museum Group copyright and the document title specified. Where third party material has been identified, permission from the respective copyright holder must be sought.

Any enquiries regarding this publication should be sent to us at freedomofinformation@sciencemuseum.ac.uk

You can download this publication from www.sciencemuseumgroup.ac.uk.

Print ISBN 9781474130837 Web ISBN 9781474130844

Printed in the UK by the Williams Lea Group on behalf of the Controller of Her Majesty's Stationery Office

ID 30031608 07/16

Printed on paper containing 75% recycled fibre content minimum

Contents

1	About the Science Museum Group	5
2	Achievements and Performance	7
	Science Museum (SM) Museum of Science & Industry (MSI) National Railway Museum (NRM) National Media Museum (NMeM)	15 21 24 28
3	Financial Review	32
4	Remuneration and Employees	35
5	Sustainability Report	41
6	Statement of Board of Trustees' and Director's responsibilities	44
7	Governance Statement	45
8	The Certificate and Report of the Comptroller and Auditor General to the Houses of Parliament	52
9	Financial Statements	53

1. About the Science Museum Group

Purpose and objectives

The Science Museum Group (SMG) is devoted to the history and contemporary practice of science, medicine, technology, industry and media. Its collections form an enduring record of scientific, technological and medical change since the 18th century. They are the largest, most comprehensive and most significant in their field anywhere in the world. SMG incorporates the Science Museum, the Science Museum Library and the Wellcome Collections of the History of Medicine in South Kensington; the Museum of Science and Industry (MSI) in Manchester; the National Railway Museum (NRM) in York and in Shildon; and the National Media Museum (NMeM) in Bradford. Collections stores are located at Wroughton, Wiltshire and Blythe House in West Kensington, London. A further store at Brunel Avenue in Salford was vacated in April 2015.

As defined in the 1983 National Heritage Act, SMG's charitable objectives are to:

- Care for, preserve and add to the objects in its collections
- Secure that the objects are exhibited to the public

- Secure that the objects are available to persons seeking to inspect them in connection with study or research, and
- Generally promote the public's enjoyment and understanding of science and technology and of the development of those subjects, both by means of the Board's collections and by such other means as they consider appropriate.

Taking due regard of the Charity Commission's general guidance on public benefit, the Board of Trustees of the Science Museum (the SMG Board) has agreed that the mission of SMG is to engage people in a dialogue about the history, present and future of human ingenuity in the fields of science, technology, medicine, transport and media. SMG will achieve this by aspiring to the highest international museum standards in the care and presentation of collections, programming, learning and advocacy for its subject areas. This informs all decisionmaking, future planning and the setting of strategic objectives.

History and organisation

The Science Museum has its origins in the South Kensington Museum set up soon after the Great Exhibition of 1851. The South Kensington Museum was reorganised as the Victoria and Albert Museum and the Science Museum in 1909. The Science Museum expanded outside London and the National Railway Museum, which opened in 1975, was established as a result of the transfer of the British Transport Commission's railway collection to the Board of Trustees of the Science Museum. The National Railway Museum at Shildon was opened in 2004 in

Legal status and Group structure

The Board of Trustees of the Science Museum is the corporate body of SMG and was established under the National Heritage Act 1983. Until 1984, SMG was managed directly by Government when it ceased to operate as part of a Government department. It now has the status of a non-departmental public body (NDPB), operating within the public sector but at arm's length from its sponsor department, the Department for Culture, Media and Sport (DCMS). These accounts fulfil the requirements of the 1983 partnership with Sedgefield Borough Council. The National Media Museum was established in 1983 as the National Museum of Photography, Film and Television, with the support of Bradford City Council. The Science Museum collections store at Wroughton, a former Second World War airfield, was made available to the museum by the Ministry of Defence in 1979. The Museum of Science and Industry opened in 1969 as the North Western Museum of Science and was registered as a charity in 1987. It joined SMG in 2012.

Act and the Museums and Galleries Act 1992. SMG is an exempt charity under Schedule 3 of the Charities Act 2011, with DCMS acting as its principal regulator for charity law purposes, and is recognised as charitable by HM Revenue & Customs.

SMG has a wholly owned subsidiary trading company, SCMG Enterprises Ltd (company registration no. 02196149), set up in 1988 and operating across all SMG museums.

Museum addresses

Science Museum Exhibition Road London SW7 2DD National Railway Museum Leeman Road York Y026 4XJ

National Media Museum Pictureville Bradford BD1 1NQ

Museum of Science & Industry	National Railway Museum at Shildon
Liverpool Road	Shildon
Castlefield	County Durham
Manchester	DL4 1PQ
M3 5BG	

Company addresses

Entity	Registered number	Charity registration	Registered office
SCMG Enterprises Ltd	02196149	-	Science Museum Exhibition Road London SW7 2DD

List of SMG advisers

	SMG		SCMG Enterprises Ltd Bradford Film Ltd
Auditors	Comptroller and Auditor Gene National Audit Office 157–197 Buckingham Palace London SW1W 9SP		Grant Thornton UK LLP Grant Thornton House Melton Street London NW1 2EP
Bankers	Barclays Bank plc Floor 27 1 Churchill Place London E14 5HP		Barclays Bank plc Floor 27 1 Churchill Place London E14 5HP
Solicitors	Farrer & Co. 66 Lincoln's Inn Fields London WC2A 3LH	CMS Cameron McKenna LLP Mitre House 160 Aldersgate Street London EC1A 4DD	Farrer & Co. 66 Lincoln's Inn Fields London WC2A 3LH
	Trowers & Hamlins LLP 3 Bunhill Row London EC1Y 8YZ		

2. Achievements and Performance

SMG strategic objectives

Each SMG museum has its own distinct identity and ambitions, but SMG also recognises the opportunities it has as a group and its capacity to be greater than the sum of its parts. The statements of SMG vision, mission and objectives given below have been informing SMG's longterm strategy since 2011.

SMG mission: SMG museums share a mission to engage people in a dialogue about the history, present and future of human ingenuity in the fields of science, technology, medicine, transport and media.

SMG vision: To be internationally recognised for SMG's creative exploration of how science, innovation, and industry created and sustain modern society.

The strategic objectives across SMG are to:

• Aspire to the highest international museum standards in the care and preservation of collections, scholarship, programming, learning and advocacy for its subject areas

SMG Group Wide activities

Collections

Collections services

In 2015-16, SMG adopted a new approach to collections services, which are the functions that underpin the care, management and use of the SMG collection across all sites. The implementation of a long-term SMG Collections Services Strategy was commenced with the aim of delivering a more accessible and sustainable collection (over 400,000 artefacts and millions of archival and photographic items), that is better understood and appreciated both internally and externally.

In accordance with the Collections Services Strategy, these functions are now planned centrally and will henceforth be delivered consistently across all SMG sites. To enable unified delivery, Conservation and Collections Care and Corporate and Collections Information teams from across SMG have been brought together under a newly created role, Group Head of Collections Services.

A central component of the strategy is unlocking the value of existing digital assets in conjunction with the new Digital Strategy (covered further under digital activity below). A major achievement in managing Digital assets in 2015-16 was the creation and soft launch of the SMG wide combined Media Library, which contained a total of more than 195,000 records by the financial year end. During the financial year, photographic teams across SMG also created around 15,000 new digital images, providing coverage of collections and press/PR events. Of these, around 8,000 are images of items from the SMG collection.

- Strengthen its core narratives and deliver dynamic gallery displays
- Implement clear audience strategies that focus on providing life-enhancing experiences
- Extend its reach nationally and internationally
- Be an organisation that is extrovert, entrepreneurial, efficient and dedicated to the development of great people

These objectives underpin all of SMG's work and the specific objectives and activities implemented at each of its museums as discussed in more detail below in the context of both SMG and each of its museums.

During the past year, the SMG Board has engaged in a process to update its strategic objectives to take SMG to 2030. This is expected to be completed in the financial year ending 31 March 2017.

SMG is also putting into action a programme of investment to upgrade and replace existing storage. Following the government's announcement of funding to replace and relocate the storage facilities at Blythe House, plans for this project will be further developed in 2016-17. These plans will be developed in conjunction with replacement of existing facilities at Wroughton that are life-expired, and consolidation of storage resulting from Masterplan projects at SMG museums. The long term objective is a step change in the proportion of collections stored in the most appropriate conditions after the anticipated opening of a new consolidated storage facility by 2023.

The Collections Services Strategy lays out that resources will be focused on the objects that are most significant and of greatest interest to SMG's audiences. A formal Collections Review programme will be established in 2016-17. This will build on the existing commitment to collections management and rationalisation of collections. Approximately 350 items have been considered for disposal and dispersal this year, including items arising from the decant of the Science Museum galleries, Glimpses of Medical History, The Science and Art of Medicine and Veterinary History. Some items are to be transferred to other museums and recipients of this material have so far included the RAF Air Defence Radar Museum, the Charterhouse in Coventry and the East Anglian Railway Museum. Other items to be disposed of are mainly hazardous materials such as chemicals, or duplicate objects such as surplus spare parts for machinery.

To enable greater efficiency and accountability for the SMG collection, a programme of reviewing collections management processes commenced, and a revised loans process was introduced during the financial year 2015-16.

Loans

SMG objects were made publicly accessible this year through the loan of 2,745 objects to 159 different venues in the UK and 154 objects to 31 international venues. International loans included Philippe-Jacques de Loutherbourg's *Coalbrookdale by Night* to the Louvre, Paris, for its exhibition *A Brief History of the Future*, and a Talbot mousetrap camera to the JCII Camera Museum, Tokyo for its exhibition *The History of the British Camera*.

Objects from the Wellcome Trust collection were lent to the Chhatrapati Shivaji Maharaj Vastu Sangrahalaya, Mumbai, for an exhibition on Indian medical history, while a loan of a model steam locomotive was renewed with the Danish Railway Museum. Objects from the Royal Photographic Society Collection at the National Media Museum were on display in an exhibition entitled *Who's Afraid of Female Photographers? 1839-1945* at the Musée de l'Orangerie, Paris.

Masterplan programme

SMG has developed Masterplan strategies across its group of museums by defining a Masterplan for each site, aligned with the key themes of the decade to entice diverse new audiences. SMG Masterplans place emphasis on significantly improving visitors' experience as well as, providing better and more meaningful access to its world class collection and heritage sites. This is being delivered through coherent and well considered design interventions, as well as appropriate investment in infrastructure and services to ensure that considerations of sustainability and efficiency are built in to all that SMG does.

All SMG museums have developed individual Masterplan strategies in response to strategic priorities of both SMG and that individual museum. Each museum's Masterplan sets out a framework for the transformation of its buildings and collections and ensuring that the individual museum's galleries and spaces meet the needs of visitors and deliver core narratives in relevant and dynamic ways. At Wroughton, a Masterplan is under development which will provide a framework in which capital projects can facilitate storage of the collections as well as maximise the commercial potential of the site. These individual Masterplan strategies are discussed in detail against the individual museum achievements below.

SMG has set up a central governance structure overseeing the development and delivery of all Masterplans across SMG to ensure that the transformation of all its sites is delivered in a holistic and coherent way.

Learning

It is SMG's Learning vision to enrich the lives of a large and diverse audience by igniting their curiosity in science and using the principles of science capital. SMG Learning also has a clear focus on generating sustainable sources of funding and income, efficient operations and sharing support, expertise and new activities across SMG.

SMG plays a central role in deepening and expanding science literacy in the UK. The breadth of resources in SMG, the diversity of audiences and communities it serves and the wide range of expertise embedded in the staff, collections, and exhibitions are a world class resource for public engagement in Science, Technology, Engineering and Mathematics (STEM). The organising principal of enhancing science capital, which comes from SMG's joint research project with King's College London, offers a vision of enriching people's lives as well as enhancing their contributions to society. Located at the intersection of formal and informal learning, SMG has a direct impact on millions of families, teachers and members of the visiting public, young and old.

605,000 booked education groups visited SMG's museums in this financial year. This includes 458,000 visits to the Science Museum making it the most visited museum by booked education visitors in the UK, 73,000 to the Museum of Science and Industry, 30,000 to the National Media Museum and 37,000 to the National Railway Museum. In addition, 83,000 people attended Outreach sessions across the UK and internationally.

Learning at SMG includes physical and online visits, interactive gallery spaces staffed by explainers, working historic machinery, interpretation, outreach, contemporary science/public programming and audience research. SMG also extends its learning programme to specific audiences such as the Early Bird programme which enables families with children on the autism spectrum to visit the Science Museum prior to opening to the general public. Another focus is adult programming which includes monthly Lates events attended by 45,000 visitors at the Science Museum, newly introduced adult sleep-overs and the Manchester Science Festival which is the most popular science festival in the UK.

National and international working

National and international working is integral to the vision and strategic objectives of the Science Museum Group and continued to be a priority for the organisation during 2015– 16. Much of SMG's national and international activity is mentioned elsewhere in this report, so this section merely provides some examples to highlight the range and reach of SMG's work beyond its own sites.

One of the two core principles of SMG's national strategy is to promote more joined-up working amongst the SMG's museums. This applies to all areas of operations, but in 2015-16 there was particular emphasis on taking a unified approach to collections management and storage (see "Collections" above), and on sharing programme content. Media Space exhibitions were already developed for showing in both London and Bradford (*Drawn By Light, Revelations* and *Gathered Leaves* in 2015-16), and Science Museum exhibitions have transferred to the MSI, including *Cravings* in 2015-16. There is now an explicit intention to proactively seek opportunities to show exhibitions at more than one site whenever possible and to develop programmes with this in mind. Content may originate at any of SMG's museums, for example the MSI's show on graphene and nanotech will travel to London, and the NRM's *Destination Stations* will be shown in Manchester.

Only in England, which was a Media Space exhibition toured to the Walker Art Gallery in Liverpool (13 February 2015 – 7 June 2015), will be shown at venues in Canterbury, Barrow-in-Furness, Redcar and Great Yarmouth between summer 2016 and spring 2018.

The second core principle is to strengthen SMG's impact by collaborating strategically with the best national partners. For example, SMG worked closely with the Royal Society on sending both organisations' collections for an exhibition at the National Science Museum of South Korea (17 November 2015 – 28 February 2016) and on collaborative development of a new gallery on science in London for the Science Museum. SMG is represented on the Public Engagement Committee and Science Policy Advisory Group of the Royal Society, and the SMG Board includes Fellows of the Royal Society.

In addition, SMG continued to work with a great many other organisations throughout 2015-16 in order to deliver events and programmes at its own sites and to support the work of others through object loans and exhibitions, learning outreach, training and advice.

SMG's international strategy aims to increase access to a wide international pool of knowledge, expertise and resources for the benefit of audiences and users, SMG personnel and those of its collaborators. Its objective is to significantly raise the profile and reputation of SMG museums as a key international force among peers, funders and key opinion-shapers and decisionmakers. Priority activities for the period 2012-2015 were: developing a touring exhibitions operation; improving SMG infrastructure to deliver and communicate SMG's international strategy; collaborations and touring; professional training, development and capacity-building; fundraising and online reach.

International relationships featured strongly in 2015-16, with several long-term projects coming to fruition. Most notably, the *Cosmonauts* exhibition September 2015 – March 2016 was the culmination of several years' work on both logistical and political fronts. It was very successful with the public and critics and also in terms of cultural diplomacy. The Director of SMG received the Pushkin Medal, which is awarded for achievements in the arts and culture, education, humanities and literature, from President Putin at a ceremony at the Kremlin in December 2015.

Other ways in which the SMG offer in the UK was enriched through international contacts include the Science Museum's work with people and organisations in India in preparation for an Indian season in 2017 (the 75th anniversary of Partition) and, potentially, a major exhibition on Indian science at a later date. Curators developing the new Medicine galleries at the Science Museum (to open in 2019) undertook a collecting expedition to India.

SMG's international touring programme expanded during the year:

- Collider was seen by 340,000 visitors in Paris at the Palais de la découverte (17 October – 19 July 2015; 37,400 visitors in Singapore at the Art Science Museum (14 November 2015 – 14 February 2016) and opened at the Hong Kong Science Museum on 18 March 2016. After two Australian venues, the exhibition is expected to be shown in modified form at the Museum of Tomorrow in Rio de Janeiro.
- Following the closure of the Science Museum's *Science in the 18th Century* gallery in June 2015 due to Masterplan developments, the collection of 18th century scientific instruments were available for touring under the title *Science and Splendour* at the National Science Museum of South Korea which received 78,000 paying visitors (17 November 2015 28 February 2016).
- Drawn By Light, a Media Space exhibition, was developed in collaboration with the Reiss-Engelhorn-Museen in Mannheim and, after showing in London and Bradford, will tour to Helsinki and Antwerp in 2016-17.

Science and Splendour in South Korea was part of a broader collaboration agreement that was formalised in a Memorandum of Understanding (MoU) signed in July 2015. In 2015 SMG also signed a partnership agreement with the Museum of Tomorrow in Rio de Janeiro. The Museum of Science and Industry entered into a MoU with the Wuhan Science and Technology Museum, originating in Wuhan being twinned with Manchester. These links were further strengthened when the wife of the Chinese premier chose to visit the Museum of Science and Industry as part of a state visit in October 2015. The National Railway Museum has an established partnership with the National Railway Museum of Sierra Leone; following disruption due to the Ebola outbreak, work on an archives preservation project there supported by the British Library Endangered Archives fund was completed in 2016. Under the longstanding Japanese Sisterhood partnership, the National Railway Museum also hosted visits by directors and staff from the major Japanese rail museums in connection with development plans.

SMG has built effective networks in Europe. With an informal consortium of major European science museums,

SMG is engaging with research organisations and policymakers to consider ways to significantly increase the scope and impact of public discourse in science. This same consortium facilitated the tour of *Collider* to Paris and Leonardo da Vinci: The Mechanics of Genius to the Science Museum, which opened on 10 February 2016. The Science Museum is a lead partner for an EU-funded project called Sparks led by the professional network Ecsite, under which a small exhibition and events programme will take place in 29 countries in 2016–17. A second EU-funded project called HoNESt (History of Nuclear Energy and Society) is a three-year research programme undertaken by an interdisciplinary consortium of researchers in 23 partner institutions across Europe. The Museum of Science and Industry is leading the cultural programme associated with the EuroScience Open Forum in 2016, when Manchester is European City of Science.

There have been myriad other international engagements including visits (inbound and outbound), conferences, outreach, training, research projects and advice which are captured in an internal annual report.

Digital activity

All of SMG's strategic objectives and activities are supported and enriched by its digital output. Following the appointment of a new Digital Director at the end of the previous financial year, SMG has formulated a digital strategy focusing on an organisation-wide integrated approach to digital that fulfils audience needs and provides a world-leading audience experience.

The focus of SMG's 2015–17 digital activity are:

1. Experience

Improve audience experience through a user-centred and holistic approach to the visitor journey, and develop a strategic approach to interpretation to make best use of digital media to bring the displays to life.

SMG is undertaking a phased redesign of its web offer including better promotion of paid programmes, a move to more sophisticated, personalised digital communication and a significantly greater use of multimedia and audience content to promote the experience of visiting the museums.

During this financial year, new websites were launched for SMG, the Museum of Science and Industry, the *Flying Scotsman* and Science Museum venue hire. In addition, the museums' blogs were re-launched with a greater focus on delivering multimedia content and telling the behind-thescenes stories from the museums.

A large-scale initiative to re-launch the museums' websites is underway.

In total, there were 12.5 million visits to the SMG websites in this financial year compared to 10.8 million in the previous financial year.

2. Culture

Increase the use of audience data, initiate a Digital Lab to deliver groundbreaking and innovative digital experiences, and build organisation-wide capability.

New analytics tools, metrics reports and user research surveys have been implemented to shape SMG's digital activity and provide a better understanding of its digital audiences.

SMG is working to establish a Digital Lab in 2016 that will be a set of activities that will build capability, explore the full potential of digital and establish the digital reputation of SMG by undertaking short-lifetime initiatives and exploring new technologies.

3. Collection

Provide digital access to the collection through investment in infrastructure and user interface; adopt open content licenses; and invite audiences to contribute to this work.

SMG is enabling audiences' reuse of images of collection objects to increase reach and promote the collection. This was achieved through adoption of permissive, "open" content licenses that enable non-commercial reuse.

Digitisation of the collection is on-going and SMG is working to represent the collection online through a new user interface that will deliver larger images and improved search and browse capabilities from mid-2016.

4. Narrative content

Tell the stories of how the modern world was shaped by the areas covered by the collection through narrativebased content; and engage audiences with contemporary science, engineering, media, transport, medicine and media through a dynamic, multi-channel approach.

SMG has been building on its significant work in this area through an increase in the production of rich media content, interactive exhibits and online narratives to bring the collections to life. The new blogs are now being used to engage audiences with contemporary developments in STEM.

5. Infrastructure

SMG has invested in building sustainable and scalable technical infrastructure to deliver these ambitions and lay the foundations for ambitious future initiatives.

Estate development

The estate of SMG provides the physical framework for the delivery of SMG's strategic objectives. In the past financial year, considerable effort has been made to ensure that the buildings, land and estate services help to achieve these ambitions.

The objectives for SMG's estate are:

• Manage the health and safety risks associated with SMG's estate and run the SMG Health & Safety Advisory Service

- Manage and maintain SMG's diverse portfolio of properties, land and infrastructure, and care for its historic buildings
- Be experts in SMG's estate and support SMG in delivering its masterplans
- House the SMG collections and support their long term preservation
- Manage the SMG workspace and ensure it is an effective place for its employees to work

The SMG Estate Team ensures that SMG's museums and their infrastructure and systems are managed and maintained to a high standard. SMG places high demands on its estate and many behind-the-scenes projects are delivered without impacting on its visitors or collections. For example: the complex separation of the Post Office Building from the Science Museum to become the new Dyson School of Design and Engineering at Imperial College is underway and is expected to complete in spring 2018; improvements at the Museum of Science and Industry have improved the delivery of estate services at this site; and at the National Media Museum, operations have been relocated and consolidated to the museum's building itself, thereby reducing operational cost and risk. A significant development across the SMG estate during the financial year was the establishment of a new unified maintenance and engineering contract. This provides a uniform approach to maintenance across the SMG estate (with the exception of the Museum of Science and Industry) and has yielded savings in SMG's operational costs.

By being entrepreneurial in the approach to how SMG's estate is managed, SMG has continued to contribute significant income from its land and buildings, helping to sustain SMG and make best use of its estate.

These measures and a programme of smaller-scale projects have enabled the individual museums to becoming ever-more efficient and ever-more able to adapt to the changing public offer and further improve the visitor experience within SMG's buildings.

Wroughton

Wroughton is the primary storage facility for SMG and currently houses over 32,000 objects and 500,000 library and archive items.

Vision and mission – To effectively house the SMG collections and to maximise the potential of the estate for the benefit of SMG

Objectives:

- Manage Wroughton's properties, land and infrastructure to support SMG's strategic objectives
- Be experts in the Wroughton site and lead SMG in delivering the site masterplan
- House the SMG collections and support their long-term preservation
- Provide research access, and expand public access, to SMG's collection

• Be entrepreneurial in approach and in the delivery of commercial opportunities

Since 2014-15, SMG has continued to consolidate storage of its collections from various sites at Wroughton as part of a significant programme of capital projects at its museums and Wroughton. The consolidation is part of SMG's longterm strategy of saving operational costs, improving storage conditions and releasing valuable space within the museums. The programme of investment in upgrading and replacing existing storage at Wroughton has been united with the planned vacation of Blythe House, following HM Treasury's Spending Review and Autumn Statement 2015 announcing its funding proposal for replacing Blythe House storage facilities (see Collections above). It is currently anticipated, subject to external approvals that a new consolidated facility will open by 2023 with further incremental expansion.

Commercial activity at the site has grown apace with tenancies of the disused runways significantly contributing to SMG's income stream. Ranging from the storage of metal gantries to the testing of automated traffic cameras, the runways now provide a growing commercial opportunity at SMG.

Also contributing to SMG's income generation, in December 2015, plans for one of the largest solar farms in the UK came to fruition. SMG leases the land to solar developers British Solar Renewables which are the owner, developer and operator of the solar farm. It was energised on 31 March 2016 and will generate enough energy to power 15,400 homes which is equivalent to three and a half times the electricity used by SMG put back into the national grid.

Volunteers

In 2015, SMG appointed a Volunteer Development Manager to engender a culture of volunteering within the organisation and empower volunteers to help it realise its ambitions. A new strategy, which focuses on the longterm growth and the retention of volunteers through the creation of a quality volunteering experience, was adopted. This will be achieved by delivering excellence in three key areas:

Professionalism: creating well managed and nationally recognised programmes

Integration: ensuring SMG's volunteers are a full part of its museums.

Experience: making its museums great places to volunteer.

In order to ensure that volunteering supports SMG's individual museums, each site is responsible for the creation and delivery of its own volunteering strategy and programme. Built around the national strategy, these focus on specific growth areas, the resolution of local challenges and the delivery of local objectives.

Alongside the new volunteer policy, a framework is being developed which will provide guidance on all areas of volunteer management. By involving colleagues from across SMG, new ways of working have been initiated that facilitate greater levels of volunteering engagement.

During the course of the year, 850 volunteers have provided 71,930 hours across SMG.

- At the Science Museum, 114 volunteers, from a diverse demographic background (including teachers, engineers, a geneticist and Russian speakers), supported *Cosmonauts: Birth of the Space Age* by helping and engaging with visitors. This has been the biggest group of volunteers dedicated to one project to date. Alongside this, volunteers have delivered tours to 4200 visitors and object handling sessions to 7,500 visitors. By running object handling sessions at weekends, during Lates and at audio described events, the Science Museum has opened up its collection to new audiences. In total, its 174 volunteers have given 9,000 hours of support to the museum.
- At the National Railway Museum, 390 volunteers, aged between 19 and 89, have provided 36,000 hours of support to the museum. Volunteer drivers and guards have welcomed 40,000 visitors to its new miniature railway since it opened in the summer 2015; and a team of volunteers working remotely are helping increase access to its collections by digitally cataloguing the Alan Jackson Archive. To date they have made 200,000 entries. The programme has been expanded in the Learning and Conservation teams and the National Railway Museum continues to develop relationships with partners such as York University and the Joseph Rowntree Foundation.
- At the National Railway Museum at Shildon, 114 volunteers have provided 14,500 hours to support thirteen different roles. These include cab access, cleaning, rail operations and caring for the collection. This year, a Corporate and Social Responsibility project

Financing and fundraising

Grant in Aid

Continuing receipt of Grant in Aid from DCMS is dependent upon SMG's compliance with the DCMS/SMG Management Agreement dated May 2014. This sets out DCMS policy and financial requirements, which include the relevant provisions of Managing Public Money and such other guidance as the Treasury, Cabinet Office or DCMS have issued. It also describes the delegated powers and limits. A Funding Agreement between DCMS and SMG defines the commitments by each party periodically and can be found on the DCMS website. was piloted. Six staff from Cummins Emission Solutions volunteered a day to help work on the National Railway Museum's collection, helping with the cosmetic restoration of the 2HAP and in preparing Furness Railway No. 20. A volunteer officer has also been appointed, allowing the National Railway Museum to develop its volunteer programme, improve the volunteer experience and provide a full time contact for its volunteer team.

- At the Museum of Science and Industry, volunteers have contributed 6,630 hours this financial year. They have supported its Light Fantastic, Make Fest and Play It! events and during the Manchester Science Festival, 70 volunteers contributed 1,400 hours to help run events and support activities. In addition, its Inspiring Futures project has continued to be a great success. By working with Imperial War Museum and Manchester Museum, it has helped strengthen relations within the city. Inspiring Futures' focus on health and wellbeing has helped create more diverse, accessible volunteering opportunities which supports the Museum of Science and Industry's wider strategy. Its work on the project also saw it finish as runner up in the Spirit of Manchester Awards (Partnerships). It also manages the STEMNET contract for Greater Manchester and 1,100 STEM Ambassador volunteers supported activity during the year.
- The National Media Museum has focused on growing the number of volunteering opportunities available and on developing the quality of its volunteering experience. It has expanded its Senior Screenings team, recruited voluntary support for its contemporary science festivals, relaunched its Widescreen Weekend volunteer team and recruited additional voluntary support for its Collections and Corporate and Collections Information team. Alongside this, its volunteers have continued to support the acquisition of the *Impressions Gallery* and the cataloguing of the *Daily Herald* and *Royal Photographic Society* collections. In total, volunteers have contributed 5,800 hours to the museum.

On 25 November 2015, HM Treasury's Spending Review and Autumn Statement 2015 announced that funding for national museums, including the Science Museum, was to remain at the current level in cash terms until 2019-20 and that free admission was to be maintained. In the current economic climate, the UK Government's decision to demonstrate its continuing support for investing in the nation's museums was especially welcome. In addition it was announced that the Government will invest £150 million to support the British Museum, Science Museum and Victoria & Albert Museum to replace out of date museum storage at Blythe House with new world-class storage facilities.

Distribution of Grant in Aid to the National Coal Mining Museum (NCMME)

In 2012–13, SMG took taken on responsibility for distributing Grant in Aid to the National Coal Mining Museum for England (NCMME). This arrangement is governed by a Management Statement and Memorandum agreed between SMG and NCMME. NCMME retains its own Board of Trustees and continues to publish its own annual report of its activities, together with its audited annual accounts, no later than 31 December each year. NCMME is not considered a subsidiary undertaking for the purposes of group accounting and SMG does not exercise any control over, nor does it have any responsibility for, the operations of NCMME.

Supporters of SMG

SMG is enormously grateful to all of its sponsors and donors, whose support has made a wide range of initiatives possible this year. Despite challenging financial circumstances, the support it has received from the corporate sector, individuals and trusts and foundations is vital in enabling it to continue with its ambitious plans. Here are a few highlights.

Sponsorship and donations

At the Science Museum, its long-term supporter BP, the sponsor behind its *Enterprising Science* programme, deepened its existing relationship with the museum by making *Cosmonauts: Birth of the Space Age* possible, its greatest temporary exhibition to date.

A host of significant new partners have joined SMG this year. Its biggest ever sponsorship deal, with Statoil in support of *Wonderlab: The Statoil Gallery*, alongside significant investment from Urenco, ensures that a whole new generation will be inspired in a groundbreaking interactive gallery which is expected to open in October 2016.

The Science Museum is delighted to have significant support from Samsung and MathWorks for *Mathematics: The David and Claudia Harding Gallery*, named in honour of the Hardings' extraordinary gift of £5 million to the Science Museum.

It is especially pleased to welcome the Lloyds Register Foundation as a supporter. The Lloyds Register Foundation is particularly interested in the application of big data and therefore became a natural fit for the forthcoming Antenna exhibition on big data.

At the Museum of Science and Industry, Haydale is sponsoring the exploration of one of the most remarkable scientific developments in *Wonder Materials: Graphene and Beyond*. The Museum of Science and Industry has plans for many more temporary exhibitions as work begins on its new Special Exhibition Gallery. More than 600 guests attended the launch of the Manchester Science Festival, sponsored by Siemens, in conjunction with the city's designation as *European City of Science*. The National Railway Museum has focused on developing projects to further build its relationship with a number of railway bodies. The joint commitment of rolling stock companies, Angel Trains, Porterbrook and Eversholt to the museum's new Young Engineers programme is testament to its success.

Corporate Membership

SMG Corporate Partner programmes continue to grow, and SMG has enjoyed significant success this year through renewals and new business, particularly at NRM. This support enables it to care for its collections and run a varied programme of events and exhibitions for its visitors.

Patrons

The Science Museum Patrons' programme continued to grow, with more patrons than previously joining the event filled programme. SMG continued to organise a series of exclusive events. The National Railway Museum Patrons' programme went from strength to strength with a programme of events that included a visit to the Crossrail development.

Events

The Science Museum's annual dinner in May 2015 was attended by: the Rt Hon John Whittingdale in his first public engagement as Secretary of State for Culture, Media and Sport; Airbus's UK President Paul Kahn; and Professor Anne Glover CBE, former Chief Scientific Adviser to the President of the European Commission, currently Vice Principal for External Affairs and Dean for Europe at the University of Aberdeen. SMG Chairman Dame Mary Archer welcomed Nobel Prize winner Prof John O'Keefe and Mr David Harding as new Fellows of the Science Museum.

At the National Railway Museum, Paul Kirkman and Mary Kenny of annual dinner sponsors Eversholt Rail, welcomed 500 guests in June 2015 to celebrate the museum's 40th anniversary where the guest speaker was Chairman of Network Rail, Professor Richard Parry-Jones, CBE.

Visitor Giving

The visitors across each of the SMG's museums continue to astound with their generosity. From the 5.5 million visitors who came through SMG's doors, it has received £2.9 million in support of its work. Based on their support, this vital unrestricted funding will ensure that the SMG can continue to mean more things to more people in the years to come.

Performance

Performance information is sourced through both internal records and periodic independent visitor surveys.

Performance against DCMS indicators

	SM	MOSI	NRM	NRM	NMeM	SMG
			York	Shildon		total
Number of visits to the mus	eum					
2015–16	3,419,000	707,000	750,000	213,000	460,000	5,549,000
2014–15	3,348,000	680,000	727,000	167,000	414,000	5,336,000
Number of visits by children	under 16					
2015–16	1,122,000	237,000	193,000	237,000	134,000	1,923,000
2014–15	1,100,000	232,000	195,000	45,000	125,000	1,697,000
Number of overseas visitors						
2015–16	1,562,000	96,000	55,000	6,000	16,000	1,735,000
2014–15	1,577,000	81,000	84,000	4,000	14,000	1,760,000
Percentage of visitors who v	vould recommend a visit					
2015–16	98%	98%	99 %	92%	98%	97%
2014–15	96%	98%	98%	94%	98%	97%
Number of facilitated and se	elf-directed visits by child	ren under 18 in forma	l education			
2015–16	381,000	46,000	30,000	5,000	24,000	486,000
2014–15	372,000	43,000	35,000	4,000	26,000	480,000
Number of instances of child	dren under 18 participatir	ng in on-site organise	d activities			
2015–16	416,000	173,000	136,000	25,000	80,000	830,000
2014–15	435,000	125,000	152,000	14,000	65,000	791,000
Number of unique website v	isits					
2015–16	8,568,000	839,000		2,101,000	611,000	12,119,000
2014–15	8,343,000	630,000		1,118,000	707,000	10,798,000
Number of UK loan venues						
2015-16	103	6		100	13	222
2014–15	104	4		97	8	213

SMG-wide performance indicators

	2015–16	2014–15
	£'000	£'000
Exhibitions admission income (gross income)	1,884	264
Trading income (net profit, excluding sponsorship income)	2,726	2,465
Total charitable giving (including sponsorship income)	12,667	11,391
Ratio of charitable giving to Grant in Aid	33.4%	28.5%

Science Museum (SM)

Mission: To make sense of the science that shapes our lives, help create a scientifically literate society and inspire the next generation.

Vision: To be the leading international museum championing the understanding, enjoyment and prestige of science in modern society.

Objectives

Through its world-class collections of historical objects, galleries, interactive experiences and its learning programmes the Science Museum aims to be the leading international museum championing the understanding, enjoyment and prestige of science in modern society.

In 2012 the Science Museum set out its Strategic Ambitions for the period 2012–22, which include a commitment to focus on the urgent choices faced by society and the fundamental science and technology that underpin them. Its core themes are:

- Climate science and sustainability
- The history and future of medicine
- Informatics and the science of data
- Understanding the universe

The Strategic Ambitions for the period 2012-22 supplement and apply SMG's strategic objectives within the context of the Science Museum.

Audience

The Science Museum continues to focus on the delivery of its Audience Development Plan 2015-2020. This sets the following broad objectives for physical visits to the Science Museum:

- Maintain visitor numbers at around 3 million with specific annual targets that reflect available square footage and the cultural programme; for 2015-16 the target was 3.26 million visits.
- Increase the number of independent adults visiting.
- Improve the visitor experience year on year with a
 particular focus on categories of visitors we describe as
 'engaged adults', 'international adults', 'museums and
 galleries adults', 'engaged families' and 'museums and
 galleries families'; visitors from the under-represented
 demographic groups and those with a disability; and
 women.
- Increase visitor spend through an integrated approach in which the commercial offer enhances the visitor experience.

The Science Museum remains a favourite with families, although the volume and proportion of adults visiting independently is increasing in line with its Audience Development Plan. This year, the Science Museum received 3,419,000 visits of which 51% were made in family groups. 35% of visits were independent adults compared to 39% in 2014-15 and 36% in 2013-14. One in four independent adults said they were visiting to see something specific, an excellent result driven by the strong showing of the Cosmonauts ticketed exhibition which was seen by over 138,000 people.

86% of visitors say they would "definitely" recommend a visit to the Science Museum, with a further 12% saying they would "probably" recommend a visit. This is in line with the last financial year and the trend at the Science Museum for the past three years has been upward. 79% of visitors are "very satisfied" with their visit, with a further 19% who are "fairly satisfied". Recognising the Science Museum's commitment to improving the quality of experience for all its visitors, it has commissioned an access audit that will lead to recommendations around improving the experience of disabled people visiting the Science Museum.

There were 458,000 visitors in education groups, making up 13% of all visits. Overseas visitors are very important to the museum, accounting for almost half of all the visits made (46%).

Achievements

In 2015–16 the previous year's record-breaking visit numbers were matched with 3.4 million visits. Awards this year included the Pushkin Medal which the Director of SMG received from the Russian Federation for achievements in the arts, culture, education, humanities and literature in connection with Cosmonauts and a Special Commendation 2016 by the European Museum of the Year Award for Information Age, the museum's gallery showcasing communication and information technology.

Significant milestones have been achieved against the SMG Plan 2014-15 this year, including the sale of the Post Office Building to Imperial College which was effected on 24 April 2015 for £30 million, the proceeds of which will be invested in essential infrastructure improvements, a new interactive gallery at the National Media Museum and collections storage space. In the short to medium term, the proceeds must fund the consequences of moving functions that have previously been housed in the Post Office Building and included entrances, offices and the Patrons' Centre.

Considerable funds were raised towards the financing of the Medicine Galleries expected to open in 2019. The Heritage Lottery Fund approved a grant of £8 million (Stage One pass) and the Wolfson Foundation approved a grant of £1.174 million and a Wellcome Stage One funding of £0.5 million. The opening of *Cosmonauts: Birth of the Space Age*, a collection of Russian spacecraft and artefacts, was announced at a press conference attended by Alexei Leonov, the first man to walk in space, on 21 May 2016. He was presented with a Science Museum fellowship by Stephen Hawking on the same day. *Cosmonauts: Birth of the Space Age*, opened on 17 September 2016. The opening events were led by Valentina Tereshkova, the first woman in space and was visited by 138,000 visitors before it closed on 13 March 2016.

The Dana Research Centre and Library opened on 6 November 2015. It brings together the Science Museum's Research and Public History Department with access to the Library and Archive collections. The aim is to increase the use and understanding of the Science Museum's collections by academics and the public.

In September 2015, the Director General of the BBC, Sir Tony Hall, chose the Science Museum as the venue for a landmark speech setting out the BBC's plans as part of the charter renewal debate. Alongside him, Professor Brian Cox announced a new science stream, *The Age of Wonder*. SMG is in active discussion on the opportunities this might offer.

The Science Museum broadcast BBC *Stargazing Live* from the Science Museum with Brian Cox, Dara O'Briain and Chris Hadfield on 15 December 2015, celebrating the launch of the UK's first official ESA astronaut Major Tim Peake on the Principia mission to the International Space Station. This was attended by around 11,000 visitors at the Science Museum and had a TV audience of 3.8 million.

Exhibitions, galleries and events

In addition to the exhibitions and galleries mentioned in "Science Museum – Achievements" above, new exhibitions and displays in 2015–16 included:

- Journeys Through Medicine: Henry Wellcome's Legacy is a temporary display which opened on 1 October 2015 following the closure of the former Medicine Galleries in preparation for the opening of the new galleries on 2019.
- Ada Lovelace: The Enchantress of Numbers (13 October 2015 31 March 2016) brought together Lovelace's portraits, letters and notes, alongside the calculating machines with which she worked.
- The Clockmakers' Museum was opened by the Princess Royal on 22 October 2015. The collection of clocks and watches from 1600 to the present day was assembled by the Worshipful Company of Clockmakers and relocated to the Science Museum from its former home in Guildhall.
- *Einstein's Legacy* (opened on 25 November 2015) celebrated the 100th anniversary of Albert Einstein's general theory of relativity.

- Leonardo da Vinci: The Mechanics of Genius (opened on 10 February 2016 with an expected closing date of 4 September 2019) was a touring exhibition created by Universcience in Paris that depicts Leonardo da Vinci's 'inventions' in the context of his wider observational studies and drawings.
- Wellcome Image Awards showcased the most informative, striking and technically excellent images that communicate significant aspects of biomedical science. The Science Museum hosted the 2016 awards ceremony on 15 March 2016 and collaborated with Wellcome Images to celebrate the winners in an exhibition which is on show until 19 June 2016.

Media Space

Exhibitions in Media Space this financial year included:

- *Revelations: Experiments in Photography* (20 March 30 September 2015) explored the influence of early scientific photography on modern and contemporary art and was visited by 13,420 people.
- The Kraszna-Krausz Book Awards and The First Book Award 2015 (20 April 2015 – 28 June 2015) displayed the nominations for the UK's leading photography and moving image book prizes. The awards ceremony took place in Media Space on 18 May 2015.
- Julia Margaret Cameron: Influence and Intimacy (24 September 2015 – 28 March 2016) marked the 200th anniversary of her birth. The exhibition featured the Herschel Album (1864), a sequence of 94 images which Cameron put together as a gift for her mentor Sir John Herschel.
- Gathered Leaves: Photographs by Alec Soth (6 October 2015 28 March 2016), the first major UK show of work by Alec Soth, who is considered to be to be one of the world's foremost documentary photographers and attracted 17,000 visitors. The exhibition will travel to the National Media Museum, the Finnish Museum of Photography, Helsinki and the Fotomuseum in Antwerp, Belgium in 2016 and 2017.

Touring

As part of SMG's strategy to raise the profile of the museum and its collections, it continued its touring exhibitions programme commenced last year. Touring exhibitions in 2015–16 were:

- Collider: Step Inside the World's Greatest Experiment:
- Palais de la découverte, Paris (17 October 2014 19 July 2015);
- ArtScience Museum, Singapore (14 November 2015 14 February 2016);
- Hong Kong Science Museum (18 March 15 May 2016);
- Thereafter, Collider will be shown at two venues in Australia and is also expected to be adapted for the Museum of Tomorrow in Rio de Janeiro.
- Science and Splendour: Treasures from the Court of King George III:
 - National Science Museum, Daejeong, South Korea (17 November 2015 – 28 February 2016).

In addition, an innovative and cost-effective model for sharing contemporary science exhibitions was introduced, the Blueprint Pack. This provides to venues the concept, research content, designs and intellectual property so that they can reproduce the exhibitions customised to their own location and context. The feasibility of the model was demonstrated by showing *3D: Printing the Future* and *Cravings* in both London and Manchester, and the first external venue to host such an exhibition will be the Beacon Museum in Cumbria, with the 3D printing show in summer 2016.

Festivals and events

The exhibition and gallery developments were complemented by a festival and events programme:

- Antenna Live presented Virtual Vision in April 2015, Helping Hands in April 2015, Speedbird in July 2015, RDM Autonomous Vehicle in August 2015 and Robot Scientist in August 2015.
- *Einstein's Cosmos*, two animated films, were commissioned by the Science Museum for the centenary of the publication of Einstein's general theory of relativity.
- The Time Travelling Operating Theatre Wellcome People Award took place in September 2015. The Imperial College Centre for Engagement and Simulation offered visitors an authentic encounter with surgical practice from the past 130 years.
- What's Your Angle: Uncovering Maths, a weekend festival celebrating the London Mathematical Society's 150th anniversary in collaboration with the interactive theatre company Non Zero One took place in November 2015 and was visited by over 1200 visitors.
- *Star Wars: The Force Awakens* was shown at the IMAX theatre (17 December 2015 2 February 2016) and attracted 26,000 cinema visitors.
- A series of monthly *Lates* events targeting an exclusively adult audience complemented the exhibition and gallery programmes with themes on *Cosmonauts, Ada Lovelace and computing, Churchill* and *Cravings.*

Masterplan

As an evolving programme of capital projects, the Masterplan seeks to make best use of the museum's estate, to implement sustainable and well considered building solutions and invest in infrastructure for future generations. Most importantly, the Masterplan will provide improved public access to the collection and an exceptional visitor experience through beautiful, accessible and appropriate design.

The first major new gallery *Information Age* was opened in 2014. In the current financial year, the Dana Research Centre and Library opened on 6 November 2015 (see "Science Museum – Achievements" above) and *The Clockmakers Museum* received a royal opening on 22 October 2015. The *Mathematics Gallery* closed to the public on 1 September 2015 in preparation for the new *Mathematics: The David and Claudia Harding Gallery* designed by Zaha Hadid Architects. The project budget is £5 million and the gallery is expected to open in late 2016.

Glimpses of Medical History, The Science and Art of Medicine and Veterinary History which housed the medical collections of Sir Henry Wellcome and the Science Museum, closed to the public on 20 September 2015. Around 6,500 objects were decanted in preparation for a move to a new suite of new Medicine galleries, budgeted at £24 million, led by architects Wilkinson Eyre and expected to open in 2019.

Launchpad closed on 2 November 2015 to be replaced by Wonderlab: The Statoil Gallery, a new larger interactive gallery. It will feature new hands-on exhibits, immersive spaces and a show space that will allow visitors to explore different scientific principles in an environment promoting observation and experimentation and appealing to both adults and children. The new gallery is expected to open in late 2016.

Finally, Hat Architects have been appointed to design a new entrance for the museum's group visitors and a new Patrons' Centre, expected to open in 2018 and 2019, respectively.

Learning

As part of the Science Museum's Strategic Ambitions, it seeks to inspire and inform audiences, and increase science literacy. It aims to be the national and international centre of excellence for informal science learning.

- The Science Museum continues to be the most visited museum in the UK for booked educational visits, with around 458,000 visitors this year.
- With the closure of *Launchpad* in November 2015, the team continued to deliver science shows and storytelling through two new studio spaces on the first floor and the Basement Studio. The Explainer team have also been delivering on-gallery activities, demonstrations and object interpretation.
- The monthly evening *Lates* programme for adults attracted 45,000 people and included the unique Tim Peake launch day event.
- Following the pilot of two successful *Astronights* adult sleepovers, the programme has been expanded to include 5 further dates in 2016-17.
- The museum also extends its reach through off-site science learning activities, this year with 90,000 people watching shows, workshops and training events. Of these, around 25,000 were schoolchildren at overseas venues.

The Science Museum has spread its expertise in science research and communication through partnership projects, enabling it to increase its influence in the education, heritage and science sectors:

- With the British Science Association, it has worked with Family Action to deliver events during *British Science Week* and a Buzz Aldrin event
- In July 2015, the Science Museum hosted 10 London schools as part of the Google sponsored 'Day at the Museum' programme. The schools selected to take part were from the museum's partner boroughs, had not visited in the last two years and had high free school meal allocations. The aim was to inspire the next generation of scientists and the Science Museum's evaluation of the programme showed that children's perceptions of science and scientists had been changed though the events. Funding for another year has been received from Google to expand the programme in London and also broaden its reach to the Museum of Science and Industry and the National Media Museum.
- It has piloted new Outreach programmes at Butlins (Minehead) with three further bookings planned for later in 2016.
- With the Association for Science and Discovery Centres and the UK Space Agency, it has delivered *Destination Space*, a national programme of learning activities that explore the skills and careers associated with the Space industry. This was related to the launch of Tim Peake in December 2015. On the launch day itself, it held a 12hour event catering for schools, families and adults.

The Science Museum has a strong reputation for working with universities and other museums and organisations on national programmes. We constantly strive to learn more about how to engage more people with the objects and stories that our museums hold:

- Building Bridges is a three-year project funded by the BG Group that aims to raise students' science literacy and engagement with STEM subjects by offering them a range of inspiring and exciting activities. We completed the second year of the project with a successful family day which included activities led by scientists from the Francis Crick Institute, STEMNET and Imperial College. Over the past year the team has worked with 600 students and their families in our partner boroughs and selected schools in Reading to raise students' science literacy and engagement with STEM subjects. The project is now due to be extended for a further two years until 2017.
- Enterprising Science is a £2.4 million five-year partnership between the Science Museum, King's College London (KCL) and BP. The project is focused on leading research from KCL on 'science capital' and aims to gain further understanding about why some young people become disengaged with science, and to further research how museum experiences, among other factors, can engage and connect young people

and families with science. SMG plays a leading role in the project by developing and disseminating the most effective ways of using museums and science centres as resources for students, teachers and families to help increase their science capital and raise awareness of the value of science skills in any career.

- *Museums and Schools* is a project funded by the Department for Education and Arts Council England that partners national museums with smaller regional museums. The Science Museum and SS Great Britain Trust in Bristol have formed a partnership with the aim of increasing the number of high-quality educational visits to local museums by schools where participation in cultural learning activities is low.
- We have hosted many international delegates who visit us to find out more about our work, including guests from Singapore, Denmark and China.

The Science Museum continues to deliver high-quality training programmes across the globe to teachers and STEM professionals, promoting the use of objects as resources and also best practice in science communication and public engagement:

- It delivered teacher training to 516 teachers nationally and internationally. This included science engagement training for 127 local teachers built onto annual visits it makes to the Hong Kong Science Alive festival at the request of the British Council to deliver a variety of shows and workshops to around 10,000 children over a three-week period.
- It delivered science engagement training to over 195 scientists, including those from the Royal Society and the Royal College of Pathologists and all scientists who have delivered as part of Antenna Live and other contemporary science events such as footfall festivals.
- It has also continued to run its popular *Teacher Zone* events during *Lates* events once a term, reaching 574 teachers . These events are designed to showcase the museum's offer for schools, give teachers the chance to take part in activities, trial our resources and talk to our experienced Learning staff about how the museum can support their teaching.

The Science Museum strives to be the most accessible and inclusive museum in the UK. This year it has continued to provide deaf-led tours as well as our renowned *SIGNtific* programme of shows and workshops using BSL and dual interpreters. The *Early Birds* programme, for families who have children on the autistic spectrum, has continued to be extremely popular and it has launched a Night Owls programme for older children/adults as well as piloting a *SENsory Science Night*. It has trialled a new programme of audio-interpreted events for the visually impaired and blind to attract a new audience to the museum.

Collections

The museum continued to develop its collections in support of its programmes. Notable additions to the collections included:

- Biped robot, 1987-1997, designed by David Buckley and made by the Shadow Robotics Project Group, one of the first successful biped robots built outside Japan.
- Toy duck, 2014, used by the Open University Ptolemy team to choose the landing site of Philae lander on comet 67P/Churyumov–Gerasimenko during the Rosetta probe mission.
- Digital Optical Module (DOM), after 2005, spare to one of 3,600 modules that form the IceCube neutrino detector at the South Pole.
- Biosure HIV self-testing kit, 2015, the first over-thecounter self-testing kit to go on sale in the UK following the controversial legalisation of self-testing in 2014.
- Fourteen engineering plans for Tower Bridge (1886-1894), from the office of John Wolfe Barry.
- Manuscripts related to Hertha Ayrton (1854-1923), the first woman elected to the Institution of Electrical Engineers, and the first woman to read a research paper at a Royal Society meeting.
- Archive of John Evershed (1864-1956). The British astronomer is associated with the Evershed Effect in sunspots. Some of the objects will feature in a future exhibition about the sun.
- First edition of one of the most important celestial atlases, *Uranographia, sive astrorum descriptio*, by Johann Elert Bode, 1801.

Research and publications

The Science Museum has, over the last financial year, made decisive steps in its strategic ambition to be at the forefront of scholarship and innovation for science museums. This year saw the strengthening of the 'three pillars' that support its research enterprise via the programme of its research centre, postgraduate teaching and its publication of research, notably via the E-Journal:

• The Dana Research Centre and Library, which opened on 6 November 2015, has the ambition of becoming one of the most stimulating national and international centres for the history of science and technology. This will be achieved through an amalgam of ready access to the entirety of its library and archive and the concentration of research students, associates and fellows working on funded projects in the same building. A programme of conferences, workshops and seminars enables the free exchange of insights and Research and Science Museums, the conference marking the formal opening of the Dana Research Centre and Library on 31 March - 2 April 2016, is an example of this. The Science Museum completed three projects funded by the Arts and Humanities Research Council: Alison Hess completed her collaborative project, Who Cares? Interventions in 'Unloved' Museum Collections. The Music, Noise &

Silence research workshop series, which helped define a potential exhibition on science, technology and music, closed on 1 December 2015. Robert Bud completed his leadership fellowship, An Old Keyword in a New Civilisation: Applied Science Between the Wars.

- In June 2015, the Science Museum received news from the Arts and Humanities Research Council that it had successfully achieved funding for a second Collaborative Partnership award, under which it will award a total of 18 studentships, with six each commencing in 2016-18. Its enlarged consortium includes, in addition to the SMG museums and British Telecom Archives, The Royal Society and The Royal Geographical Society. The Science Museum is focusing these projects on its key priorities, including research towards future exhibitions. It also taught the third cohort of MSc students in Curating Science and Technology, its option for their Science and Technology Studies course.
- The Science Museum Group Journal published its third and fourth issues. Issue 3, Communications, was the first themed issue, and featured articles related to the Science Museum's new Information Age gallery, and on contemporary and historical practice of science communication and practice. Across the year, Science Museum employees continued to publish articles and contributions to books, and to deliver conference and seminar presentations, reinforcing its contacts with leading universities. These will be listed in the Science Museum's new Research Annual Report.

Future plans and challenges

An overarching need to make SMG more financially resilient will continue for the foreseeable future, reducing the degree of reliance on Grant in Aid. Although a more stable funding settlement was announced for the period up to 2019-20, the potential for further cuts to Grant in Aid cannot be ruled out. SMG will continue to actively identify efficiencies, and to increase unrestricted income. Two major new sources of unrestricted income are planned at the Science Museum: in October 2016 the new interactive gallery *Wonderlab: the Statoil Gallery* will replace *Launchpad* as a new charged-for attraction and new, dedicated corporate hire spaces will be delivered in 2017-18.

A key opportunity for SMG is how to further realise and maximise the benefits of being a group of museums, whilst retaining the individual character of each site and acknowledging local context. This has begun explicitly in Collections Services and Public Programmes, but will be increasingly rolled out across all functions. This will lead to new ways of working and greater efficiency and consistency. Over the next two years the Science Museum is delivering some of its most ambitious Masterplan developments and exhibition programming of recent times. Next in the major exhibitions programme come Wounded: Conflict, Casualties and Care and Robots, followed by Wonder Materials: Graphene and Beyond, an exhibition on graphene and nanoscience generated by the Museum of Science and Industry and exhibited there first. An India season is planned for 2017. Two new medium-term exhibitions on contemporary agriculture and on the future of flight are in development. The Science Museum Masterplan will see one-third of its overall floor space repurposed or upgraded by the end of 2019. In addition to Wonderlab: the Statoil Gallery and Mathematics: the David and Claudia Harding Gallery planned for 2016, infrastructure projects, such as lift upgrades (expected to open in 2019), will improve circulation across the museum. Finally, a new patrons' centre and dedicated event spaces for hire (expected to open in 2018) will provide the museum with flexibility to deliver a range of public and commercial events. The Science Museum has given a good deal of consideration to maintaining the quality of the visitor experience during the extensive disruption, caused by an ongoing programme of capital development, for example, by providing alternative spaces and programmes for families and schools. In the longer term, work on the biggest gallery re-development project for the *Medicine* Galleries will continue. Planning has begun on Science *City*, showcasing science in the eighteenth and nineteenth centuries in London and on future phases of the Science Museum Masterplan.

Museum of Science and Industry (MSI)

Mission: To inspire all its visitors, including future scientists and inventors, with the story of how ideas can change the world, from the industrial revolution to today and beyond.

Vision: To be a world-leading, inspirational museum about the potential of science and industry to change lives.

Objectives

The Museum of Science and Industry's objectives are:

- Use original research and thinking to engage and inspire people with its unrivalled science and industry collections and its unique site
- Transform its site by revealing its stories and breathing new life into its heritage buildings
- With a deep understanding of its audiences, create a vibrant cultural programme that connects people with its museum's story, its collections and contemporary science
- Build an international reputation as a museum of ideas that change the world, and as a museum that does things differently
- Be an organisation that is extrovert, entrepreneurial, efficient and dedicated to the development of great people
- Provide an award-winning visitor experience.

Audiences

This financial year, the Museum of Science and Industry produced an Audience Plan for 2015-2020. This sets three broad objectives to:

- Grow its visitor numbers to 800,000 by 2020, with a focus its five target groups: Greater Manchester Pre-Schoolers; Fun and Learning Families; Older Self-Improvers; Curious Young Adults; and Education Groups.
- Improve the visitor experience year on year for all visitors, with a focus on Greater Manchester Pre-Schoolers and Fun and Learning Families, among whom satisfaction levels are currently lower.
- Increase visitor spend per head through an integrated approach in which the commercial offer enhances the visitor experience.

In 2015–16, it received 707,000 visits, 4% up on last year. 54% of those visiting the museum came as part of a family group, with a significant proportion visiting more than once a year. Adults visiting independently made up 36% of the overall visitor numbers and the remaining 10% of visitors came in educational groups.

Achievements

In terms of profile, the Museum of Science and Industry aims to build an international reputation as a museum of ideas that change the world, and as a museum that does things differently.

- This year Manchester began a year-long celebration as European City of Science. The Museum of Science and Industry is playing a central role in the celebrations, with its Director chairing the city's Steering Group for the public programme.
- Museum staff visited Wuhan, China, as part of the UK Trade & Investment Trade Mission attending the signing of Memoranda of Understanding between Wuhan City and Manchester City Council and the opening of the new British Consulate General Office in Wuhan. Subsequently a delegation from the Wuhan Science and Technology Museum visited MSI and signed a Memorandum of Understanding with regard to staff exchanges and touring exhibitions.
- The Museum of Science and Industry launched its new visual identity and a new website and its first generic marketing campaign based on detailed audience research.
- The museum won the Lever Prize awarded by the North West Business Leadership Team – for a forthcoming collaboration with Liverpool's Foundation for Art and Creative Technology (FACT), exploring the interaction between arts and science; and also excelled at the *Manchester Evening News*'s City Life Awards, winning the Best Event category for the Manchester Science Festival's adult ball pool.

Exhibitions, galleries and events

The museum's overarching objective is to create a vibrant cultural programme that connects people with our museum's story, its collections and with contemporary science.

• This year the museum has delivered three new installations: the *Wellcome Image Awards*, on loan from the Wellcome Collection; *Cravings*, a version of the successful *Antenna* exhibition at the Science Museum; and *Evaporation*, an acclaimed art-science installation by Tania Kovats, produced through a Lovelock commission. A collaboration with the Manchester Art Gallery enabled artist Yu Chen Wang to undertake a residency at the museum, producing work for the exhibition *The Imitation Game*. In the coming year, Masterplan-related activity on the museum site will reduce the amount of space for smaller exhibitions but the museum is working to produce a major exhibition, *Wonder Materials*, on the subject of graphene. Future exhibitions will include *Robots* (2017) and *The Spark of Life* (2018).

- The museum produced and delivered the ninth Manchester Science Festival, also launching the city's year-long public celebration of Manchester's designation as European City of Science. With over fifty partner venues involved across the city and 120,000 members of the public participating, this year's festival was the most successful ever and is easily England's most popular science festival. A vibrant contemporary science programme throughout the year included monthly Platform for Investigation events where scientists engage with visitors and regular Lates events for adults.
- Other highly successful events this year included MakeFest, a weekend long festival, with over 50 makers from across the region, helping visitors get to grips with making of all kinds, including sewing, soldering and coding, and Play It!, the museum's first ever gaming event, which attracted over 13,000 adults and young people, many of them first time visitors to the museum.
- Following the international success of the museum's citizen science experiment #HookedOnMusic which identified the nation's catchiest song as The Spice Girls' *Wannabe* the museum has worked with researchers to develop a new version of the online game at the heart of the experiment into a therapeutic tool for use with Alzheimer's patients. The second phase of research is currently underway.

Masterplan

The museum's overarching objective is to transform its site by revealing its stories and breathing new life into its heritage buildings. Significant progress has been made this year against a set of deliverables:

- A revised Masterplan was approved by the SMG Board of Trustees in July 2015.
- Its first major capital project, to create a new Special Exhibitions gallery, commenced. Following a competition, architects Carmody Groarke were appointed and have completed concept design to RIBA Stage 2.
- Construction of the Ordsall Chord rail link was delayed pending a judicial appeal, but has now commenced and the connection between the Museum of Science and Industry site and the main line has been severed. The Museum of Science and Industry has worked with Network Rail to propose a revised landscaping scheme for the area of land west of Water Street, adjacent to the museum site. This will be the subject of a separate listed building application to be submitted early in 2016-17.
- The Museum of Science and Industry is in productive discussions with the developers of the adjacent St John site aiming to reach mutually beneficial design proposals that may result in permeability between the two sites. Separately, it is in discussion with Manchester City Council as clients for the Factory, to explore potential for collaboration.
- All car parking on site ceased, and the museum's lower yard has been cleared of skips, as part of a concerted drive to improve the appearance of the museum's outdoor spaces.

Forthcoming Masterplan projects include development of detailed schemes for public realm spaces and for developments of galleries and learning spaces along the museum's northern boundary. In addition, work is commencing to develop the museum's first major new narrative gallery, *Cottonopolis*.

Learning

- This financial year the museum piloted and developed a new set of resources for families with pre-school children, which is one of its target groups.
- For the first time, the museum has focused on developing resources for secondary schools and this year new programmes were developed for Key Stage 3.
- This financial year the museum ran three highly successful Experimental Weekender festivals, designed to engage schools and family audiences – particularly those on low incomes - with contemporary science themes: Graphene, Light and Wearable Technology.
- The Museum of Science and Industry runs the Greater Manchester STEMNET programme and this year has more volunteer STEM ambassadors than ever before: over 1,100 enthusiastic volunteers working in over 95% of Greater Manchester's state secondary schools. This financial year, ambassadors participated regularly in linking schools with the Museum of Science and Industry and supporting the delivery of new contemporary science programming. A challenge for the future concerns uncertainty over the future funding for this highly successful national scheme.

Collections

The museum's overarching objective is to use original research and thinking to engage and inspire people with its unrivalled science and industry collections and its unique site.

Recent additions to the collections have included:

- A pair of 3D printed briefs made by Tamicare of Rochdale. These are made of Cosyflex, the world's first process for 3D printing finished textile products.
- A collection of apprentice's tools made and used at the Linotype and Machinery Co in Broadheath, Trafford in the mid-1960s.
- New material relating to the Metropolitan Vickers Electrical Company, including apprenticeship records.
- Collection and archives relating to the development of the microchip and solar cell technology at Ferranti in the early 1960s, when the company was the only one in the UK developing solar energy as an alternative power source.

Research and publications

The museum has shifted its approach to research towards actively seeking research collaborations and offering to host workshops for key academic and community colleagues. Open events for university colleagues have taken place and visits made from groups such as the Royal Photographic Society, the ReCREATE Research Network and the Creative Hands Foundation, a project studying Manchester's links with the West African Textile trade. The Museum of Science and Industry participated in University of Manchester's REALab scheme, through which a group of post graduate researchers investigated how the museum might generate more diverse stories in forthcoming galleries.

The Museum of Science and Industry currently hosts three Arts and Humanities Research Council Collaborative Doctoral PhD studentships exploring the rise and fall of the Manchester Motor Industry 1896-1939; electricity supply and consumption and the history of the museum's site.

Future plans and challenges

The greatest opportunities and challenges for the coming months and years look set to lie with the development of the area of the city in which the Museum of Science and Industry sits. Significant commercial and residential developments along the museum's northern border, including the construction of The Factory (a new arts centre), and in connection with the Ordsall Chord, should increase footfall to the museum and could provide some exciting opportunities for new programming and shared facilities. These developments could prove transformational for the museum's place in the city.

National Railway Museum (NRM)

The National Railway Museum comprises a main museum in York and a second museum, Locomotion, in Shildon, County Durham.

Mission: To inspire people with the National Railway Museum's passion for railways: shaping collective memories; demonstrating contemporary significance; and inspiring the next generation of engineers.

Vision: To be the prime showcase in the world for the huge impact of railways in the past, present and future, on Britain and the wider world.

Objectives

The museum's objectives in 2015-16 were to:

- Develop a world class programme of scholarship
- Revitalise the national collection's management, presentation and care
- Develop our modern railway strategy
- Tell bigger, bolder stories that engage new nonspecialist audience segments
- Progress our Masterplan
- Develop strategic partnerships with relevant organisations
- Create an efficient and effective organisation and focus on opportunities to raise additional income

Audiences

An innovative public programme, including an awardwinning collaboration with York Theatre Royal to bring railway stories to life for new audiences, saw the National Railway Museum maintain visitor numbers against 2014-15. This outturn is in line with its baseline for those years where the programme does not include exceptional events like the Mallard 75 A4 Reunion in 2013-14 which delivered a very significant visitor number uplift. It was very encouraging to see an increase in the volume of visits from the key target audience of positive parents.

This financial year, 750,000 people visited the National Railway Museum in York and 213,000 visited its site in Shildon. These numbers are on a par with the previous year and Shildon celebrated its landmark 2 millionth visitor.

Achievements

After undergoing a ten-year, £4.2 million programme of repairs and restoration by the National Railway Museum, *the Flying Scotsman* made its inaugural journey from London's Kings Cross station to York on 25 February 2016. *Flying Scotsman* is the world's most famous steam locomotive, built in 1923, and named after the already famous service that had been running from London to Edinburgh since 1862.

The museum continues to be recognised for its excellence with a number of high profile award wins. Accolades were received for the 2013 Mallard 75 event for which the National Railway Museum was awarded Bronze for Tourism Event of the Year in the Enjoy England Awards for Excellence 2015. The National Railway Museum won the York Press Business Award for Best Tourism & Hospitality Business of the Year 2015, recognising its strength in corporate events and conferencing. Its innovative collaboration with York Theatre Royal on two theatrical productions was recognised by winning the Heritage Railway Association's Interpretation Award 2015. The quality work delivered by the Learning team at the National Railway Museum in Shildon was recognised by their achievement of the Sandford Award. This award is an independently judged, quality assured assessment of education programmes at heritage sites and museums across the UK.

The public programme, its Masterplan programme and academic research continue to be central to the delivery of the National Railway Museum's future vision and it has made significant progress in strengthening its links with the rail industry and placing itself at the heart of contemporary debate. This was highlighted by George Osborne's announcement of a new National Infrastructure Commission live from the National Railway Museum in York against the backdrop of British engineering achievements.

The launch of a new miniature railway ride, the growing profile of the *Countess of York* dining carriage and the ongoing success of the Visitor Giving programme for donations continue to secure its financial position. Its collaboration with York Theatre Royal also delivered additional revenue generating opportunities.

Exhibitions, galleries and events

The National Railway Museum created a changing programme of innovative high quality temporary exhibitions. This work sets the course for the delivery of larger scale destination exhibitions in a new temporary exhibition gallery to be delivered as part of the Masterplan. Destination Stations brought the story of station architecture right up to date in line with the museum's focus on developing its contemporary relevance. This year exhibitions included:

- *Playing Trains* (20 March 6 September 2016) was aimed at an under-7s audience and explored the fascination young children have with trains and railways through an interactive and immersive space. Children's book illustrator Sam Usher worked with the designers on the project.
- Destination Stations opened on 25 September 2016 in collaboration with McAslan and Grimshaw Architects and Network Rail. The exhibition showcased major architectural developments in stations from the past to the future and their impact on UK passengers, cities, technology and heritage. Elements from the exhibition will tour to the Museum of Science and Industry as part of SMG's new focus on sharing exhibitions content across the Group.
- Starring Scotsman opened on 25 February 2016 to tie in with the launch of the Scotsman Season. It focused on the celebrity of the world's most famous locomotive. For Easter, the National Railway Museum created a line up event called Stunts, Speed and Style which saw Flying Scotsman join three other locomotives famous for pulling the express route from London to Edinburgh. Alongside this, Service with Style, which is a binaural immersive audio experience proved to be a big hit with visitors with one 100% positive feedback given in exit surveys. It took place in three carriages in the Great Hall and allowed the museum to test unique ways to deliver content as part of charged for, value-added activities.
- The Hidden Lives of the Coal Traders (24 August 4 October 2015), a touring exhibition from the National Coal Mining Museum for England, was the major exhibition at the National Railway Museum at Shildon.. The exhibition followed the path of the coal from the mines of the North East to the London Coal Exchange, illustrated through the artworks in the collection of the Coal Meters.

Events

The National Railway Museum's strategic emphasis on telling bigger bolder stories and working in collaboration with partners was delivered through its key partnership with York Theatre Royal. The collaboration brought the story of railways alive for new audiences, inspired by the museum archive and using the National Collection of rail vehicles as a backdrop to dramatic theatrical performances. The National Railway Museum also participated in partnership events held throughout the City of York.

 In Fog and Falling Snow (26 June – 11 July 2015) was an exciting community production with York Theatre Royal, Pilot Theatre and 430 volunteers at locations around the museum and began with *Rocket* arriving on the turntable. The 14 performances received excellent reviews, including a four star rating from the Guardian.

- The Railway Children (31 July 5 September 2015) returned to a 1000-seater purpose built theatre. The award winning adaptation co-produced with York Theatre Royal was first staged at the museum in 2008 and this time starred *No. 5775 Pannier Tank*, the locomotive from the well-known original 1970s film. The show received 5 star reviews.
- The TakeOver Festival in October 2015 saw was an arts festival run by young people aged 12-26 during the October half-term, again working with York Theatre Royal. The event reached out to a new, younger audience and featured music busking, poetry writing, making activities and an array of theatrical performances in and around the collection.
- Locos in a Different Light in October 2015, part of the National Railway Museum's partnership with the broader annual *Illuminating York* festival, showed locomotives brought to life through spectacular lighting as the results of the National Railway Museum's national competition for students of theatrical lighting design.
- More than 50 large events were held at Shildon. The Spring Steam Gala and Diamond Deltic events at Shildon in May 2016 and October 2016 attracted thousands of visitors. The latter marked 60 years of the post steam icon. A diverse new programme including the Steampunk Spectacular, linked to the region wide celebration of the 190th anniversary of the opening of the Stockton & Darlington Railway, brought a new audience. Many events were held in partnership with local groups including a Community Day with County Durham and Darlington Fire & Rescue Service.

Masterplan

The National Railway Museum's Masterplan sets out how it will transform our York site over the next decade and grow visit numbers to over 1 million a year by 2025. It highlights our museum's aspiration to be the prime showcase in the world for the huge impact of railways in the past, present and future, on Britain and the wider world.

The potential transformation of York's biggest brownfield site, which adjoins the National Railway Museum and includes land owned by it, offers the greatest opportunity for the museum since its 1975 opening. The area, known as York Central and already dubbed the future "King's Cross of the North", was awarded Enterprise Zone status in the Chancellor's Autumn Statement and plans for its redevelopment were put to a public consultation in January 2016. It has the potential to deliver a new city centre for York and a transformed National Railway Museum would be its cultural heart.

The first major step towards delivering this vision will be the redevelopment of the National Railway Museum's Great Hall, which it aspires to complete by 2021. Its transformation will see a new thematic focus and dramatic use of theatre and movement to bring the space and stories alive.

Learning

The National Railway Museum reached out to new and under-represented audiences through a revamped learning programme and collaborations with partners to deliver new activities. It also continued its strategic focus on delivering STEM activities. 37,000 people visited in booked educational groups, with 30,000 of these being school pupils. The Explainer team helped to bring the story of railways alive through workshops, talks, tours and collections activities, amassing over 345,000 instances.

At Shildon over 5,000 children and 1,800 adults participated in formal educational activities. There were over 25,000 instances of children participating in organised educational activities in addition to 9,000 adults. The museum continues to expand its educational offer and now provides three packages for Key Stage 1 and six packages for Key Stage 2. An outreach programme for senior citizens was established. The museum continued to work with Beamish Museum and to develop a Key Stage 2 STEM package which focuses upon the history of electric locomotives.

Highlights of this year's learning programme included:

- Tomorrow's Engineers as part of Tomorrow's Engineers Week. Along with professional institutes such as the Institution of Mechanical Engineers a day of high quality learning for nine local secondary schools was delivered.
- In collaboration with York Theatre Royal Youth Theatre, three different age groups ranging from age 5 – 14, which are currently under represented, were engaged through theatrical rehearsals and performances.
- The summer activity programme, *From Steam to Stage*, was also delivered in collaboration with York Theatre Royal and brought The Railway Children to life through interactive theatre and set modelling. New skills were learnt by the team through the training and delivery of these activities done jointly with the theatre team, which will be applied to the National Railway Museum's future learning programmes including its First World War activities in 2016. They will also inform its approach to learning within the Masterplan redevelopments.
- A new learning programme was created for the *Scotsman Season*. This includes the *Need For Speed* science show. Closely tied into the collection, this show explores the obsession with making trains run faster, led by the historical marketing stunt of the *Flying Scotsman* being the first locomotive to officially reach 100 miles per hour. Alongside this is a Scotsman model making activity which, through its facilitation, is designed to deliver key STEM messages around the principles of steam power.

Collections

Great progress was made towards the National Railway Museum's aspirations to revitalise the management, presentation and care of its collections and achieve the highest international standards. A new Conservation and Collections Care Manager joined the team to reinvigorate this focus and the National Railway Museum has two full time conservators for the first time. It completed the 10 year project to restore Flying Scotsman to working operation ahead of its official return to steam in February 2016. As part of the preparations for the broader Scotsman Season the National Railway Museum also undertook conservation work on the LNER Dynamometer Car in York. The Deltic 55002 King's Own Yorkshire Light Infantry was also restored into her original British Railways livery and D9002 numbering by the workshop team of staff. volunteers and placement students at Shildon.

Significant acquisitions included:

- East Indian Railway watercolours, 1851 1862. A collection of fourteen original watercolours and pencil and ink drawings depicting the construction of the East India Railway from Calcutta to Benares, from the Personal Estate of the Railway's Chief Engineer George Turnbull.
- Soviet Railways Leaflets and Handbills, 1963. Collected by British Railways employee, James Collin, when he visited Moscow in 1964, the imagery and style make an interesting contrast with the launch of British Rail's new Corporate Identity in 1965.
- Papers relating to *Flying Scotsman*, 1960s-1970s. The late Brian Hastings was the publicity officer for Flying Scotsman Enterprises, His papers, photographs and memorabilia document *Flying Scotsman*'s activities in the late 1960s, including the remarkable tour of North America which began in 1969.
- Notebook of Cyril A. Harrison, covering 1915-1919. A conscientious objector, Harrison used this notebook during his service as a Medical Orderly on a First World War ambulance train in France.
- Cartoon on the resignation of Dr Richard Beeching, 1965, by Cummings. Showing Beeching disembarking from a train driven by Prime Minister Harold Wilson, the cartoon reflects Beeching's difficult relationship with the Labour Government.
- Uniform and Presentation Standard booklet, 2013. Issued by the railway company East Coast to its staff, showing how much attention to detail the modern railway industry puts into managing its image.

Research and publications

The National Railway Museum's work to develop a world class programme of scholarship and developing academic partnership programmes was facilitated by two key appointments; the new roles of Associate Archivist Sound and Film and Research Fellow.

The Institute of Railway Studies's (IRS's) seminar programme was reintroduced in 2015 and has featured a range of talks from a variety of speakers including museum curators, current collaborative doctoral programme students, and qualified academics including IRS PhD graduates.

The National Railway Museum at Shildon hosted the *Friends of the Stockton and Darlington Railway World Heritage Site Conference* in June 2016. The conference looked in depth at future plans for the preservation and interpretation of the Stockton and Darlington Railway and plans to the celebration of the 200th anniversary of the railway in 2025.

The team also supported the *Scotsman Season* with academic research and also made a vital input into the development of the Masterplan and planning for future exhibitions. Publications this year included Andrew McLean's book *The Flying Scotsman: Speed, Style, Service,* an illustrated book featuring many images not seen in print since the 1930s and before. Over the year curators have given talks, lectures and interviews to just under 3,000 people, including museums, Network Rail graduates, rail industry professionals, community groups, media and businesses.

Future plans and challenges

The National Railway Museum will step up its focus on its Masterplan programme and progressing its plans for the redevelopment of the museum's Great Hall. Its *Scotsman Season* will continue until the end of May 2016 when its attention will turn to marking 100 years since the First World War. Its new exhibition will tell the forgotten story of the ambulance trains used to evacuate sick and injured troops on an unprecedented scale and the opportunity to step inside a recreated ambulance carriage to discover what life was like on board.

The museum's focus on STEM will continue with its new *Future Engineers* event engaging young people with the science and engineering behind the railways.

Its partnership with the Great Central Railway and Leicester City Council will continue to develop plans for a new railway museum at Leicester North featuring items from the National Collection.

The NRM will continue to grow its contemporary relevance through a new series of *Thought Leadership* events, facilitating debate and discussion on issues facing the rail industry.

National Media Museum (NMeM)

Mission: To explore the science and culture of image and sound technologies, and their impact on our lives.

Vision: A dynamic and inclusive museum, internationally recognised for its world class collections and for using them in engaging, meaningful and inspiring ways.

Objectives

The National Media Museum's objectives are:

- To develop and implement its plans for future financial sustainability
- To care for, develop and share its collections and set new standards
- To ensure that every visitor will have a consistent cultural experience, and engage with a physical or virtual environment of the highest quality
- To change perceptions and practice through participation, community engagement and partnerships, to enrich its work and its visitor offer
- To ensure that learning will be part of everything that it does, with a focus on science and technology, drawing inspiration from its collections

Further work has been undertaken this year to strengthen the STEM (Science, Technology, Engineering and Maths) focus of the museum. This has included a review and refresh of the museum's learning offer to align it more closely with the STEM agenda and a new approach to exhibitions and events. It has also been agreed that, in future, the museum's narrative will encompass image and sound technologies, drawing more widely on SMG collections to enhance its programme. This has also informed the development process over the last twelve months for the new Interactive Gallery, which will explore the scientific principles underpinning light and sound.

Audience

This year the National Media Museum welcomed 460,000 visitors. This was 11% ahead of last year. It also welcomed an additional 17,000 family visitors to the museum compared to the previous year. The most significant periods of growth occurred over the summer months of July, August and September with a 27% increase in general visits compared to the same period in the previous year, as well as the most successful February half term for three years with 29,000 visits.

There was also an increase in cinema attendances of 26% year on year. Of those 35,000 were admissions to the new digital IMAX screen which opened in September 2015. This has also been the first full year of the museum's partnership with Picturehouse Cinemas.

Its education group audience of 30,000 visitors this year was 4% ahead of the National Media Museum's internal target. The first year of Bradford Council's £1 million, three year investment in revenue funding to support the new, STEM focused offer saw the National Media Museum deliver 122,000 instances of participation across all visitors, compared to 106,000 last year.

Achievements

Exhibitions, galleries and events

Exhibitions this financial year included:

- Drawn by Light: The Royal Photographic Society Collection (21 March – 21 June 2015) featured some of the most famous names in the history of photography, and explored how photography has shaped its perception of the world. The exhibition will tour to the Reiss-Engelhorn Museen in Mannheim, Germany, in 2017.
- Light Fantastic: Adventures in the Science of Light (18 July – 7 November 2015) marked the UNESCO Year of Light and also heralded a new approach to the public programme at the museum, combining collections items, art installations, workshops and demonstrations.
- Manchester-based artist Liz West created an installation titled *An Additive Mix* which took the principle that white light is composed of different colours of the spectrum (additive colours) and placed people in the centre of the phenomenon. During the first three months of the exhibition's run the Museum received 25,000 more general visits than in the comparable period of the previous year.
- *Revelations: Experiments in Photography* (20 November 2015 3 February 2016) moved from Media Space at the Science Museum to the National Media Museum and explored the history of the enormous influence of early scientific photography on photography in modern and contemporary art.
- Great Interactions: Life With Learning Disabilities and Autism (27 February 2016 – 10 April 2016), an exhibition by photographer Polly Braden was delivered in partnership with MacIntyre, a charity that provides 1,500 children and adults with learning, support and care.

Foyer displays

Part of the museum foyer has been given over to small displays, many produced by working with partner organisations and the public to reflect the public programme and local or national initiatives.

- Angles of View (8 June 11 July 2015). A photography exhibition with Skippko, a Leeds based community art charity.
- *Everest* (14 September– 1 November 2015). Photography exhibition using the Museum's collections to mark the opening film of the newly refurbished IMAX screen.

- *Portrait of the Poppy* (5 November– 29 November 2015). Vintage and modern photography exhibition, presented in association with the Royal British Legion.
- Star Wars: the Fans Awaken (12 December 2015 31 January 2016). Fan-art exhibition drawing on local and international artists' contributions marking the return of the film franchise in IMAX screen.
- Hola Mahalla (26 February 17 April 2016). Photography exhibition of a little known Sikh festival, with Bradford-based artist Darshan Singh.

Partnership events

The museum has worked with various local and national partners to host one-off events, extending the museum's reach and reflection of its communities, including:

- *Eid Qawwali* (24 July 2015). An evening of music and poetry in Pictureville Cinema hosted by Bradford Muslim Women's Council
- Jim al-Khalili and Dallas Campbell (9 September 2015). Lectures from leading science communicators as part of the British Science Festival
- An Evening with Jon Snow (9 October 2015). The broadcaster in conversation with Bana Gora, CEO of Muslim Women's Council and Professor Lord Kamlesh Patel OBE
- The Battle of the Somme (opened on 11 March 2016). A display of copy prints from the Daily Herald Archive at the Wright Watson Centre in partnership with Inspired Neighbourhoods CIC, supplemented with material from the local community, beginning a rolling programme of partnership activity.
- Dara (23 March 2016). A screening of National Theatre and Ajoka Theatre production Dara plus post event Q&A presented in collaboration with Just West Yorkshire

Film programme

The museum's general film programme is delivered by Picturehouse Cinemas through a management agreement which began in November 2014 with the aim of putting the museum on a more sustainable financial footing. Cinema admissions have increased year on year by 19,000.

Enabled by a loan from DCMS, the IMAX cinema was upgraded to digital. This allows a much wider range of educational and full-length "blockbuster" titles to be shown, attracting a younger audience to the biggest screen in the region.

Museum film activity this year included the *Widescreen Weekend 2015.* This 19th edition of the festival dedicated to the history and future of cinema technologies attracted 130 delegates from 12 countries, generated around 1,000 paid public ticket sales and a total of around 3,000 admissions over the weekend. A keynote speech was delivered by Douglas Trumbull, a Hollywood special effects pioneer. Other guests included Professor Sir Christopher Frayling, Oscar winning effects supervisor Paul Franklin (*Interstellar*) and David Strohmaier and Randy Gitsch – internationally renowned experts in the restoration of Cinerama films. The museum also continues to augment the core film programme through collaborative programming with local and national partners. Events are designed to build partnerships in the city and provide extended opportunities for local audiences. Events in 2015-16 included:

- Press showing of: *Miss You Already* (16 September 2015). Promoting the release of a film set in Bradford to regional press in association with Bradford City of Film, Welcome to Yorkshire and Creative England
- A Taste of Honey with Professor Melvyn Stokes (23 September 2015). A special 35mm screening with introduction and post-film discussion contributing to the UCL research project, Cinema Going in the Sixties
- *The Wizard of Oz* (10 October 2015). A screening to tie in with Bradford's Echoes of Oz Festival
- Into Film Festival Screenings (4 and 10 November 2015). Free screenings for local schools as part of a nationwide festival programme
- An Afternoon with JB Priestley (31 January 2016). JB Priestley related films and clips presented in collaboration with the JB Priestley Society

Film partnership activity

The museum continues to act as the base for rural cinema project Cine North, which now operates in 22 Yorkshire and 25 Cumbria venues. The scheme partnered with the British Film Institute (BFI) to take the national "Love" season and *Britain on Film* archive programming into rural locations.

The BFI Bradford Film Academy project is a youth filmmaking and skills programme funded by the BFI. The Bradford Academy was supported by the museum through access to screenings and the showcasing of new work. Young people on the scheme were given free tickets to elements of *Widescreen Weekend 2015*.

Masterplan

Supporting SMG's strategic objectives and the National Media Museum's mission and vision, its Masterplan aims to transform the museum site in key phases.

The upgrade of the museum's IMAX cinema to digital has allowed more IMAX releases to be shown, including "blockbusters" such as *Spectre* and *Star Wars: The Force Awakens*, attracting new audiences. At the same time the opportunity was taken to improve the seating and allround experience. This will continue with the renovation of Pictureville Bar, enhancing another of the museum's three cinemas, all of which are now commercially managed on its behalf by Picturehouse Cinemas.

The next phase will be a major redevelopment of new object rich permanent galleries. With new and unique interactive exhibits of world class quality and a demonstration space for spectacular shows, the new gallery will be clearly linked to the museum's key STEM themes and the scientific principles which underpin its collections. The new £1.5 million Interactive Gallery is expected to open in March 2017. The next phase of the National Media Museum's Masterplan will be the delivery of new object-rich, permanent galleries that celebrate the National Media Museum's collections. The *Treasures Galleries* will transform the third and fifth floors of the museum to showcase the museum's unique and significant objects, which include some of the finest, and earliest examples of technology from photography, film and television. They will also draw on the wider SMG collection to broaden that story to cover sound, as well as other light based technologies.

Learning

This financial year the National Media Museum's learning programmes have been strongly anchored in science and technology, linked heavily to its collections and demonstrate a step change in the type of learning it delivers. It aims to embed science in all its learning programmes, forging new partnerships with schools, families and community groups to grow science capital in those audiences.

Contemporary Science Festivals

With support from BIS and DCMS, the National Media Museum delivered three Contemporary Science Festivals designed to engage local schools, families and young adults from lower socio-economic backgrounds with contemporary research.

- The first festival (spread over five days from 1 to 23 July 2015), was focused on the theme of light. It included two days of schools programme, a family weekend and a *Lates* event, attracting 4,700 visitors in total.
- The second festival (spread over three days from 10 to 13 September 2015) *CSI: Bradford* was themed around the science and technology of crime investigation. It attracted over 4,900 visitors.
- The third festival (spread over six days from 14 to 20 March 2016), called *Make some Noise*, investigated the science and technology of sound and formed part of *British Science Week* 2016. The festival programme comprised two Key Stage 2 and one Key Stage 3 school days, a *Lates* event and family weekend. It attracted 4,335 visitors.

Family Programme

The family programme underwent a strategic change to embed STEM in the National Media Museum's offer. The aim was to engage families, especially those from lower socio-economic backgrounds, with informal science learning, using its collections in an inspiring and memorable way.

The summer offer explored the applications of light, which is fundamental to many of the museum's collections. There were over 25,000 instances of participation from visitors. The National Media Museum's autumn period continued with the theme of light, in partnership with *The Big Draw*. Activities focused around local scientists and how they use drawing in their careers to show creative science in the real world. Other activities included light drawing, tinkering with film, and DIY LED coding workshops.

The February Half term, in association with *Horrible Science*, focused on the theme of sight, the highlight being a live demonstration of an eyeball dissection, which proved a great success with the public. The museum welcomed 29,000 visitors over nine days, by far the largest half-term footfall in the last three years.

Lates

The National Media Museum's *Lates* engage local, young independent adults in contemporary science, with approximately three quarters of visitors aged 18-35, a key audience segment. The evenings provided exciting experiences with innovative scientific research in an informal and engaging environment, working with partners locally and nationally to provide this expertise. This strongly aligns with the museum mission and vision in promoting STEM. The last four *Lates* reached almost 2,500 adults and delivered over 12,000 instances of participation.

Collections

Notable acquisitions which support the museum's refocused mission on light and sound technologies include:

- Still frames from a film by Louis Le Prince, 1880s. Laurie Snyder, great grand-daughter of the film-making pioneer, presented the museum with two frames of a historic film shot by Louis Le Prince in Roundhay, Leeds, in the 1880s. This acquisition complements the 2 cameras presented by Le Prince's daughter Marie to the Science Museum in 1930.
- *H J Round electro-dynamic microphone, 1923.* This is the only surviving prototype of the first purpose-built microphone commissioned by the BBC and might have been used for the BBC's first-ever outside broadcast: Act One of Mozart's The Magic Flute from the Royal Opera House, Covent Garden, on 8 January 1923.
- Collection of 14 Polaroid cameras, 1989-2004.
- Collection of Polaroid cameras from the Polaroid factory in Dumbarton following the ending of camera production there. These cameras strengthen the National Media Museum's existing holdings of Polaroid cameras.
- Paper archive from Captain AGD West, 1922 to 1949. Captain A G D (Gilbert) West is an extremely influential figure in the history of British communication technology. He joined the BBC in 1923, where he worked on a number of key projects, including the first broadcast of American radio in Britain, and the first BBC outdoor broadcast (of the song of the nightingale).
- *Big Ben Screen Clock, c. 1950.* This model of Big Ben was a regular fixture on BBC television in the 1950s. This clock was shown on British television, enabling television to act as a timekeeping technology.

- *Pixelvision Camera, 1988.* Produced by FisherPrice, this was the only video system to be developed by a toy company and used normal audio cassettes to record onto, rather than inventing its own media. In the 1990s it saw a resurgence in popularity -- amongst amateur and underground film-makers.
- IMAX 3D large format film projector in two parts made by IMAX Corporation, c. 1999. This particular IMAX SR 3D projection system presents a significant development in the IMAX offer, moving into 3D presentation. It is integral to the history of the National Media Museum and its pioneering work in presenting new cinema formats.

Research and publications

Publications

lain Baird, *Capturing the Song of the Nightingale*, Science Museum Group e-Journal issue autumn 2015: The first outside broadcast by the BBC from a natural location using the Marconi-Sykes magnetophone on 19 May 1924.

Research projects

The museum has four Arts and Humanities Research Council (AHRC) funded Collaborative Doctoral Awards students whose projects relate to the science and culture of image and sound technologies working with the University of York, University of Leeds, De Montford University and Durham University.

A further research bid to the AHRC Connected Communities theme is under development with the University of Leeds. Bradford Borders will investigate the museum's relationship with Bradford's local communities.

Symposia

Beyond Vision: Photography, Art and Science Symposium at Media Space (12 September 2015) was organised by Greg Hobson, Curator of Photographs and co-curator of *Revelations: Experiments in Photography* in collaboration with the University of Sussex.

Future plans and challenges

The National Media Museum now has a clear direction and plan for the next five years. There is an imperative to change the museum's name and brand to support this new vision. The ambition is to launch this new identity at the same time as the new Interactive Gallery. Next steps include a significant fundraising effort for the new Treasures Galleries, which will help to complete the transformation of the museum.

3. Financial Review

Review of financial position

Significant transactions in 2015-16

In April 2015, SMG sold the Post Office Building in South Kensington to Imperial College for £30m, realising a significant surplus on the carrying value in SMG's accounts. The sale was approved by DCMS and HM Treasury with the proceeds to be used for infrastructure works at the Science Museum, work at the Group's Wroughton storage facility and construction of the new Interactive Gallery in Bradford. A separate restricted reserve has been created to distinguish the sales proceeds from other funds. In November 2015, the Finance Committee approved investment of the funds that were anticipated to be held for the medium- to long-term in a portfolio of equity and fixed income funds in order to protect their value until the associated expenditure. Unrealised gains of £620k had resulted from changes in value of these investments at 31 March 2016, and in accordance with FRS 102 these are shown within net income for the year.

Income and expenditure

The Group's income increased from £73.5m in 2014-15 to £98.9m in 2015-16, due to a range of factors, of which the most significant was the £19.7m profit realised on the sale of the Post Office Building described above.

Grant in Aid received from DCMS reduced by £2.0m from £42.4m in 2014-15 to £40.4m in 2015-16. The settlement announced in the Chancellor's Autumn Statement in November 2015, commits to stabilising the level of Grant in Aid at the current year's level for the next four financial years. Though this represents a cut in real terms, a more stable funding environment will allow the group to make further efforts to increase its financial sustainability over that period.

Donations and legacies increased by £5.2m, with unrestricted donations from individuals (mainly visitor giving) rising from £2.5m to £3.4m in a successful year across the group. Donated assets, which are included in this figure and fluctuate significantly depending on the assets received, increased by £3.6m from £130k in 2014-15 to £3.7m in 2015-16, primarily due to the generous donation of a collection of 1930s photographs by Lewis Morley.

The recognition of sponsorship income is related to significant projects across the group and the reduction from £3.1m in 2014-15 to £1.9m in 2015-16 results from the completion of the major *Information Age* gallery in the previous financial year and the deferral of amounts related to the *Interactive Galleries* and *Mathematics: The David and Claudia Harding Gallery* into 2016-17, when these galleries are expected to be completed. This explains a similar fall in Lottery income, from 2014-15's £2.9m to the £450k received in 2015-16, as the Heritage Lottery Fund made a substantial contribution to *Information Age*. Current year contributions were received for the *Medicine Galleries* and for projects commemorating the First World War in London and York.

Ticket income increased from £600k in 2014-15 to £1.9m in 2015-16, reflecting the success of *Cosmonauts: Birth of the Space Age* and *Leonardo: The Mechanics of Genius* in the financial year, even though the latter will run into 2016-17.

Other income increased from £1.7m in 2014-15 to £5.2m in 2015-16, mainly due to a significant compensation payment received for the impact on the Museum of Science and Industry's site in Manchester as part of the works on the Ordsall Chord rail link. Rental income also increased as a result of commercial agreements at the Group's Wroughton storage site.

A grant of £6.7m (2014–15: £1.7m) was made to the Science Museum Foundation in the financial year for the furtherance of the charitable objects of SMG.

Excluding this grant, total resources expended were £76.4m (2014–15: £75.9m), reflecting a continued focus on operating efficiency over the last three financial years. This has been achieved without any significant adverse impact on exhibition and gallery development: SMG has improved the experience of visitors, whilst continuing to care for and learn more about the collection.

Balance sheet

The Group net income of £16.4m combined with upwards revaluations of pensions and property of £44.1m resulted in an increase in net assets of £60.5m to £455.3m in the financial year. This compares with net expenditure of £4.1m in 2014-15, offset by upward revaluations of £12.1m.

Tangible assets increased by £27.2m in the year, driven primarily by the revaluation of the Group property of £42.8m (2014-15: £13.3m), offset by the sale of the Post Office Building, previously carried at £10.3m on the Group balance sheet. Additions of £7.9m to work in progress represented a variety of capital projects across the Group, including the new Masterplan galleries described above, the *Medicine Galleries* and the *Special Exhibitions Gallery* in Manchester. Investments of £13.6m were held at year end (2014-15: nil), representing the holdings in equity and fixed income funds of some of the proceeds from the sale of the Post Office Building. The remainder of the proceeds were held as short-term deposits or cash and cash equivalents at year end, resulting in an increase in current assets from £15.9m in 2014-15 to £41.3m in 2015-16. Within these figures, stock and debtors levels were consistent with those recorded at 31 March 2015, reflecting the consistent nature of retail activities throughout the year.

Creditors and deferred income rose from £9.5m to £16.3m, this increase attributable largely to the residual grant of £6.7m payable to the Science Museum Foundation of which £3.6m was included as a creditor at 31 March 2016 (at 31 March 2015: £0.3m). Accruals and deferred income have increased from £6.0m to £8.7m, with deferred sponsorship income increasing from £1.0m to £2.6m and accruals, including for redundancy costs, rising from £3.9m to £5.1m. Deferred sponsorship income relates to exhibitions

Financial policies

Creditor policy

The Museum operates a 30-days payment policy where no payment terms have been specifically agreed. Using a sampling method, 67% of payments were made within this policy during 2015–16 (2014–15: 68%). No allowance has been made within these statistics for disputed invoices.

Investment policy

The Trustees are empowered to invest by the Trustees Act 2000. Taking into account both best return, shortterm availability and security, SMG ensures that all funds identified as surplus to working capital are reviewed daily and invested on short- to medium-term facilities to maintain their value over time.

During the year the Trustees adopted a new investment policy in relation to longer-term funds that allows for investment within equity and fixed income funds aimed at preservation of value over the period to expenditure by seeking to produce the best financial return within an acceptable level of risk. The investment objective for the long term reserves is to generate a return of 3% in excess of inflation over the long term. The investment objective for the short term reserves is to preserve capital value with a minimum level of risk. Assets should be readily available to meet unanticipated cash flow requirements. and galleries due to open in future periods and to several Learning projects across the Group where the activity is scheduled for future years.

The Group drew down further tranches of its loan funding agreed with DCMS in 2014-15, details of which are provided in note 17 of the accounts. The total loan balance of £4.9m (2014-15: £0.5m) is repayable over the next eleven years and relates to three loans (2014-15: one loan) designed to increase commercial income generation across the Group.

The Group pension liability reduced from £4.3m to £3.2m. Following the acquisition of the Museum of Science & Industry in 2012, SMG became an admitting body of the Greater Manchester Pension Fund, a defined benefit scheme. Details are given in note 19 of the accounts.

Group reserves increased by $\pounds 60.5m$, reflecting the retention of the proceeds from the Post Office Building sale and the upward revaluation of fixed assets and pension liabilities.

Reserves policy

The Trustees seek to maintain unrestricted general funds not committed or invested in tangible fixed assets at a level equivalent to three months' worth of non-contractual income. This level of reserves is held as a safeguard against unpredictable income streams, which may be vulnerable to the wider economic climate, including retail income and visitor donations. The Trustees agreed at their meeting in March 2016 that £1.5m was an appropriate level of reserves to hold in this respect, taking account of the level of operating contingency included in the 2016-17 budget. The value of reserves at 31 March 2016 was £1.5m.

The Trustees review the reserves policy each year and make changes where appropriate to reflect likely funding requirements or known risks.

Designated funds are unrestricted income funds held for specific future projects of high strategic value. The Museum Improvement Fund represents the aggregate value of designated funds held for such projects, which include major capital works as well as exhibitions, research and educational projects. The majority of projects for which funds are held in the Museum Improvement Fund will be undertaken during the coming financial year. A designated fund is also held for collections purchases that may arise in the coming year.

Immunity from seizure

SMG has approved status under Part 6, Section 136 of the Tribunals, Courts and Enforcement Act 2007. This was granted by the Secretary of State for Culture, Media and Sport on 9 November 2009. Part 6 of the Act confers protection on objects loaned from abroad for temporary public exhibitions, provided the conditions set out in Section 134 of the Act are met when the objects enter the UK. If the conditions of this legislation are met, a court cannot make an order to seize an object that has been loaned from abroad for an exhibition, except where required to under EU law or the UK's international obligations.

The Museum provides information regarding immunity from seizure on the Science Museum website:

http://www.sciencemuseum.org.uk/about_us/smg/ corporate/immunity_from_seizure.aspx

This year the Science Museum was pleased to collaborate on projects with key cultural partners in Russia including The State Museum and Exhibition Centre, Rosizo.

Exhibitions including works for which protection under the legislation was sought during 2015-16 are as follows:

Cosmonauts: Birth of the Space Age 18 September 2015 to 13 March 2016 Science Museum, Exhibition Road, London, SW7 2DD 126 objects

Details of the objects in these exhibitions were published on the web site at least four weeks before the objects were imported into the UK.

Up to 31 March 2016 no enquiries or claims had been received with respect to these objects under Section 7 of the Protection of Cultural Objects on Loan (Publication and Provision of Information) Regulations 2008.

4. Remuneration and Employees

Remuneration

Membership of Remuneration Committee

The membership of the Remuneration Committee during the year is shown in the Governance Statement.

The SMG Director, Mr Ian Blatchford, and Director of People and Culture were in attendance at the meeting which reviewed senior employees pay (excluding discussion concerning their own pay and performance).

Policy on the remuneration of senior managers for current and future financial year

The Remuneration Committee reviews salaries of all of the Museums' senior managers whose jobs are of a certain size (as determined by job evaluation).

When determining salary levels generally, a number of factors are taken into account:

- The projected budget for the annual staff settlement
- Salary levels internally and in the marketplace (through salary surveys)
- Job size and whether this has changed over the period (through formal evaluation, where applicable)
- Government guidance
- The individual manager's performance over the year

Performance-related pay for senior managers

At the beginning of the year, senior managers are set objectives based on the Museums' business plans. At the end of the year they are assessed by the Director, Chief Operating Officer or Group Executive member on the extent to which they have achieved their objectives and their performance is rated accordingly. The Chairman of the Board of Trustees assesses and rates the Director's performance. All ratings are then reviewed by the Remuneration Committee. All of senior managers' pay depends on performance being delivered, this being deemed the most effective way of achieving the business plans. Members of the Group Executive are eligible to be considered for a discretionary bonus within a range from 0 to 15% of their annual salary.

When determining the salary increase for each individual, the performance and contribution of the individual over the period (through performance appraisal) forms the major component together with any impact from changes in job scope and external factors.

Policy on contractual terms

Senior employees are on permanent contracts with either SMG or SCMG Enterprises Ltd. Notice periods for senior employees are between three and six months, for the Director, six months. Termination payments are in accordance with Museum or SCMG Enterprises Ltd contractual terms.

All Museum employees, except those working at MSI, are members of the Principal Civil Service Pension Scheme with associated redundancy and early retirement conditions. Civil Service pension details are given in notes to the accounts at note 11. Museum employees working at MSI are members of the Greater Manchester Pension Fund, for which SMG is an admitting body. All SCMG Enterprises Ltd employees may participate in a group personal pension scheme, currently provided by Aviva, as opposed to being auto-enrolled in a stakeholder pension. In the event of redundancy they will be entitled to payments as defined under the Employment Rights Act 1996 unless individual contracts define other terms.

The members of the Board of Trustees of the Science Museum, who hold overall responsibility for SMG, are not remunerated. Expenses paid are disclosed in note 10 of the annual accounts.

Remuneration information

The information below has been audited.

'Remuneration' includes gross salary, performance pay or bonuses, overtime, reserved rights to London weighting or London allowances, recruitment and retention allowances, and any other allowance to the extent that it is subject to UK taxation.

The monetary value of benefits in kind covers any benefits provided by the employer and treated by HM Revenue & Customs as a taxable emolument.

Senior directors

This Remuneration Report has been prepared in accordance with the Government Financial Reporting Manual, which requires disclosure of information about directors' remuneration, where 'directors' is interpreted to mean those having authority or responsibility for directing or controlling the major activities of SMG. This means those who influence the decisions of the entity as a whole rather than the decisions of individual directorates or sections within the entity.

It is the view of SMG that this requirement encompasses the two posts listed below, whose emoluments and pension details are disclosed. SMG considers that no other key management staff details need to be disclosed under this guidance for 2015-16.

Remuneration	Salary	Bonus payments	Benefits in kind	Pension benefits	Single Total Figure of Remuneration
	£000	£000	nearest £100	£000	£000
Ian Blatchford, Director					
2015-16	155 - 160 ^[1]	10-15 ^[4]	-	93 ^[2]	260-265
2014-15	140–145	-	-	64[2]	205-210
Jonathan Newby, Chief Operating	g Officer				
2015-16	125-130	10–15	800	9 ^[3]	145-150
2014-15	115–120	15–20	800	8	135-140

[1] Reflects salary increase with effect from December 2015

[2] Calculated as 20 times the real increase in pension plus the real increase in any lump-sum payment due, less member contributions

[3] Non PCSPS employee; the figure is the employer's contributions in the year

[4] One off bonus in October 2015

Pension benefits (PCSPS scheme members only)	Total accrued pension and related lump sum at pensionable age 31.03.16	Real increase in pension and related lump sum at pensionable age	CETV at 31.03.15	CETV at 31.03.16	Real increase in CETV
	£000	£000	£000	£000	£000
Ian Blatchford	45-50	5-7.5	584	703	57
The figures in the tables above ha	ave been subject to audit.				

Cash-equivalent transfer values

A cash-equivalent transfer value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in his/her former scheme. The pension figures shown relate to the benefits that individuals have accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies. The figures include the value of any pension benefit in another scheme or arrangement which the individual has transferred to the Civil Service pension arrangements. They also include any additional pension benefit accrued to the member as a result of his/her purchasing additional pension benefits at his/her own cost. CETVs are calculated within the guidelines and framework prescribed by the Institute and Faculty of Actuaries and do not take account of any actual or potential reduction to benefits resulting from Lifetime Allowance Tax which may be due when pension benefits are drawn.

Real increase in CETV

The real increase in CETV reflects the increase effectively funded by the employer. It takes account of the increase in accrued pension that is due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period.

Median remunerations

Reporting bodies are required to disclose the relationship between the remuneration of the highest-paid director in their organisation and the median remuneration of the organisation's workforce. The midpoint for the banded remuneration of the highest-paid director in SMG in the financial year 2015-16 was £172,500 (2014-15 £142,500). This was 8.4 times (2014-15 7.1 times) the median remuneration of the workforce, which was £20,300 (2014-15 £20,000). The median ratio has increased mainly due to the combination of pay award and bonus awarded to lan Blatchford during the year.

In 2015-16 no employee received remuneration in excess of the highest-paid director. Remuneration ranged from banded midpoint of £12,500 to £172,500 (2014-15: £12,500 to £142,500) on a full-year basis.

Total remuneration includes salary, non-consolidated performance-related pay and benefits in kind. It does not include employer pension contributions and the cashequivalent transfer value of pensions.

Off-payroll arrangements

There were no off-payroll arrangements in 2015-16 (2014-15: none).

Employees

The information below has been audited.

Employee numbers, analysed by activity

	Perma	nent Contract		Other Staff		Total
	2016	2015	2016	2015	2016	2015
Care for and research into collections	135	158	2	1	137	159
Science education and communication	362	328	3	2	365	330
Visitor services	101	111	3	4	104	115
Generating income and sponsorship	44	66	-	1	44	67
Trading activities	150	125	2	3	152	128
Total	792	788	10	11	802	799

Employees receiving remuneration over £60,000

	2016	2015
60,001 – 65,000	4	9
65,001 – 70,000	4	2
70,001 – 75,000	1	2
75,001 – 80,000	2	-
80,001 – 85,000	2	1
85,001 – 90,000	1	3
90,001 – 95,000	1	1
95,001 – 100,000	2	2
100,001 – 105,000	2	1
105,001 – 110,000	2	-
130,001 – 135,000	-	1
135,001 – 140,000	1	1
140,001 – 145,000	-	2
145,001 – 150,000	1	-
170,001 – 175,000	1	-
	24	25

For eight (2015: eight) of these employees total remuneration includes BUPA contributions. Contributions were paid to a defined contribution scheme on behalf of nineteen (2015: ten) employees. For five (2015: fifteen) of the staff included in this table retirement benefits accrued under a defined benefit scheme.

The total remuneration of the key management personnel, Ian Blatchford and Jonathan Newby, was £410,935 (see page 42).

Civil Service and other compensation schemes – exit packages

The number of exit packages agreed during the year are shown by cost band in the table below:

	Number of compulsory redundancies	Number of other departures	Total number of exit packages for 2015-16	Total number of exit packages for 2014-15
< 10,000 10,001 - 25,000 25,001 - 50,000 50,001 - 75,000 75,001 - 100,000 > £100,001 Total Cost (£'000)	- - - - - - -	6 7 4 3 3 - - 23 730	6 7 4 3 3 - - 23 730	23 12 12 7 - 1 <u>55</u> 1,341

Employee engagement

The Science Museum Group continues to operate various ways of facilitating effective communications with employees. Regular employee briefings from the SMG Director, the Directors of museums and other senior managers on strategic and topical issues are supplemented by group-wide and museum-specific announcements and news on the SMG intranet and by e-mail.

There are a number of forums where SMG engages with employee representatives and officials from the trade unions on matters of mutual interest and concern. These forums are used for the usual business of addressing pay and benefits but also for the development of policies and health and safety matters.

SMG operates a performance development process that enables personal objectives to be articulated and fully aligned to wider business goals. The process looks at how results are achieved as well as the results themselves, and provides an opportunity to look at the development and support that employees require to deliver their objectives.

SMG continues to focus on supporting managers and employees in dealing with change and have increased the level of support offered in career transition activity. This year SMG has continued to invest in leadership and management development and has focused on the National Railway Museum, the Museum of Science and Industry and Enterprises management teams.

Sickness absence

The average number of days lost from sickness for each full-time equivalent employee was 4.0 days (2014-15: 5.6 days).

Equality and diversity

It is SMG policy that all eligible people should have equal opportunity for employment and advancement on the basis of their ability, qualifications and fitness for the work. There should be no discrimination based on gender, race, religion, age, physical disability or sexual orientation against any eligible person whether in recruitment, training, promotion or in any other way.

SMG works with local communities, schools and education groups to increase access for under-represented groups.

This financial year SMG has continued to work with occupational health providers, Access to Work and a range of other specialist advisers to make reasonable adjustments to the workplace for employees and potential recruits with disabilities.

Archel

Dame Mary Archer Chairman of the Board of Trustees

6 July 2016

Station

Mr Ian Blatchford Accounting Officer and Director

6 July 2016

5. Sustainability Report

Summary of performance

We continue to ensure that sustainability is at the core of our activities. Measures taken this year build on the work achieved over the last five years, driving down energy consumption, encouraging our suppliers to assess their performance and through championing the use of technology and materials that positively enhance our performance. Highlights of the past year include:

- Wonderlab: The Statoil Gallery this new development within the Science Museum has a strong sustainability thread throughout. This includes sustainable timber supplies, low consumption eco-taps, hand dryers, automated natural ventilation, high performance windows, LED lighting and the clever reuse of materials from old school labs. Taking this thread even further has meant that many of the old exhibits have also found new lives in 3 UK schools, 6 UK Science Centres and 1 South African Science Centre.
- In other areas of the SMG, the reuse of showcases, plinths and other exhibition furniture has reduced the amount of new materials required and minimised waste from exhibition redisplay.
- Our audiences are also engaged through our climate change event programme- at this year's London 2050 themed *Lates* event visitors took part in a trail through the museum which explored how climate change will affect the UK, but especially London over the next century.
- Energising the solar farm at Wroughton on 25 March 2016, after three years of planning and three months of construction. Built and managed by British Solar Renewables, this 50 MW farm will put three and a half times the electricity SMG consumes annually back into the national grid.

		2016	2015	2014
Non-financial	Total gross emissions	9,108	10,059	10,695
indicators (tCO ₂ e)	Scope 3 business travel gross emissions	237	266	207
Related energy	Electricity – non-renewable (kWh)	13,500,032	13,934,670	14,793,942
consumption	Electricity – combined heat and power (CHP) (kWh)	465,637	626,063	73,112
(see individual metrics)	Gas (kWh)	12,819,299	13,938,548	14,096,566
	Oil (litres)	19,529	22,637	19,636
	Biomass – wood pellets (tonnes)	32	47	50
Financial indicators	Expenditure on energy	1,753	1,760	1,869
(£000)	CRC expenditure	154	161	128
	Expenditure on business travel	502	618	440

Greenhouse gas emissions

Performance

Emissions continue to reduce across the estate, partly through investment in energy efficiency technology such as LED lighting, but also as a result of the mild winter meaning plant has to run less frequently. A wholesale renewal of our maintenance and engineering contract has concluded with a new supplier. This new relationship will start to see a programme of reinvestment in new energy efficient infrastructure over the coming years.

Direct and indirect impacts

The main direct impacts from SMG come through electricity and gas consumption. Thus the biggest influence on consumption relates to heating, cooling and lighting in visitor areas and climate controlled galleries. Where possible travel in site vehicles is minimised and low-emission vehicles are specified when appropriate. We encourage visitors to reach our sites using public transport and our websites feature journey planners and public transport status reports.

Waste

	Non-fina	ncial indicator	s (tonnes)	Fin	ancial indicate	ors (£000)
—	2016	2015	2014	2016	2015	2014
Total waste	922.8	1,116.1	823.0	130	89.3	108.5
Hazardous (including waste electric and electronic equipment)	1.4	0.7	1.4	3.8	0.5	1.7
Non-hazardous						
Landfill	91	56.2	93.6	22	8.8	8.3
Energy from waste	324	291.1	253.6	51	45.4	39.2
Mixed recycling	402	399.1	292.4	40	48.2	38.2
Wood recycling	41	25.3	30.6	8	2.7	3.2
Metal recycling	38	12.2	18.7	3	0.9	0.8
Glass recycling	24	37.6	31.5	2	0.8	0.6

Performance

Assessing our waste performance this year has been challenging and our data requires further improvement to properly identify trends. Overall the quantity of waste from the SMG continues its downward trend, closer analysis however shows some reduction in recycling rates for certain materials. This is most likely linked to cost and changing contractors.

Direct and indirect impacts

Catering and visitor activity have the biggest direct impact on the volume of rubbish produced, followed by office and exhibition activities. We encourage all our suppliers and contractors to minimise the production of waste and to recycle where possible.

Finite resources

			2016	2015	2014
Non-financial indicators	Water including locomotive	(m³)	74,899	82,087	77,225
(see individual resource for	operations				
metrics)	Coal – locomotive operations	(tonnes)	59	45	70
	Non-fuel oils	(litres)	1,118	2,375	1,195
	Diesel – rail operations	(litres)	12,620	13,056	23,500
Financial indicators (£000)	Water supply including locomotiv	/e	90	94.6	96.4
	Coal – locomotive operations		16	11.4	14.7
	Lubricating oil – locomotive oper	ations	3	4.2	3.2
	Diesel – rail operations		8	8.3	17.7

Performance

We have managed to reduce our water and non-fuel oil consumption during the year. Coal consumption has increased with the opening of the Flying Scotsman events.

Direct and indirect impacts

The operation of site vehicles, visitor experiences and heritage vehicles is the main direct impact on finite resource consumption across the Group. Where possible, automated systems are installed to minimise the volumes consumed. Procurement of materials evaluates the provenance of the supply, particularly in respect of the coal used in the locomotives at NRM.

Biodiversity enhancement

Performance

Biodiversity at SMG varies greatly from site to site, with the urban locations playing a smaller part in the wider Group picture, but remains a key objective within our sustainability policy. Wroughton is at the forefront of biodiversity management in SMG, with many initiatives now fully established and developing into a 'business as usual' approach to managing our land-holdings.

Direct and indirect impacts

We work with suppliers to ensure that appropriate certificated products, such as Forest Stewardship Council (FSC) approved timber, are chosen above others, and have a list of excluded chemicals and materials known to have impacts on ecosystems that are not to be used on SMG's premises.

Sustainable procurement

Performance

Our evaluation criteria for procurement include sustainability and we publish tender instructions plus a response document for suppliers to complete in which we outline our sustainability requirements for the contract.

Direct and indirect impacts

A range of contracts were entered into in 2016-17. Within these, new sustainability, engagement and partnership working clauses increased the ability of SMG to work with suppliers to reduce our impacts.

Strategy for the future

Data collation and interpretation remains our greatest challenge in assessing SMGs sustainability performance and we will work on refining and improving our knowledge regarding waste and finite resources to help us drive decision making in these areas.

Building on our past success, we are in the process of reviewing our policy and direction regarding sustainability and energy and will be setting new targets for these over the coming year.

Our new building developments and exhibitions will continue to place sustainability at the heart of their design and procurement briefs.

6. Statement of Board of Trustees' and Director's Responsibilities

Under Sections 9(4) and (5) of the Museums and Galleries Act 1992, the Board of Trustees is required to prepare a statement of accounts on an accruals basis in the form and on the basis determined by the Secretary of State for the Department for Culture, Media and Sport with the consent of the Treasury. The accounts are prepared to show a true and fair view of SMG's financial activities during the year and of its financial position at the end of the year.

In preparing the Group accounts the Trustees are required to:

- Observe the Accounts Direction issued by the Secretary of State*, including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis
- Make judgments and estimates that are reasonably prudent
- State whether applicable accounting standards have been followed, and disclose and explain any material departures in the financial statements
- Prepare the financial statements on the going-concern basis, unless it is inappropriate to presume that SMG will continue in operation.

The Accounting Officer for the Department for Culture, Media and Sport has designated the Director as the Accounting Officer for SMG. His relevant responsibilities as Accounting Officer, including his responsibility for the propriety and regularity of the public finances for which he is answerable and for the keeping of proper records and for safeguarding SMG's assets, are set out in the Non-Departmental Public Bodies' Accounting Officer Memorandum, issued by the Treasury and published in Managing Public Money.

As far as the Board of Trustees and the Accounting Officer are aware there is no relevant audit information of which the entity's auditors are unaware. The Accounting Officer has taken all the steps that he ought to have taken to make himself aware of any relevant audit information and to establish that the entity's auditors are aware of that information.

Dame Mary Archer Chairman of the Board of Trustees 6 July 2016

Mr Ian Blatchford Accounting Officer and Director 6 July 2016

* A copy of which is available from the Accounting Officer, Science Museum, London SW7 2DD

7. Governance Statement

7.1. The governance framework

The Board of Trustees of the Science Museum (Board of Trustees) is responsible for the whole of the Science Museum Group (SMG). The Trustees, who may number between 12 and 20, are appointed by and responsible to the Prime Minister through the Department for Culture, Media and Sport (DCMS). The Director of SMG, as Chief Executive Officer, is responsible to the Board of Trustees and, as Accounting Officer, is accountable to DCMS for compliance with the Management Agreement. Within the framework of their statutory duties as stated under the National Heritage Act 1983, the role of the Trustees is to establish SMG's policy, review performance and endorse appointments to key management positions. Their primary activity is to assist the Chairman in meeting the Board's overall responsibilities, in accordance with the policies of the Secretary of State, and in compliance with charity law. Trustees offer guidance and expertise to the Chairman on setting and implementing SMG strategy.

The recruitment of Trustees takes place in accordance with the procedures defined by DCMS and the Office of the Commissioner for Public Appointments. Descriptions of the roles required are advertised, interviews conducted and recommendations made to DCMS for appointment by the Prime Minister in accordance with the National Heritage Act 1983. Matthew d'Ancona, Sharon Flood, Professor Russell Foster, Professor David Phoenix, Anton Valk, The Right Honourable the Lord Willetts and Dame Fiona Woolf were appointed as trustees from 1 April 2015. Professor Dame Athene Donald, Andreas Goss, Lord Michael Grade of Yarmouth and Professor Ludmilla Jordanova were reappointed as trustees from 1 August 2015.

When new Trustees are appointed, officers of SMG provide both general briefings about the museums and the role of the Board of Trustees within a charity and nondepartmental public body context and specific information about particular areas of interest. This is done through documents and meetings. The SMG Directorate has responsibility for coordinating secretarial functions for the main Board and oversight of governance arrangements and management of Board committees.

To help support a diverse and complex organisation, the Board has chosen to delegate some of its activities to a number of advisory boards and committees, each with a defined remit and terms of reference. The structure that operated in 2015–16 is briefly summarised in the table below:

Committee	Hierarchy	Remit
Board of Trustees	Board	Determine all matters requiring Board approval
Audit and Risk Committee	Board sub-committee	Provide assurance on risk, control and governance
Collections and Research (CoRe) Committee	Board sub-committee	Advise Board of Trustees on all aspects of collections and research
Finance Committee	Board sub-committee	Advise Board of Trustees on all financial matters and make financial decisions , within its remit and delegated limits
Masterplan and Estate Committee	Board sub-committee	Advise Board of Trustees on all SMG's capital development plans and make financial decisions, within its remit and delegated limits
Remuneration Committee	Board sub-committee	Advise Board of Trustees on the remuneration of Director and senior executives
Science Museum Advisory Board	Board sub-committee	Advise SMG Director and Board of Trustees on the cultural offer
Museum of Science and Industry Advisory Board	Board sub-committee	Advise local Director and Board of Trustees on the cultural offer
National Media Museum Advisory Board	Board sub-committee	Advise local Director and Board of Trustees on the cultural offer
National Railway Museum Advisory Board	Board sub-committee	Advise local Director and Board of Trustees on the cultural offer
Railway Heritage Designation Advisory Board	Board sub-committee	Make recommendations to the Board of Trustees on the designation and disposal of railway heritage artefacts and archives
Board of Directors of SCMG Enterprises Ltd	Board of Directors of trading subsidiary	Make decisions regarding commercial operations and monitor progress against budget
Management Board of SCMG Enterprises Ltd	Management Board of trading subsidiary	Advise Board of Directors of trading subsidiary

Trustees who served during the year and their attendance at meetings and a strategy day of the Board of Trustees and its sub-committees are shown in the table below. A full list of membership of sub-committees and advisory boards can be found at the end of this Governance Statement.

		Date of				Attenda	ance		
	Term	current	Expiry of appointment	Board ¹	Audit & Risk	CoRe	Fin	M&E	Rem
Chairman									
Dame Mary Archer DBE									
(as chair)	1	01.01.15	31.12.19	6/6		3/3			2/2
Members									
Mr Howard Covington	2	07.04.12	06.04.16	5/6					1/2
Mr Matthew d'Ancona	1	01.04.15	31.03.19	3/6	4/4				
Professor Dame Athene Donald DBE	2	01.08.15	31.07.19	3/6					
Lord Faulkner of Worcester	2	05.01.15	04.01.19	5/6	4/4				1/2
Miss Sharon Flood	1	01.04.15	31.03.19	6/6			4/4		
Professor Russell Foster	1	01.04.15	31.03.19	3/6					
Mr Andreas J Goss	2	01.08.15	31.07.19	5/6			2/4		
Lord Grade of Yarmouth CBE	2	01.08.15	31.07.19	6/6					
Professor Ludmilla Jordanova	2	01.08.15	31.07.19	6/6		3/3			
Mr Simon Linnett	2	05.01.15	04.01.19	4/6					
Professor Averil Macdonald	2	07.04.12	06.04.16	4/6					
Professor David Phoenix	1	01.04.15	31.03.19	6/6	4/4				
Dr Gill Samuels CBE (Trustee)	2	07.04.12	27.08.15	1/2					1/2
Mr Anton Valk CBE	1	01.04.15	31.03.19	4/6				4/5	
The Rt Hon the Lord Willetts	1	01.04.15	31.03.19	5/6					
Dame Fiona Woolf	1	01.04.15	31.03.19	6/6			3/4	5/5	

1 An extraordinary meeting was held in April 2015 and a strategy day was held in October 2015.

7.2. Reports from Board committees

7.2.1. Board of Trustees

Significant issues considered by the Board of Trustees in 2015-16 included:

- Financial resilience: In light of uncertainty in the wider economy and the risk of further reductions in Government funding, there is an overarching need for SMG to increase income from other sources, achieve operational efficiencies and exercise stringent financial management. This imperative has influence – explicitly or implicitly – all Board and Executive discussions.
- Masterplans: Every SMG site is engaged in masterplanning for the development of the estate and the public offer, each with its own range of opportunities and constraints. The Board considers the overall approaches to masterplanning, and approves specific projects where the budget exceeds a designated threshold. The Board is advised by the Masterplan and Estate Committee. Of particular note in 2015-16 were the sale of the Post Office Building and the collections storage project.
- National Media Museum: During 2015-16 NMeM continued to implement its agreed vision of focusing on the science and technology of light, image and sound,

and of being better integrated into its local community. Whilst there were notable successes, evidenced by growth in visit numbers, there was considerable media and public concern over some aspects of the new strategy in the latter part of the year, namely the transfer of some parts of the photographic collection to the V&A, the name of the museum and the place of film festivals. The Board visited NMeM during its meeting and Strategy Day in Bradford in October 2016 and devoted considerable time to NMeM issues throughout the year.

• Group-wide strategy: the Board reviews and approves SMG strategy in major areas of activity. In 2015-16 these included Digital, Collections Services and Learning. In addition, the Board initiated a working group, chaired by the Rt Hon. the Lord Willetts, to devise a long-term strategic framework for the Group as a whole. This has met regularly and reported to the main Board, and is expected to complete the task in 2016-17.

Other matters included: successful delivery of the Cosmonauts exhibition in a difficult political climate; governance of the National Coal Mining Museum for England, investments, and health and safety.

7.2.2. Audit and Risk Committee

The Audit and Risk Committee kept the management of risks under review throughout the year, particularly with respect to collections management and capital projects. The committee held a strategic risk workshop for a wider group of trustees and has raised the profile of risk management at Board level.

Members of internal and external audit attended each meeting of the Audit and Risk Committee and their work was considered by the committee.

7.2.3. Collections and Research Committee

The Collections and Research Committees advises the Board on the suitability and appropriateness of strategy and policy for SMG's collections and research, including the acquisitions and disposals of objects and the management and care of the SMG collections.

7.2.4. Finance Committee

In addition to its continuing work to provide the Board with assurance on the financial management and performance of the SMG, the Finance Committee reviewed and approved a number of major projects including the Robots exhibition and investment in ICT infrastructure.

The Finance Committee took an active role in developing and recommending to the Board an Investment Policy and ensuring that policy was implemented during the year. The Finance Committee also reviewed the SMG Financial Protocols, the budget for 2016-17 to the Board and initiated development of a strategic income plan.

7.2.5. Masterplan and Estate Committee

The Masterplan and Estate Committee provides focused technical and strategic advice to the Board on SMG's capital development plans. The committee reviews and manages the execution and completion of SMG's capital development plans.

7.2.6. Remuneration Committee

The Remuneration Committee provided advice to the Board on the remuneration of the Director and senior management team.

7.2.7. Railway Heritage Designation Advisory Board

From 1 April 2013 the Board of Trustees assumed statutory powers – formerly held by the Railway Heritage Committee – to designate certain artefacts and records related to railways as being of significant heritage value. A new sub-committee, the Railway Heritage Designation Advisory Board (RHDAB), was formed to advise the Board on designation and disposal matters. The RHDAB has two Trustee members, one of whom is the Chairman, and includes representatives of a range of stakeholders.

Designation recognises the significance of the items concerned and confers responsibility for their care and

maintenance on the owners and recipients. Designated items may not be disposed of without the approval of the SMG Board. The RHDAB was established as a subcommittee of the main Board to advise the Trustees on designations and on disposal of designated material. The designation powers cover specific bodies. In 2014 GB Railfreight Ltd, recognising the heritage value of its railway assets, decided voluntarily to come within the scope of the powers alongside Transport for London.

The RHDAB met four times in the financial year 2015-16 and recommended 26 items for designation, 10 items for disposal and no de-designations. Amongst these have been 1 class designation and 2 items through its voluntary agreement with Transport for London and GB Railfreight Ltd.

7.3. Board effectiveness

Following a review in 2014–15 of the structure and membership of sub-committees, changes were implemented in 2015–16 to reflect the outcome of the review. The Masterplan and Estate Committee was established, the Audit Committee was succeeded by the Audit and Risk Committee, the Finance and Strategy Committee was succeeded by the Finance Committee and a new Management Board was established for SMG's trading subsidiary. The terms of reference of the Board's sub-committees were reviewed and updated to reflect the changes to the committee structure.

In addition, and led by the Chairman, the Board conducted reviews of each Trustee's contribution to the Board. A review of the operation and performance of the Board as a whole will be conducted in the financial year 2016-17.

The Board has high standards in terms of the data it expects to receive to support it in discharging its duties. Data relating to the delivery of the SMG's objectives, including financial control and the management of risk, is regularly reviewed by the Board and its committees.

7.4. Group Executive

As Accounting Officer, the Director is personally responsible for safeguarding the public funds for which he has charge, for propriety and regularity in the handling of those public funds as guided by Managing Public Money, and for the day-to-day operations and management of SMG. The Director of SMG is also Director of the Science Museum and is supported by the Deputy Director of SMG. Each of the other museums within SMG is headed by a Director who is directly responsible for collections, the museum's cultural programme and for coordinating the overall delivery of the museum's goals.

The Group Executive is accountable to the Director of SMG, and is formed by the senior managers, most of whom report directly to the Director of SMG. The Group Executive is responsible for resource allocation, leading strategic management, developing the cultural content and programmes, and sustaining SMG values.

Senior managers who served on the Group Executive during the year were:

Ian Blatchford	Paul Kirkman
Jane Ellis	Karen Livingstone
Susan Fisher	Sally MacDonald
Jean Franczyk	Judith McNicol
Roger Highfield	Jonathan Newby

Tom O'Leary Jo Quinton-Tulloch John Stack

7.5. Risk management framework and risk assessment

The Board of Trustees believes considered risk taking is a necessary feature of the entrepreneurialism that is essential to success; the decision-making approach balances potential consequences against the scale of opportunity. The Board of Trustees' risk appetite varies according to the nature of the risk, but in general SMG takes a moderate approach to risk and the system of internal controls is structured accordingly.

The Accounting Officer is responsible for managing risk and ensuring an effective system of internal control is in place. The Accounting Officer places assurance on the work of the Corporate Risk Group, an executive committee that meets regularly to review the risk environment, identify changes in the corporate risk profile as well as emerging risks and report on these areas to the Director, the Group Executive and the Audit and Risk Committee.

The Board of Trustees places assurance on reports from the Chairs of the Audit and Risk Committee and the Finance Committees and the Director concerning matters affecting internal control. The minutes of all subcommittees are distributed to Trustees.

The Audit and Risk Committee places assurance on the work of the internal auditor. Internal audit services in 2015-16 were provided by PricewaterhouseCoopers LLP (PwC), in accordance with Public Sector Internal Audit Standards. The work of the internal audit provider is informed by an analysis of the risk to which the body is exposed, and annual internal audit plans are based on this analysis, which is endorsed by the Audit and Risk Committee. The Head of Internal Audit (HIA) provides the Audit and Risk Committee with regular reports on internal audit activity, which include the HIA's independent opinion on the adequacy and effectiveness of the system of internal control, together with recommendations for improvement. The HIA's opinion for 2015-16 is given below. Actions arising from all the audits are addressed by the Group Executive and progress is monitored through the Audit and Risk Committee.

The Corporate Risk Group monitored the major risks and focused on measures in place to manage them during the year, reporting to the Group Executive, the Audit and Risk Committee and the Board of Trustees. Risk assessment and management formed an integral part of business planning and project management. The system of internal control has been in place in SMG throughout the year ended 31 March 2016 and up to the date of approval of the Annual Report and Accounts, in accordance with Treasury guidance. The system of internal control is based on a framework of regular management information, administrative procedures including the segregation of duties, and a system of delegation and accountability.

In particular, it includes:

- A Group Executive management team, as described above, which met regularly throughout the year to review progress against plans, make operational and policy decisions and to consider the management of identified and emerging risks
- Regular reports from managers to the Audit and Risk Committee, Finance Committee and Board of Directors of SCMG Enterprises Ltd or management team (as appropriate) on the steps they are taking to manage risks in their areas of responsibility, including progress on key projects
- Annual completion of internal control schedules by senior managers to confirm their compliance with SMG's internal control standards
- Comprehensive budgeting systems, with an annual budget which is reviewed and agreed by the Board of Trustees
- Regular reviews by the Board of Trustees of progress against the key performance indicators that measure attainment against objectives, and of regular financial reports that track financial performance against forecasts
- A Corporate Risk Group, chaired by the Finance Director and reporting to the Audit and Risk Committee, responsible for
 - raising the profile of management awareness and accountability for the risks faced by SMG;
 - supporting the ongoing development of risk management and implementation of the risk management process
 - acting as a source of advice on risk management to aid embedding of risk management across the organisation
 - reviewing departmental risk registers on a cyclical basis and assessing the need for escalation of those risks

- identifying emerging risks and reviewing and assessing existing corporate risks and appropriate actions to manage those risks
 - reporting corporate risks and recommended actions to Group Executive (for validation) and to the Audit and Risk Committee
 - identifying the need for investment to fund high priority risk response actions.
 - Maintenance of a register of interests for Trustees, Directors of SCMG Enterprises Ltd, sub-committee advisers and senior staff.

The system of internal control is designed to manage rather than eliminate the risk of failure to achieve the Group's policies, aims and objectives; it can therefore only provide reasonable and not absolute assurance of effectiveness. The system of internal control is based on an ongoing process designed to identify the principal risks to the achievement of the Group's policies, aims and objectives, to evaluate the likelihood of those risks being realised and the impact should they be realised, and to manage them efficiently, effectively and economically.

7.5.1. Risk profile

The key risk faced by SMG in recent years has been continued cuts in core funding. The likelihood of this risk having a critical impact was reduced following the announcement of a stable funding settlement in the 2015 Autumn Statement. There remains a residual risk around future levels of Grant in Aid and SMG continues to seek ways to both increase self-generated income and reduce expenditure in order to secure longer-term financial sustainability.

Risks relating to the storage and management of collections, including loans out of the collection, continued to be managed. A new Head of Collections Services position for the Group was created during the year and operations relating to collections management have been reorganised. A process of internal review and audit of collections is underway and progress is reported regularly to the Audit and Risk Committee. The announcement in the Autumn Statement 2015 that funding is to be provided for SMG, the V&A and the British Museum to vacate the shared storage facility at Blythe House will help improve the storage of collections over the medium term, and plans are under development for a new, purpose-built storage facility at Wroughton.

Other areas of risk identified during the year included management of the estates, and corrective action has been put in place since the year end to address this risk through the appointment of an interim Head of Estates and allocation of additional resource to strengthen the team.

Internal audit work during the year identified some system security weaknesses detected through penetration testing. SMG have plans in place to decommission the relevant websites in order to eliminate this risk.

7.5.2. Assessment of risk management framework

The Accounting Officer and Board of Trustees have to maintain a balance between the strength of internal control systems and the cost of their implementation and improvement. At present, the Accounting Officer and Board of Trustees consider that the framework of internal controls and risk management is effective, although they acknowledge scope for improvement was identified during the year, particularly relating to the management of collections. The opinion of the Head of Internal Audit was that governance, risk management and control in relation to business critical areas is generally satisfactory, with some improvements required to enhance the overall framework. Corrective action is being taken to address the specific control weaknesses identified, and this is being monitored by the Audit and Risk Committee.

7.6. Information security

During the year there were no centrally recorded incidents related to protected personal data and a report to the Information Commissioner's Office has not been required.

7.7. Records and Enquiries

7.7.1. Corporate Records

As a public body SMG has a responsibility to preserve organisational records, and this duty is fulfilled by a team that also handles collections records and enquiries. This year the team handled 691 general enquiries.

7.7.2. Freedom of Information

SMG's statutory responsibility to respond to enquiries under the Freedom of Information (FOI) Act and Data Protection Act was met by responding to 126 FOI requests focusing on income-generating activities, cost cutting, procurement, major events and high-profile projects.

7.8. Compliance with the Corporate Governance Code

While the Board of Trustees has different responsibilities and is appointed in accordance with the relevant Acts, SMG confirms that SMG's governance processes comply with the intentions of 'Corporate governance in central government departments: Code of good practice 2011'. The Board is well balanced in composition, and supports the Director in leading SMG through strategic direction, monitoring activity and achievement of objectives, and ensuring good governance is in place. The work of the Board is well supported by strong committee management. Regular evaluation by the Board of its effectiveness, including the views of senior staff, ensures that the Board is reviewing its activities and processes to continue to improve its performance. The Trustee register of interests is available for inspection on the SMG website or on application to the Directorate at the Science Museum, Exhibition Road, London SW7 2DD.

7.9. Membership of Trustee sub-committees, subsidiary company boards and advisory boards

Full memberships of the Trustee sub-committees, advisory boards and subsidiary company boards are set out below.

Audit and Risk Committee

Chairman Members Professor David Phoenix OBE (Trustee) Mr Matthew d'Ancona (Trustee) Lord Faulkner of Worcester (Trustee) Paul Feldman, from 08.04.16

Collections and Research Committee

Chairman Members Professor Ludmilla Jordanova (Trustee) Dame Mary Archer DBE (Trustee), from 27.09.15 Professor Russell Foster CBE (Trustee), from 01.06.15 to 27.09.15 Mr Philippe Garner, from 01.06.15 Dr Jeff Hughes Ms Sarah Staniforth, from 01.01.16

Finance Committee

(met concurrently with Board of Directors of SCMG Enterprises Ltd)

Chairman Members Miss Sharon Flood (Trustee) Mr James Bilefield, from 16.11.15 Mr Andreas Goss (Trustee) Dame Fiona Woolf CBE (Trustee)

Masterplan and Estate Committee

Co-Chairman Members Mr Steve McGuckin Dame Fiona Woolf CBE (Trustee) Mr Nick Kirkbride Mr Ken Shuttleworth Mr Anton Valk CBE (Trustee)

Remuneration Committee

Chairman Members Dr Gill Samuels CBE (Trustee), until 27.08.15 Lord Faulkner of Worcester (Trustee), from 27.08.15 Dame Mary Archer OBE (Trustee), from 01.01.15 Mr Howard Covington (Trustee), from 18.04.15 to 06.04.16 Lord Faulkner of Worcester (Trustee), until 27.08.15

SCMG Enterprises Ltd Management Board

Chairman Members Miss Sharon Flood Mr James Bilefield Mr Charles Coates, from 16.11.15

Company information

SCMG Enterprises Ltd

Directors Mr Ian Blatchford Mr Jonathan Newby Ms Jane Ellis

Advisory Boards

Science Museum Advisory Board

Chairman Members Mr Howard Covington (Trustee), until 06.04.16 The Rt Hon the Lord Willetts (Trustee), from 07.04.16 Mr Matthew d'Ancona (Trustee), from 28.04.15 Ms Jane Atkinson Dr Sarah Caddick Professor Dame Athene Donald DBE (Trustee) Dr Marcus du Sautoy Mr Malcolm Garrett Dr Lucie Green Sir Tim Hunt, until 11.02.16 Sir Paul Nurse, from 11.03.16 Professor Michael J Reiss Dr Gill Samuels CBE (Trustee). until 27.08.15 Professor Simon J Schaffer Professor Molly Stevens Professor Helen Storey MBE

Museum of Science and Industry Advisory Board

Chairman Members Dr Gill Samuels CBE (Trustee), until 27.08.15 Professor Russell Foster CBE (Trustee), from 03.09.15 Professor Colin Bailey Dr Maria Balshaw Mr Michael Emmerich Lord Faulkner of Worcester (Trustee and Observer) Clare Hudson, from 04.04.15 Mr Steve Johnson Sir Richard Leese CBE Professor Andy Miah, from 23.03.16 The Rt Hon Baroness Morris, from 07.12.15 Dr Erinma Ochu Professor David Phoenix CBE (Trustee), from 09.04.15

National Media Museum Advisory Board

Chairman Members Lord Grade of Yarmouth CBE (Trustee) Ms Samira Ahmed, from 13.05.15 Ms Yvonne Baker, from 13.05.15 Mr Pierre Brahm. until 13.05.15 Professor Brian Cantor Baroness Margaret Eaton DBE, from 13.05.15 Professor Elizabeth Edwards, from 13.05.15 Ms Kersten England, from 24.09.15 Professor Russell Foster CBE (Trustee) Mr Philippe Garner Ms Suzan Hemingway, until 12.06.15 Mrs Sally Joynson, from 13.05.15 Mr Matt Locke, until 13.05.15 Professor Averil Macdonald (Trustee), until 06.04.15 Baroness Manzoor, until 14.09.15 Dr Annette Nabavi Ms Carolyn Reynolds, until 18.12.15 Ms Gillian Reynolds MBE Dr Gill Samuels CBE (Trustee and Observer), until 27.08.15

National Railway Museum Advisory Board

Chairman Members Mr Simon Linnett (Trustee) Mr Philip Benham Mr David Brown, from 12.01.16 Lord Faulkner of Worcester (Trustee and Observer) Mr Bryan Gray CBE Professor Ludmilla Jordanova (Trustee) Dr Ellen McAdam, from 16.09.15 Professor Clive Roberts, from 10.06.15 Dr Gill Samuels CBE (Trustee), until 27.08.15 Mr Adrian Shooter CBE Ms Sarah Tanburn, until 25.06.15 Mr Anton Valk CBE (Trustee) Mr Christian Wolmar

Railway Heritage Designation Advisory Board

Chairman Members Lord Faulkner of Worcester (Trustee) Mr Mike Ashworth Mr Christopher Austin OBE, until 01.04.16 Dr David Brown Mr Ian Brown CBF Mr Malcolm Brown Mr Neil Butters Ms Liz Hallam Smith, from 01.04.16 Ms Louise Innes Dr David Jenkins Mr Mike Lampert, from 01.04.16 Mr Simon Linnett (Trustee and Observer) Professor Averil Macdonald (Trustee), from 24.04.15 to 06.04.16 Mr Peter Ovenstone Mr Jonathan Pepler Mr Andy Savage Ms Vicky Stretch

The Board of Trustees of the Science Museum and the Board of Directors of SCMG Enterprises Ltd recognise that the effective management of risk and uncertainty is core to their ability to achieve their objectives. The Board of Trustees (advised by the Audit and Risk Committee) sets the risk appetite and risk management standards for the Group, as well as reviewing the major risks.

J Archel

Dame Mary Archer Chairman of the Board of Trustees

6 July 2016

Station

Mr Ian Blatchford Accounting Officer and Director

6 July 2016

8. The Certificate and Report of the Comptroller and Auditor General to the Houses of Parliament

I certify that I have audited the financial statements of The Board of Trustees of the Science Museum Group for the year ended 31 March 2016 under the Museums and Galleries Act 1992. The financial statements comprise: the Consolidated Statement of Financial Activities, the Consolidated and Museum Balance Sheets, the Consolidated Cash Flow and the related notes. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration Report that is described in that report as having been audited.

Respective responsibilities of the Trustees/Board, Accounting Officer and auditor

As explained more fully in the Statement of Board of Trustees' and Directors' Responsibilities, the Trustees and the Director as Accounting Officer are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. My responsibility is to audit, certify and report on the financial statements in accordance with the Museums and Galleries Act 1992. I conducted my audit in accordance with International Standards on Auditing (UK and Ireland). Those standards require me and my staff to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Board of Trustees of the Science Museum's and the group's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Board of Trustees of the Science Museum; and the overall presentation of the financial statements. In addition I read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by me in the course of performing the audit. If I become aware of any apparent material misstatements or inconsistencies I consider the implications for my certificate.

I am required to obtain evidence sufficient to give reasonable assurance that the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Opinion on regularity

In my opinion, in all material respects the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Opinion on financial statements In my opinion:

• the financial statements give a true and fair view of the state of the Group's and of the Science Museum's affairs as at 31 March 2016 and of its net income/expenditure for the year then ended; and

• the financial statements have been properly prepared in accordance with the Museums and Galleries Act 1992 and Secretary of State directions issued thereunder.

Opinion on other matters

In my opinion:

- the part of the Remuneration Report to be audited has been properly prepared in accordance with Secretary of State directions made under the Museums and Galleries Act 1992; and
- the information given in the Annual Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

Matters on which I report by exception

I have nothing to report in respect of the following matters which I report to you if, in my opinion:

- adequate accounting records have not been kept or returns adequate for my audit have not been received from branches not visited by my staff; or
- the financial statements and the part of the Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- I have not received all of the information and explanations I require for my audit; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

Report

I have no observations to make on these financial statements.

Sir Amyas C E Morse Comptroller and Auditor General 11 July 2016 National Audit Office, 157-197 Buckingham Palace Road, Victoria, London SW1W 9SP

9. Financial Statements	ments								
Consolidated Statement of Financial Activities for the year ended 31 March 2016	nancial Act	ivities for t	he year en	ided 31 Mar	ch 2016				
					2016				Restated Note 25) 2015
All activities are continuing activities	Notes	Unrestricted £000	Restricted £000	Endowment £000	Total £000	Unrestricted £000	Restricted £000	Endowment £000	Total £000
Income and endowments from:									
Donations and legacies Grant in Aid for SMG		34,843	3,126	I	37,969	39,774	125	I	39,899
Grant in Aid for NCMME Other densities	Ľ	3 537	2,409 7,850	1 1	2,409 8 387	- 017 0	2,499 718	1 1	2,499 3 197
Charitable activities	ה	0,004	4,000	I	0,004	2,417	017	I	0,177
Lottery income	7		453	I	453	- 04	2,892 2 550	I	2,892
Other trading activities	0	2,207	2/0/2	I	4,00/	174	400'7	I	5,333
Commercial activities		17,106	I	I	17,106	16,402	119	I	16,521
Sponsorship		1,912	I C	I	1,912	333	2,744	I	3,077
Kental Income	2	112	0.G	i c	761	065	nc	I I	400 20
Other income	~ ∞	5,157	~ 1	- 1	5,157	1,652			1,652
Profit on sale of Post Office Building		ļ	19,649	I	19,649	1	I	I	I.
Total		65,616	33,222	F	98,839	61,804	11,706	I	73,510
Expenditure on:	ç								
Charitable activities Care for and research into collections	01	12 315	3 530	I	15 845	13 736	3 660	I	17 396
Science education and communication		25,452	5,229	I	30,681	22,155	6,083	I	28,238
Visitor services		12,001	632	I	12,633	12,452	009	I	13,052
Grants awarded	10	6,716	I	I	6,716	1,727	I	I	1,727
Kalsing lunus Activities for generating funds	2	2.529	47	I	2.576	2.323	77	I	2.400
Commercial activities		14,554	85	I	14,639	14,365	413	I	14,778
Total		73,567	9,523	I	83,090	66,758	10,833	I	77,591
Net gains /(losses) on investments	14		623	! र	623			1	- (7007)
		(164'/)	24,322	-	10,372	(4, 734)	0/3	1	(4,001)
Transfers between funds		(6,913)	6,913	I	I	120,211	(120,211)	I	I
Other recognised gains/losses Gaine/loceeel on revoluation of fixed accete	12	017 01	I	I	066 67	13 3/7	I	I	13 3/7
Actuarial gains/(losses) on defined benefit	19	1,322	I	I	1,322	(1,296)	I	I	(1,296)
pension scheme Net movement in funds		29,237	31,235	-	60,473	127,308	(119,338)	1	7,970
RECONCILIATION OF FUNDS	ŝ								
iotat runds prought forward Total funds carried forward	23	241,822	213,396	78	374,823 455,296	212,585	301,499 182,161		394,823

SMG Annual Report and Accounts 2015–16

The notes on page XX to XX form part of these accounts.

Consolidated Balance Sheets as at 31 March 2016

			Restated (Note 26)
	Notes	2016 £000	2015 £000
Fixed assets	10		07/ 150
Tangible assets	12	401,356	374,150
Heritage assets	13	23,435	19,593
Investments	14	13,620	393,743
Current assets		438,411	373,743
Stock		1,309	1,064
Debtors	16	6,100	6,142
Short term deposits	10	5,750	0,142
Cash and cash equivalents		28,163	8,681
		41,322	15,887
Creditors: amounts falling due within one year	17	(16,340)	(9,495)
Net current assets		24,982	6,392
Total assets less current liabilities		463,393	400,135
Creditors: amounts falling due after one year	17	(4,747)	(633)
Provisions for liabilities and charges	18	(128)	(353)
Net assets excluding pension liability		458,518	399,149
Pensions liability	19	(3,222)	(4,326)
Net assets		455,296	394,823
Represented by:			
Restricted funds			
Sponsorship, grants and donations reserve		1,120	1,666
Post Office Building sale reserve		30,163	1,000
Capital reserves		182,113	180,495
Capital Teselves	23	213,396	182,161
Unrestricted funds			
Designated funds			
Museum Improvement Fund		1,924	4,420
Collection Purchases Fund		217	217
Capital Reserves		26,845	26,743
Revaluation Reserve		214,558	183,987
		243,544	215,367
Deficit on MOSI defined benefit pension scheme		(3,222)	(4,326)
General funds		1,500	1,544
Total unrestricted funds	23	241,822	212,585
Endowment funds	23	78	77
Total Funds		455,296	394,823

The notes on page XX to XX form part of these accounts.

Approved by the Board of Trustees and authorised for issue.

ery Archer

Dame Mary Archer Chairman of the Board of Trustees

6 July 2016

en Stilkford

Mr Ian Blatchford Accounting Officer and Director

6 July 2016

Museum Balance Sheets as at 31 March 2016

		2016	Restated (Note 26) 2015
	Notes	£000	£000
Fixed assets			
Tangible assets	12	399,577	371,285
Heritage assets	13	23,435	19,593
Investments	14/15	14,031	411
		437,043	391,289
Current assets			
Debtors	16	8,786	9,533
Short term deposits		5,750	-
Cash and cash equivalents		22,896	5,660
		37,432	15,193
Creditors: amounts falling due within one year	17	(11,246)	(6,604)
Net current assets		26,186	8,589
Total assets less current liabilities		463,229	399,878
Creditors: amounts falling due after one year	17	(4,747)	(633)
Provisions for liabilities and charges	18	(128)	(353)
Net assets excluding pension liability		458,354	398,892
Pensions liability	19	(3,222)	(4,326)
Net assets		455,132	394,566
Represented by:			
Restricted funds			
Sponsorship, grants and donations reserve		1,120	1,666
Post Office Building sale reserve		30,163	-
Capital reserves		181,750	180,047
		213,033	181,713
Unrestricted funds			
Designated funds			
Museum Improvement Fund		1,924	4,420
Collection Purchases Fund		217	217
Capital Reserves		26,845	26,743
Revaluation Reserve		214,417	183,906
		243,403	215,286
Deficit on MOSI defined benefit pension scheme		(3,222)	(4,326)
General funds Total unrestricted funds		1,840	1,816 212,776
וטנמג עווו פגרוכנפט זעחטג		242,021	212,776
Endowment funds		78	29/ 5//
Total Funds		455,132	394,566

Notes 1 to 28 form part of these accounts. All activities are continuing.

Approved by the Board of Trustees and authorised for issue.

Mary Archer

Dame Mary Archer Chairman of the Board of Trustees

6 July 2016

er. Stily

Mr Ian Blatchford Accounting Officer and Director

6 July 2016

Consolidated Cash Flow for the year to 31 March 2016

			Restated (Note 26)
		2016	2015
	Notes	£000	£000
Net cash from operating activities	25	12,317	7,181
Cash flows from investing activities			
Proceeds from the sale of fixed assets		30,000	-
Purchases of fixed assets		(8,339)	(9,579)
Purchases of heritage assets		(134)	(111)
Purchases of investments		(13,000)	-
Purchases/(redemptions) of short term deposits		(5,750)	6,800
Interest received		124	6
Net cash from/(used in) investing activities		2,901	(2,884)
Cash flows from financing activities			
Repayment of bank loans		(81)	(99)
Interest paid		(4)	-
DCMS loan funding received		4,349	500
Net cash from financing activities		4,264	401
Net increase in cash and cash equivalents	-	19,482	4,698
Cash and cash equivalents at beginning of year		8,681	3,983
Cash and cash equivalents at end of year	23	28,163	8,681
Reconciliation of net cash flow to movement of net funds (Note 25)			
Increase in cash in period		19,482	4,698
Increase/(decrease) in liquid resources		5,750	(6,800)
Decrease in debt and lease financing		81	99
(Increase) in Museum loan from DCMS		(4,408)	(500)
Change in net funds resulting from cash flow		20,905	(2,503)
Net funds at beginning of year	_	8,100	10,603
Net funds at end of year	25	29,005	8,100

Notes to the consolidated account for the year ended 31 March 2016

1 Basis of preparation and consolidation

1.1 Basis of preparation

The Science Museum Group (SMG, the Group) is a nondepartmental public body, sponsored by the Department for Culture, Media and Sport. SMG is an exempt charity as listed in Part 3 of the Charities Act 2011.

The Group's financial statements have been prepared in compliance with applicable United Kingdom accounting standards, including Financial Reporting Standard 102 – *The Financial Reporting Standard applicable in the United Kingdom and Republic of Ireland* (FRS 102).

The Group's financial statements have also been prepared in compliance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) (the Charities SORP) and the Financial Reporting Manual for 2015-16 (FReM) issued by HM Treasury. The accounting policies contained in the FReM follow UK generally accepted accounting practice (UK GAAP) to the extent that it is meaningful and appropriate to the public sector.

The financial statements have been prepared under the historic cost convention as modified by the revaluation of certain fixed assets. The financial statements are prepared in sterling which is the functional currency of the Group and rounded to the nearest \pounds '000.

Going concern

After reviewing the Group forecasts and projections, the Directors have a reasonable expectation that the SMG has adequate resources to continue into operational existence for the foreseeable future. The Group therefore continues to adopt the going concern basis in preparing its financial statements.

1.2 Change in applicable accounting standards

The Group transitioned from previously extant UK GAAP to FRS 102 as at 1 April 2015. An explanation of how transition to FRS 102 has affected the reported financial position and financial performance is given in note 26.

1.3 Basis of consolidation

Consolidated accounts have been prepared which include the Museum and its subsidiary company, SCMG Enterprises Ltd. The consolidation is on a line-by-line basis with the recharges between the Museum and the trading subsidiaries eliminated from the Statement of Financial Activities. Amounts owed and owing between the entities have been eliminated from the consolidated balance sheet.

2 Principal accounting policies

2.1 Revenue recognition

Grant and donation income

Grant and donation income, including Lottery income, is recognised as income when the group is entitled to the funds, when the receipt is probable and when the value of income can be measured reliably.

Grant in Aid income

Grant in Aid from the Department for Culture, Media and Sport is recorded in the Statement of Financial Activities and recorded in the year in which it is received. Except where it has been allocated for a specific purpose, it is disclosed as unrestricted income.

Exchange transactions

Revenue from contractual arrangements is measured at the fair value of the consideration received, excluding discounts, rebates, VAT and other sales taxes or duty. The following criteria must also be met before revenue is recognised:

Sale of Goods

Revenue from the sale of goods is recognised when the significant risks and rewards of ownership of the goods have passed to the buyer, usually on dispatch of the goods, when the amount of revenue can be measured reliably, it is probable that the economic benefits associated with the transaction will flow to the entity and the costs incurred or to be incurred in respect of the transaction can be measured reliably.

Exhibition sponsorship income

The Group recognises the costs and income of a charged exhibition in the year(s) in which the exhibition takes place. Income received for an exhibition taking place in a future period is treated as deferred exhibition income and costs treated as deferred exhibition costs and included in deferred income and prepayments respectively on the Balance Sheet.

All other income is accounted for on a receivable basis.

2.2 Expenditure

Expenditure is classified under the principal categories of charitable and other expenditure rather than the type of expense, in order to provide more useful information to users of financial statements. An analysis of resources expended is set out in note 10.

Costs of raising funds include fundraising and publicity costs incurred in seeking voluntary contributions to the Group.

Charitable expenditure comprises direct expenditure, including direct staff costs attributable to the activity, and, where costs cannot be directly attributed, an allocation of indirect costs on a basis consistent with the use of the resources as set out in note 10. The costs of publicising the Museum are included in the cost category *Science education and communication*.

Governance costs, which are included in the support costs allocated to charitable activities, are the costs associated with the governance arrangements and the strategic management of the charity's activities. These costs include internal and external audit, legal advice for Trustees and costs associated with constitutional and statutory requirements.

2.3 Fixed assets valuation and depreciation

Fixed assets are defined as assets costing £5,000 or more with a useful life of greater than one year.

All property assets are subject to quinquennial valuations in accordance with the RICS Appraisal and Valuation Manual, supplemented by independent valuations. As part of the revaluation process asset lives are evaluated and re-estimated, the restated expected useful life is then applied to the original historic cost, and to any previous revaluation movements for the purposes of calculating depreciation. Desktop revaluations are carried out at least annually with reference to indexation in relevant property cost categories.

Galleries and exhibitions are not revalued but the lives of these assets are reviewed annually to reflect their true value. For other asset categories, where the assets have short useful lives or low values, SMG adopts a depreciated historic cost basis as a proxy for fair value. Fixed assets are reviewed annually for evidence of impairment.

Depreciation is provided on all tangible fixed assets, other than freehold land and collection items, at rates calculated to write off the cost or valuation, less the estimated residual value, on a straight line basis for each asset over its expected useful life as follows:

	Expected useful life
Asset category	(years)
Freehold, leasehold and residential buildings	10-50
Plant and machinery	5–28
Galleries and exhibitions	5–15
Information technology and audio-visual equipm	ent 3–10
Fixtures and fittings	3-10

A full year of depreciation is charged in the year of capitalisation and none in the year of disposal.

2.4 Heritage assets

Heritage assets acquired since April 2001 are reported in the balance sheet at cost. Donated assets with an estimated value greater than £5,000 are reported at an internally generated valuation for which reliance is placed on the professional knowledge and expertise of the Museum's in-house curatorial staff.

For the collections that existed at March 2001, the Board of Trustees is of the opinion that valuation information cannot be obtained at a cost commensurate with the benefits to users of the financial statements so a valuation approach is not practicable and SMG has adopted a non-recognition approach.

Expenditure which is required to preserve or prevent further deterioration of individual collection items is recognised in the Statement of Financial Activities when it is incurred. Purchases of items at a price less than £5,000 for the collection are charged to the Statement of Financial Activities in the year of acquisition.

Heritage assets are not subject to depreciation or revaluation and are reviewed at the reporting date for impairment.

2.5 Stock

Stock is stated at the lower of the cost, using the weighted average method, and the price less costs to complete and sell.

2.6 Leases

Costs relating to operating leases are charged to the Statement of Financial Activities over the life of the lease. There are no assets held under finance leases.

2.7 Employee benefits

PCSPS pension scheme

Present and past employees are covered by the provisions of the Principal Civil Service Pension Scheme (PCSPS), which is a contributory and unfunded scheme. Although the scheme is a defined-benefit scheme, liability for payment of future benefits is a charge to the PCSPS. The SMG and other bodies covered by the PCSPS meet the cost of pension cover provided for the staff they employ by payment of charges calculated on an accruing basis.

There is a separate scheme statement for the PCSPS as a whole. Pension contributions are paid at rates determined from time to time by the Government Actuary and advised by the Treasury.

GMPS pension scheme

SMG is an admitting body of the Greater Manchester Pension Fund which is a defined benefit scheme. The expected cost of providing pensions, as calculated periodically by professionally qualified actuaries, is charged to the Statement of Financial Activities so as to spread the cost over the service lives of the employees in the scheme, in such a way that the pension cost is a substantially level percentage of current and expected future pensionable payroll.

The pension costs are assessed on the advice of a professional qualified actuary using the projected unit method. The scheme is funded in advance by contributions from its members, including the company and its employees at rates assessed by the scheme actuary in regular funding reviews.

Pension scheme assets are valued at market value at the balance sheet date. The pension scheme deficit relating to MSI employees is recognised in full on the Balance Sheet because SMG is able to identify its share of the deficit.

The Group recognises the cost of the defined benefit plan as follows:

- the change in the net defined benefit pension liability arising from employee service rendered during the reporting period in profit or loss;
- net interest on the net defined benefit pension liability during the reporting period in profit or loss;
- the cost of plan introductions, benefit changes, curtailments and settlements in profit or loss; and
- remeasurement of the net defined benefit liability in other comprehensive income.

Interest income on plan assets is a component of the return on plan assets, and is determined by multiplying the fair value of the plan assets by the discount rate.

The difference between the interest income on plan assets and the return on plan assets is included in the remeasurement of the net defined benefit liability.

Remeasurement of the net defined benefit liability comprises:

- actuarial gains and losses; and
- the return on plan assets, excluding amounts included in net interest on the net defined benefit liability.

SCMG Enterprises pension schemes

SCMG Enterprises Ltd operates two defined contribution pension schemes, the assets of which are held separately in an independently administered fund. Contributions are charged to the Statement of Financial Activities as they become payable, in accordance with the rules of the schemes.

Provision for annual leave

The Group recognises a provision for annual leave accrued by employees as a result of services rendered in the current period, and which employees are entitled to carry forward and use within the next 12 months. The provision is measured at the salary cost payable for the period of absence.

2.8 Early retirement scheme

The Museum operates an Early Retirement and Severance Scheme, which gives retirement benefits on redundancy terms to certain qualifying employees. These benefits conform to the rules of the Principal Civil Service Pension Scheme. The Museum pays annual compensation payments to those employees retired under the Early Retirement and Severance Scheme.

The total forecast annual compensation payments liability up to normal retiring age in respect of each employee is charged to the Statement of Financial Activities in the year in which the employee takes early retirement. The early retirement provision is recalculated annually, informed by updated information. Funds are released from the provision annually to fund compensation payments made in the year (note 18).

2.9 Taxation

SMG is exempt from corporation tax on its charitable activities under the provisions of the Corporation Tax Act 2010.

For SCMG Enterprises provision is made at current rates of taxation deferred in respect of all material timing differences except to the extent that, in the opinion of the Directors, there is reasonable probability that the liability will not arise in the foreseeable future.

SCMG Enterprises Ltd undertakes to Gift Aid profits, to the extent that the Directors of the subsidiary judge that they do not need to be retained in the business.

2.10 Investments

The value of the Museum's investment in its trading subsidiary is disclosed at cost.

Funds identified as surplus to working capital in the short- or longer-term are invested to maintain their value over time. SMG has investments in equity and fixed income funds, and places funds on short-term deposit, as explained in note 14. These investments are actively traded and are held at fair value, as reported by the Group fund managers.

2.11 Financial instruments

Financial investments comprise investments in equity and fixed income funds which are measured at fair value. Changes in fair value are recognised in profit or loss, in accordance with FRS 102, section 11. The nature and extent of the risks associated with the financial instruments are disclosed in accordance with FRS 102.

2.12 Cash and cash equivalents

Cash and cash equivalents include cash at bank and in hand and highly liquid interest-bearing securities with maturities of three months or less.

2.13 Foreign currencies

Transactions in foreign currencies are recorded at the rate ruling at the time of the transaction and, at year end, balances are restated at the year-end rate. All exchange differences are taken to the Statement of Financial Activities.

2.14 Provisions

Provisions are made when an obligation exists for a future liability in respect of a past event and where the amount of the obligation can be reliably estimated. Discount rates provided by the Treasury are used in current value calculations for long-term commitments.

3 Significant judgements and estimates

3.1 Judgements and key sources of estimation uncertainty

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the amounts reported for assets and liabilities as at the balance sheet date and the amounts reported for revenues and expenses during the year. However, the nature of estimation means that actual outcomes could differ from those estimates.

The following judgements (apart from those involving estimates) have had the most significant effect on amounts recognised in the financial statements:

Revenue recognition

The timing of revenue recognition on long-term sponsorship contracts depends on the assessed stage of completion of contract activity at the balance sheet date. For exhibitions and galleries that are not completed, sponsorship is deferred until opening. At 31 March, £2.576m (2015: £1.000m) of income had been deferred, primarily in relation to multi-year learning projects, the new Interactive Galleries and the Maths Gallery at the Science Museum. These amounts are shown in current liabilities.

Property, plant and equipment (PPE)

Property, plant and equipment represents a significant proportion of the asset base and therefore the estimates and assumptions made to determine their carrying value and related depreciation are critical to the reported financial position and expenditure. Revaluation of PPE requires management to apply professionally supplied indices to existing fixed asset balances in those years when formal valuations are not required. In 2015-16, this resulted in an upward revaluation of the Group PPE of £42.8m (2015: £13.3m).

4 Museum Statement of Financial Activities

	Notes	2016 £000	2015 £000
Income and endowments from:			
Donations and legacies			
Grant in Aid for SMG	[A]	37,969	39,899
Grant in Aid for NCMME		2,409	2,499
Gift Aid from subsidiary, SCMG Enterprises Ltd		4,491	4,790
Other donations and legacies		8,384	3,197
Charitable activities			
Lottery income		453	2,892
Other charitable income		4,887	3,353
Other trading activities			
Sponsorship		147	281
Rental income		472	307
Investments		136	34
Other income		5,356	1,891
Profit on sale of Post Office Building		19,649	-
Total	_	84,353	59,143
Expenditure on:			
Charitable activities			
Care for and research into collections	[B]	15,845	17,396
Science education and communication		30,681	28,238
Visitor services		12,633	13,052
Grants awarded		6,716	1,727
Raising funds			
Activities for generating funds		2,576	2,411
Total	_	68,451	62,824
Net gains/(losses) on investments		623	_
Net income/(expenditure)		16,525	(3,681)
Transform behavior founds			
Transfers between funds		-	-
Other recognised gains / (losses)		(0.010	10.0/17
Gains/(losses) on revaluation of fixed assets		42,719	13,347
Actuarial gain/(losses) on defined benefit pension liability	_	1,322	(1,296)
Net movement in funds		60,566	8,370
Reconciliation of funds:			
Total funds brought forward		394,566	386,196
Total funds carried forward		455,132	394,566

[A] Capital grant in aid received from DCMS was £3,001k (2014-15: £3,387k).
 [B] The £2,409k (2014-15: £2,499k) grant from the Group to the National Coal Mining Museum of England (NCMME) is categorised as 'care for and research into the collections'.

5 Other donations and legacies (consolidated)

	Unres. £000	2016 Res. £000	Unres. £000	2015 Res. £000
Value of donated goods and services	-	250	_	39
Corporate donations	2	4	-	63
Individual donations	3,531	637	2,479	198
Legacies	1	251	-	287
	3,534	1,142	2,479	587
Value of donated heritage assets	-	3,708	-	131
	3,534	4,850	2,479	718

6 Other charitable income (consolidated)

		2016		2015
	Unres.	Res.	Unres.	Res.
	£000	£000	£000	£000
Grant income, excluding Lottery grants	326	2,383	187	2,559
European Union grants	-	295	-	-
Ticket income	1,883	-	607	-
	2,209	2,678	794	2,559

7 Income from investments

Excluding gains and losses on the Group investment portfolio detailed in note 14, consolidated interest income of £121k (2014-15: £20k) was earned from investing surplus funds.

8 Other income

Other income arises from self-generated income, conference and educational events, locomotive hire and cloakroom fees. In the current year, the figure includes a material compensation payment in relation to the development of the Ordsall Chord railway in Manchester, which will have a permanent impact on the heritage site of the Museum of Science and Industry.

9 Net income / (expenditure)

	2016 £000	2015 £000
Auditors' remuneration: Comptroller and Auditor General	58	55
Auditors' remuneration: Subsidiary company audit fee	37	34
Lease rentals on land and buildings	21	93
Lease rentals on equipment	69	57
Lease rentals on vehicles	34	34
Movement on bad debt provision	(6)	9

10 Total expenditure

Analysis by functional purpose

	Direct	Grants		Support	Total	Total
	costs	awarded	Depreciation	Costs [1]	2016	2015
Care for and research into collections	9,359	-	984	5,502	15,845	17,396
Science education and communication	18,863	-	4,031	7,787	30,681	28,238
Visitor services	6,459	-	812	5,362	12,633	13,052
Grants awarded for charitable activities	-	6,716	-	-	6,716	1,727
Charitable activities	34,681	6,716	5,827	18,651	65,875	60,413
Generating donations and legacies	1,729	-	59	788	2,576	2,400
Trading activities	14,498	-	141	-	14,639	14,778
	50,908	6,716	6,027	19,439	83,090	77,591

[1] Support costs include the depreciation charged on support activities.

Support cost allocation

	Management	Finance	HR	ICT	Estates	Governance	Total 2016	Total 2015
Care for and research into collections	326	159	86	493	4,378	59	5,501	6,343
Science education and communication	831	406	710	1,312	4,378	149	7,786	7,422
Visitor services	314	154	198	263	4,378	56	5,363	5,961
Charitable activities	5 1,471	719	994	2,068	13,134	264	18,650	19,726
Generating donations and legacies	84	41	265	384	-	15	789	522
	1,555	760	1,259	2,452	13,134	279	19,439	20,248

Management, governance and finance (after adjustment for internal recharges) costs were allocated in proportion to the direct costs in each area. HR costs were allocated in proportion to the number of FTE staff in each area; ICT costs in proportion to the number of PCs/terminals used by each area. Estates costs were allocated equally across the three charitable activities.

Governance costs

Governance costs comprise support for Trustee Committee activity and related Governance work, internal and external audit and resources required to produce statutory accounts.

Trustees

The Chairman and Trustees (listed in the Annual Report) received no remuneration for their services, but travel expenses totalling £12,177 were paid to seventeen Trustees (2014-15: £5,278 paid to nine Trustees).

11 Staff costs

	2016	2015
	£'000	£'000
Wages and salaries	22,572	22,323
Social security costs	1,869	1,816
Pension costs	1,975	2,205
Agency staff	496	418
Early retirement and redundancy	730	1,336
	27,642	28,098

Included in the above is £778k (2014-15: £352k) in respect of staff costs which have been capitalised.

Civil Service Pensions

Pension benefits are provided through the Civil Service pension arrangements. The Principal Civil Service Pension Scheme (PCSPS) and the Civil Servant and Other Pension Scheme (CSOPS) - known as "alpha" are unfunded multi-employer defined benefit scheme but SMG is unable to identify its share of the underlying assets and liabilities. The scheme actuary valued the scheme as at 31 March 2012. You can find details in the resource accounts of the Cabinet Office: Civil Superannuation (www.civilservice.gov.uk/pensions).

For 2015-16, employer's contributions of £1,361,470 were payable to the PCSPS (2014-15 £1,542,545) at one of four rates in the range 20.0% to 24.5% of pensionable earnings, based on salary bands. The Scheme Actuary reviews employer contributions usually every four years following a full scheme valuation. The contribution rates are set to meet the cost of the benefits accruing during 2015-16 to be paid when the member retires and not the benefits paid during this period to existing pensioners.

Employees can opt to open a partnership pension account, a stakeholder pension with an employer contribution. Employer's contributions of £10,700 (2014-15- £11,800) were paid to one or more of the panel of three appointed stakeholder pension providers. Employer contributions are age-related and range from 3% to 12.5% of pensionable earnings up to 30 September 2015 and from 8% to 14.75% of pensionable earning from 1 October 2015. Employers also match employee contributions of £379 (2014-15 £629), 0.8% of pensionable pay up to 30 September 2015 and 0.5% of pensionable pay from 1 October 2015, were payable to the PCSPS to cover the cost of the future provision of lump sum benefits on death in service or ill health retirement of these employees.

None of the contributions due to the partnership pension providers at the balance sheet date were unpaid and none had been prepaid.

The SCMG Enterprises Ltd Pension Schemes

This is a contracted-in group money-purchase scheme with optional contracted out pensions to which SCMG Enterprises Ltd contributes 7% and the employees 5%. Employees not opting to join the scheme are autoenrolled in a stakeholder pension scheme. SCMG Enterprises Ltd pension contributions of £303,526 were paid in the year (2014-15: £293,778).

12. Tangible fixed assets

Consolidated assets

	Land and	Plant and	Galleries and	Fixtures and	ICT and	Assets under	
	buildings	machinery	exhibitions	fittings	AV	construction	Total
	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Current cost							
At 1 April 2015	295,547	79,316	29,205	5,137	1,244	2,012	412,461
Additions	-	24	-	112	59	7,910	8,105
Sale of PO Building	(8,566)	(2,030)	-	-	-	-	(10,596)
Disposals	-	(1,659)	(4,137)	(1,896)	(163)	-	(7,855)
Transfer	1,929	917	724	889	249	(4,708)	-
Revaluation	34,655	8,124	-	-	-	-	42,779
At 31 March 2016	323,565	84,692	25,792	4,242	1,389	5,214	444,894
Depreciation							
At 1 April 2015	5,996	14,225	14,058	3,436	596	-	38,311
Sale of PO Building	(132)	(112)	-	-	-	-	(244)
Disposals	-	(1,659)	(4,137)	(1,896)	(163)	-	(7,855)
Charge for the year	6,166	3,895	2,389	607	269	-	13,326
At 31 March 2016	12,030	16,349	12,310	2,147	702	-	43,548
Net book value							
At 31 March 2016	311,535	68,343	13,482	2,095	687	5,214	401,356
At 31 March 2015	289,551	65,091	15,147	1,701	648	2,012	374,150

Museum assets

	Land and	Plant and	Galleries and	Fixtures and	ICT and	Assets under	
	buildings	machinery	exhibitions	fittings	AV	construction	Total
	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Current cost							
At 1 April 2015	293,170	76,017	29,017	3,300	1,244	2,012	404,760
Additions	1,005	24	-	112	58	7,910	9,109
Sale of PO Building	(8,566)	(2,030)	-	-	-	-	(10,596)
Disposals	-	(172)	(4,137)	(353)	(163)	-	(4,825)
Transfer	1,927	917	718	896	250	(4,708)	-
Revaluation	34,595	8,124	-	-	-	-	42,719
At 31 March 2016	322,131	82,880	25,598	3,955	1,389	5,214	441,167
Depreciation							
At 1 April 2015	5,987	11,375	13,865	1,653	595	-	33,475
Sale of PO Building	(132)	(112)	-	-	-	-	(244)
Disposals	-	(172)	(4,137)	(353)	(163)	-	(4,825)
Charge for the year	6,157	3,809	2,389	560	269	-	13,184
At 31 March 2016	12,012	14,900	12,117	1,860	701	-	41,590
Net book value							
At 31 March 2016	310,119	67,980	13,481	2,095	688	5,214	399,577
At 31 March 2015	287,183	64,642	15,152	1,647	649	2,012	371,285

Land and buildings

The Science Museum was transferred from the Secretary of State for the Environment on 10 August 2001. Wroughton Airfield was transferred from the Secretary of State for Defence to the Science Museum on 27 July 1997. The buildings and land relating to the National Railway Museum were transferred from the Secretary of State for the Environment on 1 August 1997. The Royal Naval Air Yard was purchased from the Ministry of Defence on 31 March 2000. When MOSI became part of the Science Museum Group on 31 January 2012 the Manchester estate was transferred at fair value as determined by an external valuation.

Blythe House is currently occupied by the British Museum, the Science Museum and the Victoria and Albert Museum. The freehold title is held by the Office of the Deputy Prime Minister, although ministerial responsibility for all museum estate issues has subsequently transferred to the Secretary of State for Culture, Media and Sport. As a longstanding tenant and beneficial user SMG shows a one-third share of the value, as established by Gerald Eve at 31 March 2014, on its balance sheet.

Revaluation of land and buildings

A full valuation in accordance with the RICS Appraisal and Valuation Manual was carried out by chartered surveyors Gerald Eve LLP as at 31 March 2014. Land and buildings at the Science Museum in London, Museum of Science and Industry in Manchester, National Railway Museum in York and Shildon, and National Media Museum in Bradford were valued on the basis of depreciated replacement cost. The Science Museum sites at Wroughton and Blythe House are included at existing use valuations. The Concrete Works, an undeveloped site adjacent to NRM in York, owned by SCMG Enterprises Ltd, is also held at an existing use valuation. A revaluation was carried out at 31 March 2016 based on professionally prepared price indices.

13. Heritage Assets

13.1 An overview of the collections

Science Museum, London

The Science Museum holds the nation's pre-eminent collections in the fields of science, technology, engineering and medicine. The collections have their roots in those of the South Kensington Museum, founded in 1857, augmented by those of the Patent Office Museum, the Special Loan Collection of Scientific Instruments and the Wellcome Trust.

The diverse collections comprise scientific demonstration instruments from leading makers of the 19th century and other historical artefacts often acquired from major collectors, examples of contemporary instrumentation and laboratory science, non-Western astronomy and elementary mathematics. The Industrial Revolution and post-industrial eras are represented by examples of the work of central figures such as James Watt, Henry Maudslay, Richard Arkwright and Marc and Isambard Brunel. The development of mechanical, electrical and electronic communications technologies from the mid-19th century to the present is also fully represented and the Museum holds the only surviving Fleet Street rotary newspaper press. The development of computing is charted from the Babbage machine, via electromechanical equipment, to early business and home computers and contemporary technologies. Space technologies from the 1960s onward are well represented. The Museum also holds the collection of the Farnborough Museum of the Royal Aircraft Establishment.

Additionally, there are significant holdings of prints, drawings, paintings, printed ephemera, technical drawings, maps, photographs, postal items, sculpture and contemporary art and the Library and Archive collections, comprising important collections of rare books and documents, which span the full history and development of science and technology.

Museum of Science and Industry, Manchester

The museum was founded in the mid-1960s when Manchester's traditional industries, particularly engineering and textile production, were undergoing major changes.

The collections reflect Manchester's pre-eminence as the world's first industrial city, and the city's role in an international exchange of goods, people and ideas. They demonstrate the role of Manchester and North West England as a nexus of industrialisation. As a whole the collections also reflect the effects of science, technology, industrialisation, urbanisation, and deindustrialisation on the lives of inventors, designers, workers and consumers.

At the core of the museum is the historic site itself, a very rare example of the development of a working station and railway yard over 150 years. Several of the city's internationally known scientific endeavours and personalities are represented in the object collections, from the pioneering work of John Dalton and James Joule, to graphene, Manchester's latest global scientific export.

Manchester's role as the centre of the Lancashire textile industry is also covered, alongside power for the industrial revolution, and the development of precision engineering and machine tools that laid the foundations for a new age of mass production. The collections cover the technologies that affected life in industrial Manchester, including electricity, gas, water supply and sanitation. Communications and information technologies form a major theme, ranging from early photographic material through ground-breaking calculating and computing machines. Bringing the story up to date, material from the broadcasting, music and animation industries represents the growth of creative industries in the post-industrial city.

National Railway Museum, York and Shildon

These collections have evolved over the last 150 years, from the amalgamation of the railway collections of the Science Museum with those of the former railway museum at York and railway items from the British Transport Commission (BTC) Museum of British Transport, Clapham. They have expanded since the opening of the National Railway Museum in 1975, through collecting from the modern railway industry and private individuals.

The National Railway Museum curates its collection in five main subject areas: the origins of railways; the impact of railways on our lives; the impact of railways on our world; the impact of railways on our culture and the science and technology of railways.

National Media Museum, Bradford

Founded in 1983 as the National Museum of Photography, Film & Television, the National Media Museum inherited collections from its parent institution, the Science Museum.

The collection currently numbers in the region of 3.25 million individual objects. These range from one-off individual donations of ephemeral material such as instruction manuals; to family photographic portraits; to the most significant collection of American television receivers in the UK; to the Kodak Museum collection, comprising photographs and equipment dating back to the very beginnings of photography

The National Media Museum curates its collection in three main areas: photography (encompassing photographic technology and photographs); cinematography; and television.

13.2 Acquisitions, management and disposals

Acquisitions

Acquisitions are made in accordance with the Collecting Policies agreed for each museum by the Board of Trustees and may be by purchase or donation. Further details of policies can be found at www.sciencemuseumgroup.ac.uk.

Collections Management

SMG exists, under the terms of the National Heritage Act 1983 (NHA), to develop, manage and make its collection useful for the public. The Act requires it to preserve, care for and add to the objects in its collection, to exhibit them to the public and to make them available for study and research, and to promote the public's enjoyment and understanding of science and technology and of the development of those subjects.

SMG follows the principle that it will share its collection widely. This objective is mainly delivered through public programmes of displays, events, publications and websites. Objects from the collection are either displayed in its Museums, or made available via loans to third parties, or else they are in store for future use and research.

The collection is displayed and stored according to SMG standards for the prevention of material deterioration; these are based on international standards and current research in alignment with PAS 198:2012 Specification for managing environmental conditions for cultural collections.

Library and archive storage facilities and exhibitions are based upon and informed by the requirements of BS 5454, PAS 198 and the National Archives Standard for Record Repositories. Collections management and care are regularly reviewed by SMG to ensure adherence to these standards. Collections management and care are regularly reviewed by SMG to ensure adherence to these standards.

SMG will:

- keep all objects in conditions in which deterioration is minimised;
- undertake conservation so that objects may be made accessible to audiences; and
- manage hazards in the collection with clear and effective systems to ensure public, staff and object safety.

SMG demonstrates its commitment to managing collections effectively as Arts Council England accredited museums, and by following the SPECTRUM standard and PAS 197:2009, the code of practice for cultural collections management.

Records proving title or relating to the history of objects in the collections are managed in accordance with the requirements of the Public Records Act and SMG's status as a designated Place of Deposit.

Information relating to the history and management of objects in the collection is held within the collections management system. This constitutes the primary record of the collection and is subject to regular review.

Information relating to the SMG's Library and Archive collections is held within local management systems. It is made accessible to the public subject to relevant legislation.

SMG will have secure title to all objects in the collection, hold basic data on every object so that it can be uniquely identified and the collection audited regularly and ensure records relating to objects in the collection are enhanced and made available to audiences.

Further details of policies adopted by SMG in the management of its collections can be found at http://group.sciencemuseum.org. uk/policy/group-policies/.

Disposals

The SMG actively manages its collection in order to ensure its long-term sustainability, significance and safety. The Group's museums have a long term purpose, and except for sound curatorial (including collections management) reasons, there is a strong presumption against the disposal of any item in the collection. However, the breadth of the collection, and the ways in which it has been developed, mean that SMG is currently holding material that is duplicate, unsuitable, or unusable.

Disposals will be guided by the National Heritage Act 1983 (as amended) and the Museums Association's Code of Ethics (as amended). SMG will dispose of material that is unsuitable for retention in the collection and can be disposed of without detriment to the interests of students or other members of the public.

Material may be unsuitable for retention if:

- It is a duplicate of another accessioned item in the collection, beyond the number of similar items that would reasonably be of interest and necessary for future use;
- It is more suitable for transfer to the collection of another National Museum, other accredited museum, or other organisation in the public domain that can improve access to, or the use, care or context of the material.
- It is otherwise unsuitable for the collection, because it falls outside the scope and content of the SMG collection.

 It is useless for the purposes of the collection because it is in poor or hazardous condition by reason of damage, physical deterioration, or infestation by destructive organisms. All material that is in such poor condition as to render it unusable will be destroyed to remove the risk of contamination or infestation.

SMG recognises that financially motivated disposal risks damaging public confidence in museums and the principle that collections should not normally be regarded as financially negotiable assets.

SMG accepts the principle that sound curatorial reasons for disposal must be established before consideration is given to the disposal of any item in the collection. SMG will not undertake disposal principally for financial reasons, except in exceptional circumstances, when it can be demonstrated that:

- It will significantly improve the long term public benefit derived from the remaining collection.
- It is not to generate short term revenue (for example to meet a budget deficit).
- It is as a last resort after other sources of funding have been thoroughly explored.
- Extensive prior consultation with sector bodies has been undertaken.
- The material under consideration lies outside the museum's established core collection.

The proceeds of disposal through sale, if this exceptional circumstance arises, will be applied solely and directly for the benefit of the museum's collection. Money raised will be restricted to the long term sustainability, use and development of the collection.

13.3 Heritage assets on the balance sheet

In the opinion of the Trustees, reliable information on cost or value is not available for the SMG's collections prior to 2001. This is owing to the lack of information on purchase cost; the lack of comparable market values; the diverse nature of the objects; and the volume of items held.

In the Trustees' opinion, conventional valuation approaches lack sufficient reliability and any valuation is likely to incur significant cost that is likely to be onerous. Even if valuations could be obtained this would not be at a cost commensurate with any benefits to the SMG management, curatorial staff, the public, or users of the financial statements.

For this reason the collections assembled up to the end of the 20th century (before 2001), large proportions of which were gifted to the Museum at nil cost and are incomparable in nature, are not recognised as assets in SMG's balance sheet.

Prior to 1 April 2011 The Museum of Science and Industry, Manchester did not recognise heritage assets in the balance sheet. The small number of objects acquired between 2002 and 2011 are of low value and it is not considered a sensible use of resources to attempt to determine their appropriate capital value.

	Purchased		Donated		Total	
	£'000	No.	£'000	No.	£'000	No.
2002-11	7,760	32	7,580	36	15,340	68
2011-12	90	8	16	2	106	10
2012-13	391	5	2,835	26	3,226	31
2013-14	7	1	672	12	679	13
2014-15	111	7	131	6	242	13
2015-16	134	8	3,708	13	3,842	21
At 31 March 2016	8,493	61	14,942	95	23,435	156

13.4 Collection sub-categories

	Estimated number of items at 31/03/2016	Number of items capitalised at 31/03/2016
Science Museum		
Scientific instruments	25,828	12
Commerce and Industry	43,512	27
Medical	18,870	4
Art	7,305	6
Coins and medals	903	1
Library and archive collections	707,119	8
National Railway Museum		
Railway origins	5,166	1
Locomotives and rolling stock	20,304	22
Railway life and work	18,105	1
Railway image and sound	4,324	-
collections		
Railways and culture	2,962,239	2
Library and archive collections	2,890	3
Handling collections	226	-
National Media Museum		
Photographic collections	10,506	28
Printed materials and	352	-
ephemera		
Cinematography	2,942	4
Photographic technology	11,316	-
Television and new media	2,852	27
Library and archive collections	3,485,075	2
Museum of Science and		
Industry		
Science	2,852	3
Industry	5,363	5
Transport	1,352	-
Communications	2,842	-
Energy	5,013	-
Community history	7,127	
_	7,354,383	156

N.B. The estimated number of total items includes individual figures for collections of objects which are split into parts, e.g. archive or photographic collections. The number of capitalised items includes those collections as 1 object with a combined total value.

14. Investments

In accordance with the Investment Policy, the following investments were made during the year:

(a) Fixed asset investments

	2016
	£'000
– International equities	5,651
– UK equities	5,432
 Sterling-denominated corporate bonds 	2,537
	13,620

All investments are stated at fair value at 31 March 2016.

	2016
	£'000
Additions	13,000
Unrealised net investment income	620
	13,620

(b) Current assets

	2016
	£'000
– Cash fund investments of short duration	11,253
– Cash holdings	16,910
	28,163
– Short term cash deposits	5,750
	33,913

Interest of £3k received from the cash fund investments is shown in net investment income on the Statement of Financial Activities.

15. Trading subsidiary

Subsidiary company

The Board of Trustees of the Science Museum owns the single share which is the entire issued share capital of SCMG Enterprises Ltd, a company registered in England and Wales. The company's principal activities are retailing, catering, corporate hire, corporate partnership, temporary exhibitions and interactive production and providing services to the Museum for admissions, public relations, sponsorship and fundraising.

The carrying value of SMG's investment in SCMG Enterprises Ltd, which is held at historic cost in the museum's balance sheet, is \pounds 411k (2014-15: £411k).

SCMG Enterprises Profit and Loss

			2015-16			2014-15
		Intragroup			Intragroup	
	SCMGE	adjustment	Total	SCMGE	adjustment	Total
	£'000	£'000	£'000	£'000	£'000	£'000
Turnover	17,106	-	17,106	16,605	(4)	16,601
Cost of sales	(6,420)	-	(6,420)	(5,547)	4	(5,543)
Gross profit	10,686	-	10,686	11,058	-	11,058
Administrative expenses	(19,780)	11,633	(8,147)	(18,995)	9,778	(9,217)
Rental income	320	-	320	93	-	93
Other operating income	13,284	(11,442)	1,842	12,748	(9,952)	2,796
Operating profit	4,510	191	4,701	4,904	(174)	4,730
Interest receivable	4	-	4	6	-	6
Interest payable	(23)	19	(4)	(33)	19	[14]
Profit on ordinary activities	4,491	210	4,701	4,877	(155)	4,722
Gift Aid	(4,491)	4,491	-	(4,871)	4,871	-
Retained profit	-	4,701	4,701	6	4,716	4,722

SCMG Enterprises Balance Sheet

			2015–16			2014-15
		Intragroup			Intragroup	
	SCMGE	adjustment	Total	SCMGE	adjustment	Total
	£'000	£'000	£'000	£'000	£'000	£'000
Fixed assets	1,719	60	1,779	2,865	-	2,865
Stocks	1,309	_	1,309	1,064	_	1,064
Debtors	2,941	-	2,941	2,848	-	2,848
Cash at bank and in hand	5,267	-	5,267	3,021	-	3,021
Creditors within one year	(9,428)	4,334	(5,094)	(7,905)	4,946	(2,959)
	89	4,334	4,423	(972)	4,946	3,974
Creditors over one year	(1,293)	1,293	-	(1,293)	1,293	-
Provisions	(363)	363	-	(448)	448	-
	152	6,050	6,202	152	6,687	6,839
Share capital	-	_	_			
Profit and loss account	71	5,627	5,698	71	6,239	6,310
Capital reserves	-	363	363	-	448	448
Revaluation reserve	81	60	141	81	_	81
	152	6,050	6,202	152	6,687	6,839

16. Debtors

	Group	Group	Museum	Museum
	2016	2015	2016	2015
	£'000	£'000	£'000	£'000
Trade debtors	3,262	2,130	1,010	286
Provision for bad debts	(14)	(20)	(2)	(14)
Other debtors	207	208	103	104
Prepayments and accrued income	1,692	2,538	1,095	1,631
Taxation and social security	953	1,286	953	1,286
Loans to subsidiary	-	-	1,293	2,298
Intercompany current account	-	-	4,334	3,942
	6,100	6,142	8,786	9,533

Ageing of debtors

Analysis of the ageing of the non-impaired trade debtors is shown below:

	Trade	Less than	30-60	More than
	debtors	30 days	days old	60 days
	£'000	£'000	£'000	£'000
As at 31 March 2016	3,252	1,762	580	910
As at 31 March 2015	2,110	1,096	336	678

Credit risk

The Museum's principal exposure to credit risk is primarily attributable to trade debtors. However this risk is not considered significant as major customers are familiar to the Museum. The amounts presented in the Balance Sheet are net of provisions for doubtful receivables estimated by the Museum's management based on prior experience and their assessment of the current economic value.

Movement in the provision for bad and doubtful debts relating to trade debtors

	2016	2015
	£'000	£'000
Provision at start of financial year	20	11
Utilised in the year	(17)	-
Increase in the provision	17	10
Bad debts recovered	(6)	(1)
Balance at 31 March	14	20

Loans to trading subsidiary

Purpose of loan	2016	2015 Interest payable
	£'000	£'000
Future purchase of leasehold interest in the Old Meteorological Building, Exhibition Road.	-	1,005 None
Purchase of land at Leeman Road, York.	1,293	1,293 1% above Bank of England base rate
	1,293	2,298

The loan held by the trading subsidiary is repayable on demand and secured by a floating charge on all of the subsidiary's assets. The Museum has confirmed that it will not call for repayment of the loan until at the earliest 30 June 2017 and then subject to the ability of the subsidiary to make repayments.

17. Creditors

Amounts falling due within one year

MSI employees. The amount of the provision anticipates annual increases of 2.20% (2014-15: 4.85%). In accordance with Treasury guidance the discount factor applied is 1.37% (2014-15: 1.8%).

	Group	Group	Museum	Museum
	2016	2015	2016	2015
	£'000	£'000	£'000	£'000
Trade creditors	2,796	2,533	2,360	2,366
Other creditors	3,860	399	3,735	295
Accruals and deferred income	8,699	6,023	4,758	3,767
Taxation and social security	741	459	149	176
Bank loan	-	81	-	-
Loans from DCMS	244	-	244	-
	16,340	9,495	11,246	6,604

Amounts falling due after one year

	Group	Group	Museum	Museum
	2016	2015	2016	2015
	£'000	£'000	£'000	£'000
Deferred income (advance rent)	83	133	83	133
Loans from DCMS	4,664	500	4,664	500
	4,747	633	4,747	633

The loan balance from DCMS is comprised of three loans for commercial activities at the Science Museum, the National Railway Museum and the National Media Museum. The total agreed facility is £8.535m, of which £4.849m has been drawn down to date. The loans are repayable in equal instalments over periods of three to ten years, with the first repayment due on 1 April 2016 and the final on 1 April 2026. Interest on the outstanding principal is payable annually and is calculated for two of the loans at fixed rates and for the other at the relevant National Loans Fund Interest Rate prevailing at the date of drawdown. The interest rates payable on the loans range from 0.84% to 1.68% depending on the period of the loan and the date on which the agreement was entered into.

Details of deferred income balances are provided in the Financial Review above.

18. Provisions (consolidated)

		Restructuring	Added years	
2016	Dilapidations	costs	pensions	Total
	£'000	£'000	£'000	£'000
Balance brought forward	43	251	59	353
Utilised	-	(226)	(7)	(233)
Reversed	-	(25)	-	(25)
Provision made in year	-	26	7	33
Balance carried forward	43	26	59	128
– due within one year	43	26	7	76
– due after one year	-	-	52	52

Restructuring costs

The balance reflects the best estimate of costs arising from three (2014-15: five) change programmes being undertaken by the Group at the year end.

Added years pension costs

In accordance with FRS 102 the sum provided is equivalent to the present value of expenditures expected to be required to settle the obligation to pay for the added-years benefits gifted to two former

19. Pensions

For details of the Civil Service and SCMG Enterprises Ltd pension schemes, see note 11.

Greater Manchester Pension Fund

SMG is an admitting body of the Greater Manchester Pension Fund ('the fund') which is part of the Local Government Pension Scheme ('the LGPS'); a defined benefit statutory scheme, administered in accordance with the Local Government Pension Scheme Regulations, it was contracted out of the State Second Pension until 6 April 2016. The last formal triennial valuation of the fund was carried out at 31 March 2013. The results of this valuation have been projected forward to 31 March 2016 using approximate methods. Results schedules were prepared by qualified independent actuaries Hymans Robertson LLP for 31 March 2016. The actuarial calculations are based on individual membership data submitted at 31 March 2015 for the purposes of the formal funding valuation at that date.

Major assumptions

The major assumptions used by the actuary were:

	2016	2015
Rate of increase in salaries	3.5%	3.6%
Rate of increase in pension	2.2%	2.4%
Discount rate	3.5%	3.2%

Mortality assumptions are identical to those used in the previous accounting period. The average life expectancies at age 65 are summarised below:

	Males	Females
Current pensioners	21.4 years	24.0 years
Future pensioners *	24.0 years	26.6 years

* Figures assume members aged 45 as at the last formal valuation date.

Fair value of employer's assets

		2016		2015
	Fair value	Proportion	Fair value	Proportion
	£'000		£'000	
Equities	8,317	73%	8,463	73%
Bonds	1,937	17%	1,971	17%
Property	684	6%	696	6%
Cash	455	4%	464	4%
Total of net assets	11,393	100%	11,594	100%

Balance sheet liability

	£'000	£'000
	2016	2015
Fair value of employer's assets	11,393	11,594
Present value of scheme liabilities	(14,615)	(15,920)
Net pension liability recognised on the balance sheet	(3,222)	(4,326)

Statement of Financial Activities

	2016	2015
	£'000	£'000
Service cost		
Current service cost	241	241
Past service cost (including curtailments)	40	36
Total service cost	281	277
Net interest		
Interest income on plan assets	(369)	(447)
Interest cost on defined benefit obligation	509	571
Total net interest	140	124
Total defined benefit cost recognised in Statement of Financial Activities	421	401

Other comprehensive income

	2016	2015
	£'000	£'000
Re-measurements		
Changes in financial assumptions	1,533	(2,190)
Other experience	226	135
Return on assets excluding amounts included in net interest	(437)	759
Total re-measurements recognised in	1,322	(1,296)
Other comprehensive income		

Movement in scheme obligation during the year

Opening defined benefit obligation Current service cost	2016	2015
	£'000	£'000
Current service cost	15,920	13,295
	241	241
Past service cost (including curtailments)	40	36
Interest on scheme liabilities	509	571
Contributions by scheme participants	57	73
Benefits paid	(393)	(351)
Actuarial losses / (gains)	(1,759)	2,055
Closing defined benefit obligation	14,615	15,920

Changes in the fair value of scheme assets during the year

	2016	2015
	£'000	£'000
Opening fair value of the employer's assets	11,594	10,409
Interest income on plan assets	369	447
Contributions by members	57	73
Contributions by the employer	203	257
Benefits paid	(393)	(351)
Return on assets, excluding amounts in net interest income	(437)	759
Closing fair value of the employer's assets	11,393	11,594

Projected pension expense for the year to 31 March 2017

	£'000	% of pay
Projected current service cost	204	22.3
Past service cost	-	-
Losses / (gains) in curtailment and settlements	-	-
Interest income on plan assets	(398)	(43.6)
Interest on obligation	510	55.9
Total	316	34.6

The estimate of the employer's contributions in the year to 31 March 2017 is approximately £204k.

Sensitivities

The sensitivities regarding the principal assumptions used to measure the scheme liabilities are set out below:

	Approximate % increase to the employer liability	Approximate monetary amount (£'000)
0.5% decrease in the real discount rate	11%	1,615
1 year increase in member life expectancy	3%	438
0.5% increase in the salary increase rate	3%	417
0.5% increase in the pension increase rate	8%	1,181

20. Commitments under operating leases

At the balance sheet date total minimum lease payments due under operating leases were as follows.

	Land and bu	ildings	Vehicle	25	Equipm	ent	Total	
(£'000)	2016	2015	2016	2015	2016	2015	2016	2015
Leases which expire:								
– within one year	11	11	22	27	42	42	75	80
– in the second to fifth year	44	44	26	52	-	-	70	96
– after more than five years	546	557	-	-	-	-	546	557
	601	612	48	79	42	42	691	733

Note that UK GAAP required disclosure of annual commitments and the 2014-15 figures have been restated to show total minimum lease payments, in accordance with FRS 102.

21. Capital commitments

At the balance sheet date contracted commitments totalling £5.762m existed for development of *Mathematics: The David and Claudia Harding Gallery* (£2.239m), *Wonderlab: The Statoil Gallery* (£2.500m) and the Medicine Galleries (£388k) at the Science Museum, and for other capital projects across the Group.

22. Intra-Government balances

	Debtors			Creditors		
		£'000		£'000		
	2016	2015	2016	2015		
Balances with central Government bodies	203	316	257	589		
Balances with local authorities	2	250	-	147		
Balances with NHS organisations	1	-	-	-		

23. Statement of funds (consolidated)

2015-16	Brought forward	Income	Expenditure Re	-valuation	Total	Transfers	Carried forward
Restricted funds	loritara	meenie		vatuation	Totat	Transfers	lorituru
Restricted income fund	1,666	9,794	(4,409)	_	7.051	(5.931)	1,120
Collections purchase fund	_	, 15	_	_	15	(15)	-
Post Office Block sale fund	-	20,278	-	_	20,278	9,885	30,163
Capital asset fund	180,495	3,758	(5,114)	_	179,139	2,974	182,113
Capital asset revaluation fund	_	-	_	_	_	· _	-
	182,161	33,845	(9,523)	-	206,483	6,913	213,396
Endowment fund	77	1	-	-	78	-	78
Unrestricted funds							
Designated funds							
Museum Improvement fund	4.420	-	(628)	_	3.792	(1,868)	1,924
Collections purchase fund	217	-	(20)	_	197	20	217
Capital asset fund	26,743	-	(2,304)	_	24,439	2,406	26,845
Capital asset revaluation fund	183,987	-	(5,852)	42,779	220,914	(6,356)	214,558
•	215,367	-	(8,804)	42,779	249,342	(5,798)	243,544
MSI pension scheme liability	(4,326)	_	_	1,322	(3,004)	(218)	(3,222)
General funds	1,544	65,616	(64,763)	,	2,397	(897)	1,500
	212,585	65,616	(73,567)	44,101	248,735	(6,913)	241,822
Total funds	394,823	99,462	(83,090)	44,101	455,296	_	455,296

Fund	Description
Restricted income fund	This comprises a number of funds where donors or grant-makers have specified the uses to which they may be put or have placed certain restrictions on the use of the funds.
Collections purchase funds	Amounts restricted (in the restricted fund) or designated (in the unrestricted fund) for purchase of collection items.
Post Office Block sale fund	Disposal proceeds over which there are specific conditions relating to their application to certain capital projects in London, Bradford and Wroughton.
Capital asset fund	Funds related to capital assets on the balance sheet which are fully employed in the operation of SMG and are not available for any other purpose.
Capital asset revaluation fund	Funds representing the revaluation of capital assets.
Museum Improvement fund	Unrestricted funds set aside by the Trustees for specific projects, both capital and revenue, principally expected to be expended within the next year.
MSI pension scheme liability	Funds related to the MSI defined benefit pension liability.
General funds	Expendable unrestricted funds.

Transfers of funds

		Restr	icted					Unrest	ricted			
	Restricted income fund	Collection purchase fund	Post Office Building sale fund	Capita asset fund	Endowment fund	Museum Improvement fund	Collection purchase fund	Capital asset fund	Capital asset revaluation fund	MSI pension scheme liability	General funds	Total
Purchase of the Post Office Building leasehold	-	-	-	-	-	(1,000)	-	1,005	-	-	(5)	-
Sale of the Post Office Building	-	-	10,351	(2,932)	-	-	-	(1,063)	(6,356)	-	-	-
Unrestricted income received for MIF projects	-	-	-	-	-	2,857	-	-	-	-	(2,857)	-
Collection fund income	-	-	-	-	-	-	125	-	-	-	(125)	-
Purchase of fixed assets	(5,402)	-	(466)	5,744	-	(2,041)	-	2,359	-	-	(194)	-
Purchase of heritage assets	(14)	(15)	_	29	-	-	(105)	105	-	-	-	-
Funding for future depreciation	-	-	-	133	-	-	-	-	-	-	(133)	-
Expenditure of funds designated in prior years	-	-	-	-	-	(1,532)	-	-	-	-	1,532	-
Designation of funds for future expenditure	-	-	-	-	-	561	-	-	-	-	(561)	-
Release of spent unrestricted funds in MIF projects	-	-	-	-	-	(713)	-	-	-	-	713	-
Release of spent restricted funds	(515)	-	-	-	-	-	-	-	-	-	515	-
Net pension costs incurred	_	_	_	_	_	_	_	_	_	(218)	218	_
Net transfers of funds	(5,931)	(15)	9,885	2,974	-	(1,868)	20	2,406	(6,356)	(218)	(897)	-

Transfers of funds (continued)

Transfer	Description
Purchase of the Post Office Building	Funds designated in previous years for the purchase of the Post Office Building leasehold
leasehold	from SCMG Enterprises.
Sale of the Post Office Building	Funds associated with the net book value of the Post Office Building in capital reserves.
Unrestricted income received for	Unrestricted income received for projects within the Museum Improvement Fund.
Museum Improvement Fund projects	
Collection fund income	Designation of £125k for collections purchases in 2015-16.
Purchase of fixed assets	Fixed assets purchased from restricted and unrestricted funds, including the Post Office
	Building fund.
Purchase of heritage assets	Heritage assets purchased from restricted and unrestricted funds.
Funding for future depreciation	Funding for depreciation in future periods of specified fixed assets.
Expenditure of funds designated in	Use of funds designated in previous years for the construction of the Dana Research Centre
prior years	and Library at the Science Museum.
Designation of funds for future expenditure	Designation of funds for future expenditure at the MSI and NRM Shildon.
Release of spent unrestricted funds in	Unrestricted funds received for and previously allocated to completed projects.
Museum Improvement Fund projects	
Release of spent restricted funds	Accounting entries where unrestricted funding has been used in prior years instead of
	restricted funds.
Net pension costs incurred	Transfer of costs incurred in relation to the defined benefit pension scheme to the specific reserve.

Analysis of group net assets between funds:

Fund balances at 31 March 2016 are represented by:

	Restricted	Endowment	Unrestricted	Total
	£'000	£'000	£'000	£'000
Tangible assets	159,202	-	242,154	401,356
Heritage assets	22,549	-	886	23,435
Investments	13,620	-	-	13,620
Current assets	19,511	78	21,733	41,322
Current liabilities	(1,403)	-	(14,937)	(16,340)
Long-term creditors	(83)	-	(4,664)	(4,747)
Provisions	-	-	(128)	(128)
Pension liability	-	-	(3,222)	(3,222)
Total of net assets	213,396	78	241,822	455,296

24. Financial instruments

Liquidity risk

Approximately 50% of SMG's income is provided by Grant in Aid from the Department for Culture, Media and Sport and 26% of SMG's income is from a wide range of commercial activities. As the SMG's cash requirements of the Charity are met largely through Grant in Aid, financial instruments have less potential for creating risk than they would in a non-public-sector body of a similar size. The majority of financial instruments relate to contracts to buy non-financial items in line with the SMG's purchase and usage requirements and the SMG is therefore exposed to little credit, liquidity or market risk.

The foreign currency risk is negligible as substantially all income and expenditure and material assets and liabilities are denominated in sterling.

Financial assets by category

	Note	2016	2015
		£'000	£'000
Trade debtors	16	3,248	2,110
Other debtors	16	207	208
Short-term deposits	14	5,750	-
Cash and cash equivalents	14	28,163	8,681

The above figures exclude statutory debtors which relate to VAT due from HM Revenue & Customs. None of the financial assets have been subject to impairment other than trade debtors in respect of provision for bad debts.

Financial liabilities by category

	Note	2016	2015
		£'000	£'000
Trade creditors	17	2,796	2,533
Other creditors	17	3,860	399
Accruals	17	4,958	5,575
Bank loan	17	-	81
Museum loan (from DCMS)	17	4,908	500

The above figures exclude statutory creditors, which relate to Tax and Social Security due to HM Revenue & Customs. With the exception of the bank loan and the DCMS loan to the SMG, other liabilities are non-interest bearing.

25. Cash flow information

Reconciliation of net incoming resources to net cash inflow from operating activities

	Note	2016	2015
		£'000	£'000
Net income/(expenditure)		16,372	(4,081)
Adjustments for:			
– Net gains on investments	14	(623)	-
– Investment income	7	(121)	(20)
– Interest payable		63	14
- Release of deferred income	17	(50)	(50)
– Depreciation charge for the year	12	13,326	13,735
- Profit on sale of Post Office Building	-	(19,649)	-
– Donated fixed and heritage assets	13	(3,708)	(131)
– Net movement on provisions	18	(225)	(169)
– Greater Manchester Pension Scheme costs	19	218	144
– Decrease/(increase) in stocks	-	(245)	(6)
– Decrease/(increase) in debtors	16	42	1,101
– Increase/(decrease) in creditors [1]	17	6,917	(3,356)
Net cash from operating activities	-	12,317	7,181

[1] Excluding bank loans and capital accruals.

Analysis of changes in net funds

	Notes	2015	Cash flows	2016
		£'000	£'000	£'000
Cash at bank and in hand	14	8,681	19,482	28,163
Current asset investments	14	-	5,750	5,750
Debt due within one year	17	(81)	81	-
Museum loan (from DCMS)	17	(500)	(4,408)	(4,908)
Net funds		8,100	20,905	29,005

26. Transition to FRS 102

As explained in note 1, the Group has adopted FRS 102 and the new *Charities SORP* for the year ended 31 March 2016, and has restated comparative amounts as follows.

Changes for FRS 102 adoption

1 Annual leave accrual

FRS 102 requires recognition of an accrual for accumulating compensated absences, for example for annual and sick leave that can be carried over into future financial years. The SMG's HR system allows outstanding leave to be calculated for each individual in the organisation and for an accrual to be calculated. The balance shown in the opening balance sheet at 31 March 2014 was £401k, and the balance at 31 March 2015 was £448k, resulting in an additional charge of £47k to the Statement of Financial Activities in 2014-15.

2 Defined benefit pension schemes

As explained in note 19, the Group is an admitting body of the Greater Manchester Pension Fund (GMPF) for certain past and current employees at MSI. At 31 March 2015, the group's proportion of the overall deficit included in the accounts was £4.326m. FRS 102 requires a different treatment of defined benefit pension schemes in the Statement of Financial Activities, including that a net interest cost be calculated by applying the same interest rate to the net defined benefit liability (or asset), with this figure included in the SoFA, while remeasurements of the net liability (or asset), i.e. actuarial gains and losses, are recognised in full in other comprehensive income. Applying these changes to the 2014-15 financial statements results in an increase of £166k in the cost recognised in the SoFA and an equal reduction in the costs in Other Comprehensive Income.

3 Income recognition

The *Charities SORP* offers new guidance on the recognition of income and alters one of the criteria for recognition from the income's receipt being 'virtually certain' to 'probable'. In relation to grant funding, the *SORP* states that income must be recognised, when meeting funding terms relating to performance are within the charity's control and there is sufficient evidence that they have been met. After reviewing grant income not recognised in the financial year ending 31 March 2015, the SMG has identified two grants of a combined value of £686k that would have been recognised in 2014-15, had the new conditions of the *Charities SORP* applied at that date. The Statement of Financial Activities for the previous year shows this restricted income and the Balance Sheet a corresponding accrued income balance.

4 Governance costs

Governance costs were previously shown separately on the face of the Statement of Financial Activities. Under the *Charities SORP*, these are treated as support costs and allocated across charitable objectives in the same fashion. The comparative information in note 10 has been restated to reflect this change.

Restated Balance Sheet

	Explanation	2014	2015
		£'000	£'000
Original funds		387,254	394,585
Annual leave accrual	1	(401)	(448)
Income recognition	3	-	686
Restated funds		386,853	394,823

Restated Statement of Financial Activities

	Explanation	2015
		£'000
Original net expenditure		(4,554)
Annual leave accrual	1	(47)
Defined benefit pension schemes	2	(166)
Income recognition	3	686
Restated net expenditure		(4,081)

27. Related-party transactions

The Science Museum Group is an executive non-departmental public body whose parent body is the Department for Culture, Media and Sport (DCMS). DCMS is regarded as a related party. During the year, the Science Museum Group had a number of material transactions in the normal course of business with DCMS and with other entities for which DCMS is regarded as the parent department. This includes the Heritage Lottery Fund, which provided grant funding to the Science Museum Group during the course of the year.

The Director of the SMG acts as Accounting Officer for the National Coal Mining Museum for England, and the Science Museum Group provided grant funding to that museum during the year.

The SMG also entered into other material related party transactions during the course of the year with bodies connected to Trustees, as follows:

28. Post balance sheet events

The result of the referendum held on 23 June was in favour of the UK leaving the European Union. This is a non-adjusting event. A reasonable estimate of the financial effect of this event cannot be made.

The Annual Report and Accounts 2015-16 were authorised for issue by the Trustees and Accounting Officer on the date they were certified by the Comptroller and Auditor General.

Related party	Nature of relationship	Income £'000	Expenditure £'000	Outstanding balances due from / (due to) at year end £'000	Nature of transaction
Science Museum Foundation	Mr Howard Covington served as trustee of the related party during the year.	-	(6,716)	(3,716)	Grant funding
First Great Western	Lord Faulkner of Worcester is chair of the advisory board at the related party.	3	-	-	Annual dinner tickets
Royal Society	Professor Dame Athene Donald served as a trustee and Lord Willetts served as the member of the President's Advisory Committee of the related party during the year.	6	-	-	Training and event income
Imperial College, London	Professor Averil Macdonald served as a council member of the related party during the year.	30,116	[6]	-	Income from sale of the PO block building. Expense JANET network connectivity.
University College, London	Dr Gill Samuels served as a council member and on the finance committee of the related party during the year.	8	-	4	Academic fees
ThyssenKrupp Elevator UK Ltd	Mr Andreas Goss served as executive board member of ThyssenKrupp Steel Europe AG, parent of the related party during the year.	-	(11)	-	Maintenance contracts
The Chartered Institute of Marketing	Lord Grade served as vice president of the related party during the year.	-	(1)	-	Subscription fees
Network Rail	Ms Sharon Flood served as a remunerated director of the related party during the year	122	-	-	Mainly rental income
British Science Association	Lord Willetts served as chair and Professor Dame Athene Donald served as a president of the related party during the year	64	-	63	Rental income
Cambridge University	Professor Dame Athene Donald is a master and trustee at Churchill College, Cambridge University and is also a professor at Cambridge University.	-	(96)	-	Payment for Science Museum Fellowship

