

---

***BBC Digital  
Media Initiative***  
Review of the BBC's  
management of DMI

17 December 2013

FINAL

---

# Contents

<i>Table of figures</i>	<b>1</b>
<i>Glossary</i>	<b>2</b>
<i>Executive summary</i>	<b>4</b>
<i>Introduction</i>	<b>8</b>
<hr/>	
<b><i>Findings and recommendations</i></b>	<b>11</b>
<hr/>	
<i>Question 1 – Governance arrangements</i>	<b>12</b>
<i>Question 2 – Project and financial management</i>	<b>20</b>
<i>Question 3 – Risk management</i>	<b>25</b>
<i>Question 4 – Executive reporting</i>	<b>28</b>
<i>Question 5 – Project reporting</i>	<b>32</b>
<i>Question 6 – Implementation of NAO findings</i>	<b>34</b>
<i>Question 7 – Recommendations</i>	<b>38</b>
<hr/>	
<b><i>Appendices</i></b>	<b>45</b>
<hr/>	
<i>Appendix A: Timeline and key events</i>	<b>46</b>
<i>Appendix B: Summary of meeting minutes where DMI has been referenced</i>	<b>52</b>

---

# *Table of figures*

Figure 1 – Scope of PwC's review of DMI .....	4
Figure 2 – BBC DMI scope and timeline presented to the BDG in March 2010.....	9
Figure 3 – BBC Corporate and DMI Governance Forums .....	12
Figure 4 – Definition of DMI governance forums .....	13
Figure 5 – DMI Governance compared with a typical governance model .....	14
Figure 6 – Overall DMI status as reported in the quarterly BBC PMO reports .....	16
Figure 7 – BBC PMO guidelines on project status reporting .....	17
Figure 8 – BBC PMO Reporting Summary Status Criteria .....	17
Figure 9 – Duration of individuals in key DMI roles.....	18
Figure 10 – Summary of benefits as detailed in the DMI Business Case (2010) .....	21
Figure 11 – Analysis of benefits per the BBC financial Business Case and Quarterly PMO reports .....	22
Figure 12 – BBC's proposed delivery timeline (per the 2010 business case) .....	23
Figure 13 – Analysis of budget and cost per the BBC financial Business Case and Quarterly PMO reports.....	24
Figure 14 – Analysis of assurance interventions from various DMI management reports.....	26
Figure 15 – Interpretation of the reporting flow between DMI and BBC Corporate.....	29
Figure 16 – BBC PMO's 'BID' benefits mapping framework.....	33
Figure 17 - Recommended governance forums.....	39

# Glossary

<b>Term</b>	<b>Description</b>
<b>Baseline</b>	A level on which progress can be measured. Can represent any dimension (e.g. Time, Cost, Benefit, Quality or Scope).
<b>BBC</b>	The British Broadcasting Corporation is a British public service broadcasting statutory corporation. The BBC exists to serve the public, and its mission is to inform, educate and entertain.
<b>BBC Executive</b>	The BBC Executive is responsible for the operational delivery of BBC services and the direction of BBC editorial and creative output in line with the framework set by the Trust.
<b>BBC PMO</b>	The BBC's Central Project Management Office set up to provide project management guidance and management reporting on the BBC's critical projects portfolio.
<b>BBC Trust</b>	The BBC Trust ("The Trust") is the governing body of the BBC, and makes sure the BBC delivers that mission. The Trust is separate from the BBC Executive and the Executive Board which is led by the Director-General. The Trust sets the overall strategic direction for the BBC, approves its strategy and budget and assesses its performance.
<b>BDG</b>	BBC Direction Group (BDG) is responsible for managing pan-BBC issues delegated to it from the Executive Board and ensuring that the organisation meets its pan-BBC objectives.
<b>Capex</b>	Capital Expenditure – budget defined for the development of organisational assets. As opposed to Opex (Operating expenditure).
<b>CI</b>	Continuous Improvement efficiencies programme preceding DQF.
<b>Corporate Governance</b>	The system by which the BBC is directed and controlled by the BBC Executive. Corporate Governance, as it relates to DMI, interacts with: <ul style="list-style-type: none"><li>• The BBC Trust to agree strategic direction of the BBC, set strategy and budget, and assess performance.</li><li>• DMI Governance to ensure alignment of the DMI investment to the BBC strategy, management of risk in relation to the portfolio, and to maximise return on the DMI investment.</li></ul>
<b>DG Finance Committee</b>	The Director General's Finance Committee. Appointed to assess investment cases, and ensure financial costs and benefits are managed.
<b>DMI</b>	The Digital Media Initiative project set out to create new digital production tools and link them with a central, digital archive that would allow BBC staff to access a seamless digital chain throughout the production process, from camera to archive.
<b>DMI Governance</b>	The project management framework within which DMI decisions are made and communicated with clear linkage to Corporate Governance through the DG Finance Committee, the BDG and the Executive Board.
<b>DMI Technical Solution</b>	The underpinning technology systems comprising digital archive, archive cataloguing, production tools, and associated tools to enable the ingesting of digital media.
<b>DQF</b>	Delivering Quality First is the BBC's plan for how it can best deliver the highest quality programmes and content to audiences until the end of the Charter in December 2016.
<b>ESB</b>	Executive Steering Board. A programme governance forum comprised of senior leadership and sponsors to provide guidance and decision-making on a project or programme.
<b>Executive Board</b>	The Corporate Governance body of the BBC Executive, the Executive Board manages the BBC. It is responsible for operational management and delivery of BBC services according to the plans that have been agreed with the BBC Trust.
<b>Fabric</b>	The term describing the end-to-end solution DMI sought to deliver.

<b>Term</b>	<b>Description</b>
<b>I&amp;A</b>	Information & Archives is a department within the BBC which manages information and archive media assets.
<b>In-fax</b>	The legacy BBC archive library system for logging archive media and tracking data associated to its use.
<b>KPI</b>	A performance indicator or Key Performance Indicator (KPI) is a type of performance measurement. KPIs can be used to evaluate an organisation or project's success, or to evaluate the success of a particular activity in which it is engaged.
<b>Programme</b>	A collection of projects or workstreams aligned to a common business outcome. Also known as a programme of work.
<b>Project</b>	The Project Management Institute describes a project as a temporary group activity designed to produce a unique product, service or result.
<b>Project Governance</b>	The project management framework within which project decisions are made and communicated with clear linkage to Corporate Governance.
<b>Project North</b>	Creation of a new centre of excellence outside London for production, technology development, training and digital media.
<b>PSB</b>	Project Steering Board.
<b>RAID</b>	A process and log for the management of Risks, Assumptions, Issues and Dependencies.
<b>Television</b>	The Television division is responsible for commissioning, producing, scheduling and broadcasting the content of all of the BBC's television channels.
<b>Top Hat</b>	The Top Hat is a management summary that was provided by the BBC on top of the detailed DMI status report.
<b>Trust</b>	The BBC Trust, also known as 'the Trust'.
<b>Trust FC</b>	The Trust Finance Committee, or Trust FC, oversees the budget, assurance and value for money processes at the Trust.
<b>Vision</b>	The name given to the Television division in April 2010 at the time the DMI Business Case was approved by the DG Finance Committee.

---

# Executive summary

## Introduction and scope of the review

PricewaterhouseCoopers LLP (“PwC”) were engaged by the BBC Trust (the “Trust”) to provide a review of the Digital Media Initiative (DMI) with a focus on project governance, reporting and controls. The review seeks to understand and provide insight on the following seven areas:

- 
- 1 What governance arrangements were put in place for the oversight of DMI? Were they fit for purpose?

---

  - 2 What project and financial management arrangements were put in place to ensure DMI delivered the anticipated benefits on time and to budget and did these arrangements follow an agreed BBC methodology? Were they fit for purpose and followed?

---

  - 3 What risk management arrangements were put in place and did these arrangements follow an agreed BBC methodology? Were they fit for purpose and followed?

---

  - 4 What project reporting arrangements (including information on project delivery, technical delivery approach, costs and risks) were put in place for the Executive Audit Committee, the Executive Board and the BBC Trust? Were they fit for purpose and followed?

---

  - 5 Were the agreed project and risk reporting arrangements followed? Were the reports fit for purpose? What actions resulted from the reports? Were they fit for purpose?

---

  - 6 Did the BBC Executive implement the recommendations focusing on project management governance and risk management from the NAO’s 2011 report on the management of DMI?

---

  - 7 What are the wider project management and reporting lessons that can be learnt from DMI and applied to other BBC projects?
- 

Figure 1 – Scope of PwC’s review of DMI

Our fieldwork was performed in the period 24th May 2013 to 30th September 2013.

The timeframe for our review was initially set from the point the National Audit Office (NAO) report on DMI was published in January 2011 through to the decision to stop DMI in May 2013. Following our initial review of documentation, it was apparent that the majority of processes and procedures that relate to the questions in Figure 1 were set up at the point the revised DMI Business Case was first presented by the BBC Executive to the Trust in May 2010. As a result, we agreed with the Trust to extend the timeframe for this review back to April 2010 when the Business Case was approved by the DG Finance Committee.

Our review was based on interviewing key stakeholders and reviewing formal documents provided by the BBC and the Trust which relate to questions 1 to 6 in Figure 1. Recommendations coming from this review are set out in our answer to Question 7. For the avoidance of doubt, this review has not assessed the programme delivery or any element of the technology delivery, business change activities, DMI technical solution, or the decision to write down the asset. It is clear however that DMI was not delivered.

PwC were not engaged to carry out a forensic investigation and we have not verified the reliability or accuracy of information obtained in the course of our work other than as specifically stated in our engagement letter with the Trust dated 22nd May 2013.

When reading this report, it is important to understand that any large and complex technology-enabled business transformation programme can experience significant challenges during execution. It is not unusual for these challenges to have a time, cost or quality impact. Hindsight typically sheds light on decisions and practices that at the time can seem eminently reasonable.

It should also be noted that DMI was being undertaken at a time of considerable change within the BBC and against the backdrop of a portfolio of complex programmes including Project North, W1 and the Olympics.

Whilst PwC have not reviewed the approaches taken to deliver these programmes as part of this review, and whether they can be technically defined as successes against their original business cases (or the usual metrics of time, cost and quality), it should be noted that each of these programmes ultimately delivered its expected outcomes.

It is against this backdrop of organisational strain on the business and technology delivery, and the BBC's belief that they had the internal capability to manage the delivery of these types of programmes, that our findings on DMI should be considered.

We provide an overview of DMI and more information on our approach to this review in the Introduction section on Page 8 of this report.

## *Summary of findings*

In answering questions 1 to 6 set out in Figure 1, our review focused on the governance, reporting and risk management arrangements implemented for DMI. Within this scope, we found that there was no single event or issue that was the root cause of DMI failing to deliver its anticipated benefits. Our overall findings are:

### **The programme governance structure implemented for DMI was not effective in dealing with the complexity of the project.**

The structure lacked an executive steering board (ESB) which could effectively challenge the progress of DMI against agreed quality, time and cost metrics. The DG Finance Committee undertook some elements of the role that an executive steering board would have – namely to ensure the practice of good financial governance by enforcing BBC Investment Policy and Guidelines. However it is our view that the composition of the DG Finance Committee meant that whilst it was appropriately skilled to assess DMI from a financial cost and benefit perspective, it is not clear that they had the ability to challenge progress on the process improvement aspect of DMI. The CTO attended the DG Finance Committee to provide technology expertise. However as the DMI Project Sponsor, this meant that the DG Finance Committee did not have sufficient independent technical capabilities needed to challenge progress on DMI from a technology perspective.

### **Corporate Governance bodies were not provided with a clear view of the status of DMI through the formal reporting of progress and management of risk.**

DMI did not provide clear and transparent reporting on progress against plan, cost to complete, or delivery of benefits to enable effective decision-making within the corporate governance structure. Whilst the overall status of DMI was known formally through the quarterly reporting provided by the BBC PMO, confidence amongst the BBC Executive that DMI would eventually deliver was not supported by evidence of detailed specific remediation plans.

**The focus and priorities of DMI were on technology build and not sufficiently on enabling BBC-wide change.**

DMI sought to change and standardise working practices across all of the BBC based on implementing leading edge technology that the BBC needed to research and develop in conjunction with third parties. Delivery of a single set of processes and the required change in business operations were a pre-requisite of successful delivery of the benefits recognised in the 2010 Business Case. DMI reporting focused on technology risks and issues rather than the ability of DMI to drive operational change to business practices in the BBC. This could have resulted in senior management taking a view that DMI would eventually deliver the anticipated benefits. The BBC Executive's view of progress could have been more clearly informed by taking into account reporting by projects dependent on DMI (such as North and Vision DQF) of the impacts on the business coming from delays in delivery.

**The DMI Business Case was not subject to periodic review.**

Without periodic reviews, DMI would have had to monitor for changes in the benefits and the cost against the Business Case approved in April 2010. Reviewing cost and benefits together would determine whether trigger points in the BBC Investment Policy and Guidelines were met which would have required a re-submission of the Business Case. The guidelines in place at the time required the Business Case to be resubmitted should there be variation in costs or benefits over the whole life of a project by 10%. In June 2011 the DMI steering board reported that £11.4m of the benefits forecast were at risk, representing a drop from £98m to £86.6m – a reduction of 11.6%. A benefits review was subsequently undertaken in July 2011, however the BBC believed at the time that the full functionality outlined in the Business Case, and hence the benefits, would be delivered over the full life of DMI out to March 2017. No review was undertaken into the cost of delivering DMI. Had DMI provided an accurate forecast against plan, it should have been clear from delays in delivery, and changes to the risk profile, that the conditions requiring re-approval of the Business Case had been reached.

**The lack of an integrated assurance plan reduced the effectiveness of governance in managing risk.**

DMI originally set up risk management processes that were consistent with other BBC projects. Over time independent assurance activities were provided by Internal Audit, the BBC PMO and a number of third parties. Apart from the regular quarterly reporting by the BBC PMO, other assurance activities were ad-hoc in nature and concentrated on answering specific questions at a point in time. We do not believe this was sufficient to support a programme as complex as DMI as these independent activities did not provide an integrated, on-going view of risk. In September 2011, it was noted at the BBC Executive Audit Committee that the planned 2011 Internal Audit review of DMI would be postponed until 2012. In September 2011, reporting on DMI indicated that successful delivery was in doubt with major risks or issues apparent in a number of key areas. Had the Corporate Governance bodies been provided a clear view of the status of DMI, then it would have been apparent to Internal Audit at the time that the required mitigation was not in place. Apart from quarterly BBC PMO portfolio reporting, no other assurance activities were undertaken on DMI in 2011. It was only after the 2011-2012 Q3 BBC PMO portfolio report was presented to the DG Finance Committee in February 2012, which first identified that successful delivery of DMI appeared unachievable without significant mitigation, that assurance activities continued with Internal Audit and BBC PMO reviews of DMI in April 2012.



Recognising the projected timescales for DMI development and delivery, and the level of impact DMI would have had on the operations of the BBC, we are of the view that had appropriate governance, risk management and reporting arrangements been established from the outset, then the process of preparing a revised Business Case for DMI could have been commenced as early as July 2011. It is not possible to predict how long this process would have taken or what the outcome would have been, but in retrospect it is clear that the project would have benefited from this greater scrutiny at this earlier stage.

In summary, the complexities of DMI and a series of missed milestones, combined with weaknesses in DMI governance, risk management and reporting arrangements meant that it took longer than we would have expected for the BBC to reach Executive agreement on the future for DMI.

## *Summary of Recommendations*

In answering Question 7, we have made recommendations on the following key aspects of programme management:

- *Programme and Corporate Governance*
- *Programme Lifecycle Management*
- *Risk and Issue Management*
- *Programme Assurance Planning*
- *Financial Management*
- *Benefits Management and Tracking*

---

# Introduction

## Overview of DMI

DMI was a complex business transformation programme aimed at transforming the way in which the BBC makes content for its audiences. DMI was a strategic investment in infrastructure, people and production processes that supported both the BBC's creative vision and its technology strategy to standardise the production, storage and use of digital content across TV, radio and online.

Central to the delivery of DMI was a technology solution that would allow BBC staff and partners to develop, edit, share and manage video and audio content and programming on their desktops. At the time the Business Case for DMI was approved by the Trust in June 2010, it was envisaged by the BBC and the Trust that the technology would not be commercially available within a timescale that would allow the BBC to realise its aim. DMI would need to deliver:

- A data management system, including a structured format for data, and a catalogue database that listed all archived projects and content;
- A digital archive to store all new BBC content;
- Production tools, for example desktop editing tools; and
- Common enterprise services underpinning the above.

In addition to the technology elements of the programme, DMI would need to deliver a standard set of processes across the BBC which required a significant change in operational and cultural ways of working. When taken together, DMI was at its inception a highly complex technology enabled business transformation programme.

## Context

In February 2008, the BBC entered into an agreement with Siemens to deliver DMI. Following a series of delivery delays, the BBC and Siemens reached a mutual agreement to terminate the DMI contract in 2009. In June 2010, the BBC presented a revised DMI Business Case to the Trust which was subsequently agreed, bringing the delivery of DMI under the control of the BBC with third parties contracted to provide specific deliverables or resources under the direction of the BBC.

Figure 2 – BBC DMI scope and timeline presented to the BDG in March 2010 shows the original timeline for each release together with a high level view of the business outcome that was planned to be delivered. From the diagram it is clear that DMI set an expectation from the outset that there would be a high degree of confidence as to what would be delivered in the initial phases. DMI recognised that this confidence would reduce over time, reflecting the belief by the BBC at the time that business requirements could change and that this would later be reflected in changes to the release schedule.

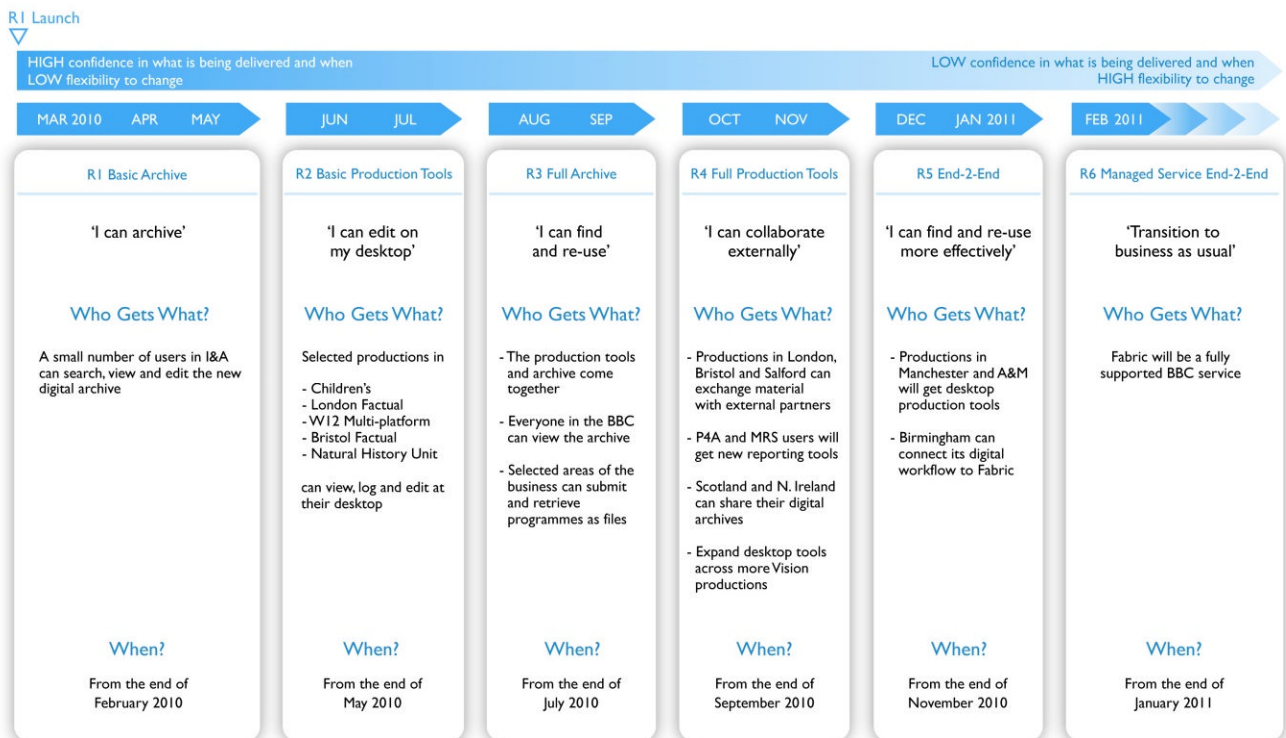


Figure 2 – BBC DMI scope and timeline presented to the BDG in March 2010

From 2010 to 2012, DMI was being delivered at a time of considerable challenges at the BBC, predominantly due to a demanding portfolio of complex programmes including Project North, W1 and the Olympics, all of which apart from DMI had a fixed immovable deadline for delivery. Whilst we have not looked at these programmes as part of this review, each of them appears ultimately to have delivered the expected outcomes. It is against that backdrop of organisational strain on the business and its technological capabilities, and the BBC's belief that the BBC had the internal capacity to manage the delivery of these types of large programmes that our findings on DMI should be considered.

In January 2011, the Trust published the National Audit Office's (NAO) value for money review of the BBC's management of DMI. The NAO found that the BBC had started to deliver the system since bringing the project in-house. The NAO concluded that there was still a considerable way to go in the development of a technically complex system and that the success of the project would depend on take-up by users across the BBC and elsewhere.

In February 2011, the DMI Steering Group approved a revised release plan that aimed to deliver DMI by August that year. In July 2011, the BBC PMO portfolio milestone plan reported that a number of DMI delivery milestones on this revised release roadmap had slipped, including a critical milestone for the acceptance testing of DMI for Project North. Both

DMI and Project North continued to work towards the achievement of this critical milestone; however in November 2011 it became apparent to both DMI and Project North that this critical milestone could no longer be met.

Over the course of 2012, it became clear to the BBC and the Trust that there were significant problems with the delivery of DMI. In June 2012, at the request of the Executive Sponsor, the BBC Chief Operating Officer (COO), a review of DMI was conducted by the BBC PMO into two main areas – archive and production tools. The review team interviewed 17 people from DMI, production and other areas of the BBC deemed relevant to the review. There was broad consensus on the findings from this review which concluded in a memo to the COO that of the 12 functions addressed, one was currently in live use but required a period of stabilisation and further releases to improve usability in the long term. The remaining functions in the scope of DMI were in various phases of development. However, there were a number of delivery, functionality and performance issues to resolve that would require further releases to meet acceptable levels of usability for the end user. As a result of this review, DMI needed to clarify the impact on time and delivery to understand the cost of providing these further releases.

In September 2012, the Trust FC requested that any amended proposal for the future of DMI be put before them for consideration.

In October 2012, the DG Finance Committee paused DMI whilst an operational review and technology assessment was conducted. At this point the End-to-End Digital initiative was established by the Director of Operations to carry out this review. The BBC Executive Board and Trust FC were advised by the CFO that DMI had been paused. It was agreed that under the leadership of the End-to-End Digital initiative, DMI should bring a new business case to the Executive Board and the Trust by March 2013. In this period the BBC completed its review of DMI and concluded that DMI would not deliver the BBC's future business needs for digital, tapeless production, at which point the decision was made to stop the programme and write down the asset value.

## *The role of the BBC Trust*

The BBC exists to serve the public, and its mission is to inform, educate and entertain. The Trust is the governing body of the BBC, and makes sure the BBC delivers that mission.

The role of the Trust is to get the best out of the BBC for licence fee payers and to set the strategic objectives for the BBC.

The Trust is separate from the Executive Board which is led by the Director-General. The Executive Board is responsible for the operational delivery of BBC services and the direction of BBC editorial and creative output in line with the framework set by the Trust.

For every BBC service the Trust states what it expects the BBC to deliver and how much it can spend. The Trust sets the BBC's editorial guidelines and protects the BBC's independence. The Trust monitors performance to ensure that the BBC provides value for money while staying true to its public purposes.

## *Approach to this review*

This review has been conducted in accordance with our engagement letter with the Trust dated 22 May 2013 and the report is for the benefit of the Trust only.

In the period 24th May 2013 to 30th September 2013 we conducted a series of 50 interviews with key DMI leadership and stakeholders, and undertook a broad review of formal DMI governance documentation. The observations included in this report are our views on DMI based on our experience of running and reviewing similar programmes of work, the interviews we conducted and the documentation we reviewed.

To avoid unnecessary duplication, this review builds on the findings and conclusions of previous reviews of DMI commissioned by the BBC. We have not verified these findings and conclusions, and do not comment on the viability of the DMI technical solution.

Our work does not constitute a forensic review of DMI and we have not verified the reliability or accuracy of information obtained in the course of our work other than as specifically stated in our engagement letter. In preparing this report we have not taken into account the interests, needs or circumstances of anyone apart from the Trust, even though we are aware that others will have an interest in our findings.

## *Structure of this report*

The main body of this report provides key findings and conclusions to our work which extend only so far as to answer questions 1 to 6 listed in Figure 1 – Scope of PwC's review of DMI (on page 4). In answering question 7, we have included a series of pragmatic recommendations based on our review of DMI. These address the identified issues and risks and are based on our experience of projects similar in nature to DMI.

This report is not designed to meet the needs of, and may not be suitable for, the use of any party other than the Trust for any purpose or in any context. Any party other than the Trust that obtains access to this report or a copy (under the Freedom of Information Act 2000, the Freedom of Information (Scotland) Act 2002, through BBC's Publication Scheme or otherwise) and chooses to rely on this report (or any part of it) does so at their own risk. To the fullest extent permitted by law, PwC does not assume any responsibility and will not accept any liability in respect of its work or its findings to any party other than the Trust.

---

# *Findings and recommendations*

# Question 1 – Governance arrangements

*What governance arrangements were put in place for the oversight of DMI? Were they fit for purpose?*

## Background

At the time the Business Case for DMI was approved by the DG Finance Committee on 1st April 2010, the Executive Committee on 12th April 2010 and finally by the Trust on 24th June 2010, DMI had undergone a significant change in delivery approach with the decision to bring responsibility for the delivery of DMI back from Siemens to the BBC – transferring the delivery risk to the BBC.

Governance responsibilities changed at this point and were clearly articulated in the Business Case. A Programme Steering Group was established which was integrated into the existing BBC corporate governance framework, to guide and direct the programme to deliver the outcomes and benefits outlined in the Business Case.

The governance model for DMI was comprised of two core groups: BBC Corporate governance and DMI governance. BBC Corporate governance included standard governance functions that existed outside of the DMI programme, providing executive governance over DMI and other major projects and programmes in the BBC portfolio. DMI governance functions were set up specifically for the delivery of DMI and overseen by the DMI Steering Group. The DMI Steering Group reported to the DG Finance Committee and was responsible for guiding and directing DMI to deliver the outcomes and vision outlined in the Business Case approved by the Trust, and to ensure continued alignment of DMI with business direction and editorial strategy. This is illustrated in Figure 3 – BBC Corporate and DMI Governance Forums with the role of each body set out in Figure 4.

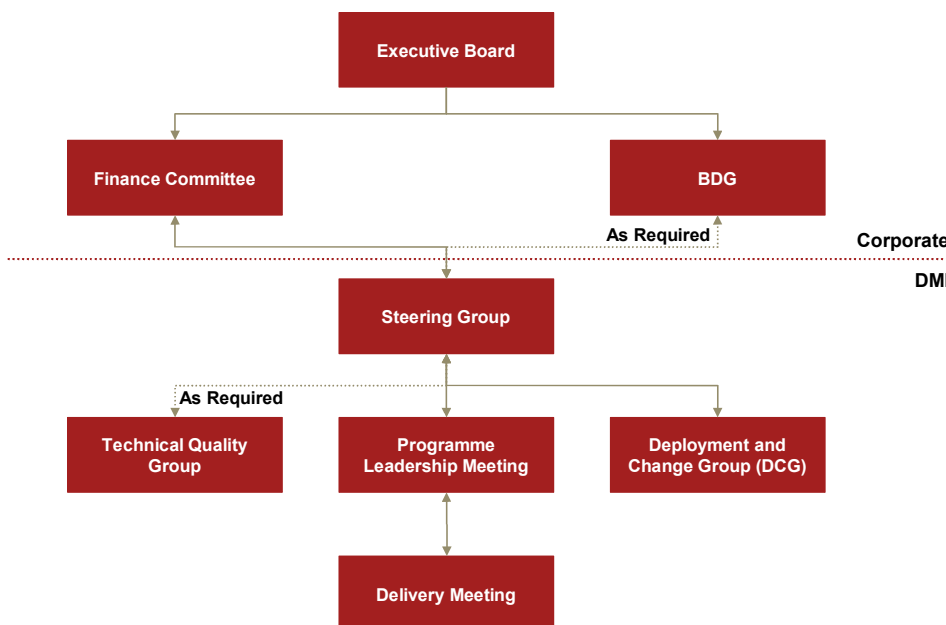


Figure 3 – BBC Corporate and DMI Governance Forums

<b>Group</b>	<b>DMI meeting frequency</b>	<b>Role</b>
<b>Executive Board</b>	Quarterly	Responsible for operational management of the BBC and for the delivery of BBC services according to the plans that have been agreed with the Trust.
<b>DG Finance Committee</b>	Quarterly	Responsible for reviewing and approving investment cases and monitoring spend and benefits.
<b>BDG</b>	As required	Responsible for managing pan-BBC issues delegated to it from the Executive Board and ensuring that the organisation meets its pan-BBC objectives.
<b>DMI Steering Group</b>	Monthly	To guide and direct DMI to deliver the outcomes and vision outlined in the benefits and business case approved by the BBC Executive and the Trust. To ensure continued alignment of DMI with business direction and editorial strategy.
<b>Technical Quality Group</b>	Monthly	To support the DMI programme in ensuring that it follows best practices in technical delivery, that the solution is aligned with the FM&T strategy and that data integrity is maintained.
<b>Programme Leadership Meeting</b>	Weekly	To guide and direct the programme to ensure it delivers the desired outcomes and benefits in the required timescales.
<b>Deployment and Change Group (DCG)</b>	Every 2 weeks	With the support of the DMI Business Requirements Delivery Team, to enable local-level benefits realisation through effective deployment, roll-out and use of Fabric. To include: maintaining a co-ordinated change plan and ensuring business readiness.
<b>Delivery Meeting</b>	Weekly	Responsible for the day-to-day running of the DMI workstreams.

Figure 4 – Definition of DMI governance forums

The DMI governance model approved in the Business Case appears consistent with other major programmes and projects being undertaken by the BBC at the time (such as Project North, W1 and the Olympics).

DMI reported to the DG Finance Committee quarterly along with the other critical projects in the BBC portfolio (Question 4). The Executive Board and the Trust FC then received briefings from the BBC PMO on a quarterly basis on the pan-BBC project portfolio, one of which was DMI. DMI was also discussed frequently at

the BBC Vision Operational Board and the Project North Steering Group, in respect of the dependence on DMI in the achievement of cost savings in the DQF plan and the move to Salford respectively.

Outside of the governance arrangements described above, DMI leadership provided verbal briefings to the BDG as well as to the DG Finance Committee. These informal briefings were not formally documented. The formal reporting arrangements are reviewed in response to question 4.

## Governance structure

In our experience a typical programme of this complexity would have a three-layered governance structure, with the top layer (normally referred to as an “Executive Steering Board” or “ESB”) being responsible for setting – and being responsible for delivering – the strategic objectives of the programme. This differs from the role that the DG Finance Committee played on DMI as an ESB’s prime responsibility would be to steer the various streams of work within the DMI Programme. The DG Finance Committee was effectively a level higher, overseeing a broad portfolio of BBC change programmes.

The prime focus of the DMI Steering Group became to drive the programme forward to deliver its outcomes and benefits, and increasingly focused on day-to-day programme issues rather than the strategic direction of the programme. This DMI Steering Group lacked the support needed from an independent ESB to stand back and challenge progress, assess the ability to deliver against end-user requirements, consider whether DMI was delivering the benefits articulated in the Business Case and check DMI’s alignment to BBC strategy over the delivery lifecycle of the programme.

Figure 5 shows how the governance structure for DMI would align to a typical governance structure for the management of a strategic portfolio of change programmes within an organisation of equivalent size and scale to the BBC. It shows how the ESB would sit in the governance structure and how the DMI

Steering Group and the DG Finance Committee partially fulfilled the responsibilities of the Operational Steering Group and Strategic Portfolio Management body respectively. Further explanation of the remit for these bodies is provided in Question 7 – Recommendations on page 38

The consequence of not establishing a formal ESB from the outset increased the reliance on the DG Finance Committee to challenge DMI. We have not undertaken a skills and capability analysis of the DG Finance Committee. However it is our view that the composition of the DG Finance Committee meant that whilst it was appropriately skilled to assess DMI from a financial cost and benefit perspective, it is not clear that they had the ability to challenge progress on the process improvement aspect of DMI. The CTO attended the DG Finance Committee to provide technology expertise and context. However as the DMI Project Sponsor, this meant that the DG Finance Committee did not have the independent technical capabilities needed to challenge progress on DMI from a technology perspective. The DG Finance Committee focused essentially on financial matters, and thus the lack of focus on technology and process resulted in a de facto delegation of authority and responsibility for strategic alignment with the wider BBC, and governance of the technology delivery, to the DMI Steering Group.

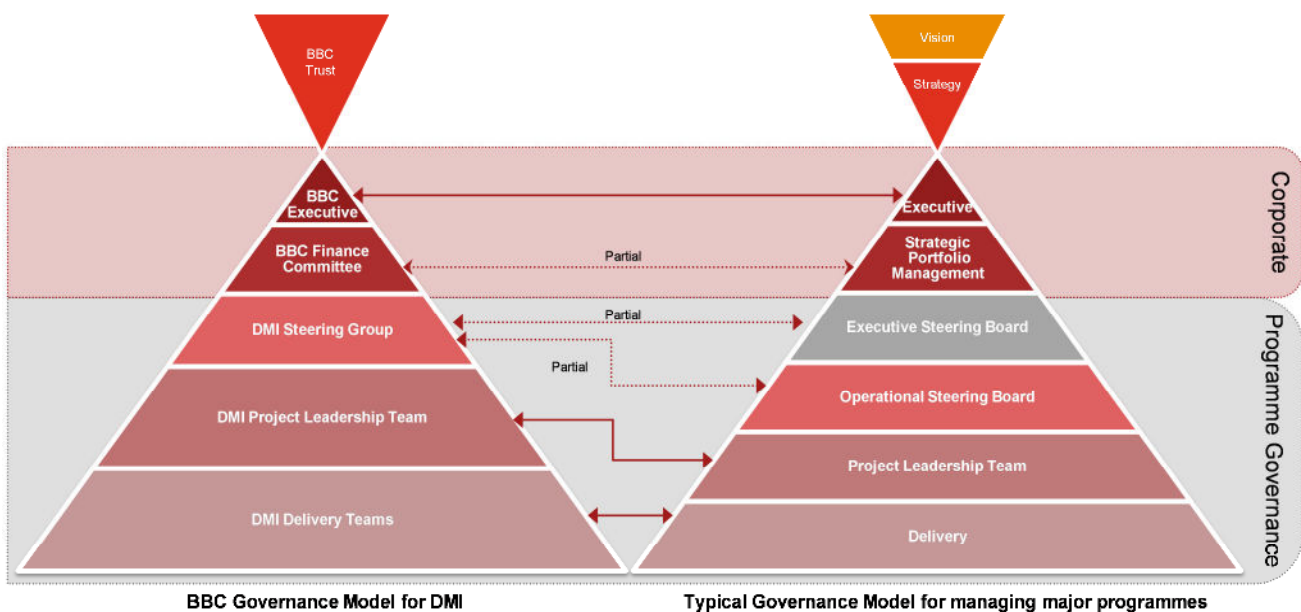


Figure 5 – DMI Governance compared with a typical governance model



## *Programme sponsorship*

The DMI governance structure was described in the appendix to the DMI Business Case approved by the BBC Executive Finance Committee and the Executive Board in April 2010, and the Trust FC in May 2010. We explain the role of sponsorship described in the DMI governance structure later on in this section.

We understand that it is common practice in the BBC to have a single Executive Board level Sponsor for a programme or project such as DMI. The role of the Executive Sponsor is not defined in the DMI governance structure; however we understand the lead division for DMI was FM&T at the time the Business Case was approved and that the Executive Sponsor of DMI was the Director of FM&T.

In March 2011 there were structural changes at the BBC. Technology and Future Media separated, with Technology transitioning into Operations along with DMI. The COO was now the Executive Sponsor of DMI up to the end of September 2012 when further restructuring meant that Operations and Technology, again with DMI, would now report to the CFO. At that point, the CFO became the Executive Sponsor of DMI, shortly after which DMI was paused for further review.

The DMI governance structure is defined in one section of the Business Case and in the appendix. In the context of participation to the DMI Steering Group, the appendix identifies several roles, including a Project Sponsor, Business Stakeholders and a Business Sponsor, and their responsibilities:

### *Project sponsor*

- Responsible for delivery of technology.
- Alignment with BBC technical strategy.
- External risks and issues.
- The final arbiter within programme remit.

### *Business stakeholders*

- Business engagement.
- Benefit realisation.
- Resource allocation.
- External risks and issues.

One of these business stakeholders was described as the Business Sponsor and had additional responsibilities:

- Benefits realisation tracking and reporting business change planning.

We have found no evidence in the documents we have reviewed that the Business Sponsor had an active role in governance and reporting outside of the DMI Steering Group. All governance and reporting to the DG Finance Committee, Executive Board, or Trust FC was undertaken by the Project Sponsor and the Executive Sponsor. We describe executive reporting and project reporting in our responses to questions 4 and 5 respectively.

By having sponsors and business stakeholders on the DMI Steering Group, there was insufficient separation from the day-to-day management of DMI to enable them to provide effective oversight and challenge of the project.

The Executive Sponsor of DMI was independent of its day-to-day operational running, which is not uncommon in the governance of similar programmes. However, changes of Executive Sponsor over the life of DMI combined with structural changes at the BBC would have reduced the effectiveness of this role in providing executive oversight to DMI.

A change in Executive Sponsor is one of the key risks a programme such as DMI would typically face, and the inclusion of an ESB in the governance of DMI would have reduced this risk. The Executive Sponsor would have been attending the ESB along with senior divisional sponsors from Vision and North as would be consistent with the share of benefits coming from the delivery of DMI. We go into further detail on the share of benefits in our response to Question 2. Collectively this ESB would have provided effective support, oversight and challenge to DMI, and ultimately been responsible for holding the DMI Steering Group to account.

## Sources of information for the Governance bodies

Without the range of technology programme experience and specialist technical capability needed to understand and challenge progress on DMI, the Trust FC, BBC Executive Board, BBC Executive Audit Committee and the DG Finance Committee were reliant on the newly established BBC PMO for providing insight into the status of DMI. In addition, the DG Finance Committee was also reliant on the guidance provided by the CTO, the programme updates and a number of external reviews and verbal briefings to provide further clarity on DMI's status. The executive board also had a non-executive director with technology delivery experience. As can be observed in Figure 6 – Overall DMI status as reported in the quarterly BBC PMO reports, DMI was being

formally reported as Amber throughout 2010, moving to Amber/Red during 2011, and finally moving to Red in December 2011 as reported in the 2011-2012 Q3 BBC Portfolio status report, October– December 2011. Figure 6 also shows the timetable for delivery of the PMO report to various corporate governance bodies and the Trust FC.

As can be seen, there was a pattern of considerable delay between the end of the period under review and the reports being received by corporate governance bodies and the Trust FC. The reports were submitted to the relevant governance bodies in sequence as information flowed up the governance chain. Nonetheless, these delays are likely to have reduced the effectiveness of reporting as the reports (and specific points identified in them) were no longer a timely, accurate reflection of the current status of DMI.

PMO Report	DMI Status	DG Finance Committee received the report on:	Legend		Executive Board received the report on:	Trust Finance Committee received the report on:
			○	●		
2009-2010 Q4 (Jan – Mar)	A	27/05/10	●	○	14/06/10	●
2010-2011 Q1 (Apr – Jun)	A	02/09/10	●	○	13/09/10	●
2010-2011 Q2 (Jul – Sep)	A	25/11/10	●	○	06/12/10	●
2010-2011 Q3 (Oct – Dec)	A	22/02/11	●	○	07/03/11	●
2010-2011 Q4 (Jan – Mar)	A	17/05/11	●	○	13/06/11	●
2011-2012 Q1 (Apr–Jun)	A/R	26/07/11	○	○	12/09/11	●
2011-2012 Q2 (Jul – Sep)	A/R	04/11/11	○	○	05/12/11	●
2011-2012 Q3 (Oct – Dec)	R	10/02/12	○	▲		▲
2011-2012 Q4 (Jan – Mar)	R	15/05/12	●	○	11/06/12	●
2012-2013 Q1 (Apr – Jun)	R	03/08/12	○	○	10/09/12	●
2012-2013 Q2 (Jul – Sep)	R	15/11/12	●	○	12/11/12	●
2012-2013 Q3 (Oct – Dec)	R	22/02/13	●	○	11/03/13	●
2012-2013 Q4 (Jan - Mar)	R	10/05/13	●	○	13/05/13	●

Figure 6 – Overall DMI status as reported in the quarterly BBC PMO reports

The table in Figure 7 – BBC PMO guidelines on project status reporting shows the BBC’s categorisation of project and programme status, to give context to the status presented in Figure 6 – Overall DMI status as reported in the quarterly BBC PMO reports.

explain the rating system, as set out in Figure 8 – BBC PMO Reporting Summary Status Criteria. This could have resulted in a misunderstanding of the seriousness of the status being reported to the corporate governance bodies and the Trust FC.

This definition of programme status was part of the template used to collate base data to prepare the PMO reporting pack. However, although the PMO rated all projects in line with the PMO guidelines presented in Figure 7, the reports used a summarised version to






				
Success appears highly likely and there are no major outstanding issues at this stage that appear to significantly threaten delivery.	Success delivery appears probable, however constant attention will be needed to ensure risks do not materialise into major issues threatening delivery.	Success delivery appears feasible but significant issues already exist requiring management attention. These appear resolvable at this stage if addressed promptly.	Success delivery is in doubt with major risks or issues apparent in a number of key areas. Urgent action is needed to address these issues.	Successful delivery outcomes* appear to be unachievable. There are major issues which at this stage do not appear to be manageable or resolvable. Re-baselining and/or overall viability to be re-assessed.  *or the specific area (governance, outcomes, delivery or project management).

Figure 7 – BBC PMO guidelines on project status reporting




 No major issues threatening delivery at this stage.	 Significant issues, but they appear resolvable at this stage.	 Major issues which may not be resolvable or manageable.  Re-baselining and/or overall viability to be reassessed.
---	---	---

Figure 8 – BBC PMO Reporting Summary Status Criteria

Up to the end of Q1 2011/12 collective information coming from the quarterly BBC Portfolio reports, and other sources of reporting described in Question 4, gave an overarching view that while the programme had difficulty meeting the agreed timescales and faced a number of technical challenges, it would eventually deliver the core DMI technology expected to underpin the delivery of the benefits. For the two successive periods when DMI reported Amber/Red this view was unchanged, except to acknowledge that the technical challenges now needed urgent action.

It was not until July 2012, following a series of reviews into DMI (triggered at the time DMI first reported Red to the DG Finance Committee in February 2012) that it became apparent to the BBC that DMI was not delivering the technology required to deliver the benefits.

## Changes in roles within the governance structure

Whilst not directly related to the question of whether the governance structures were fit for purpose, we noted that there was considerable change in the personnel fulfilling a number of key roles in the governance structure over the life of the programme.

This would have reduced the effectiveness of decision-making, reduced continuity in management of issues and risks, and introduced variations in the consistency of governance and reporting. Figure 9 – Duration of individuals in key DMI roles below illustrates the changes in personnel performing key roles. This is presented through colour changes on the horizontal bars.

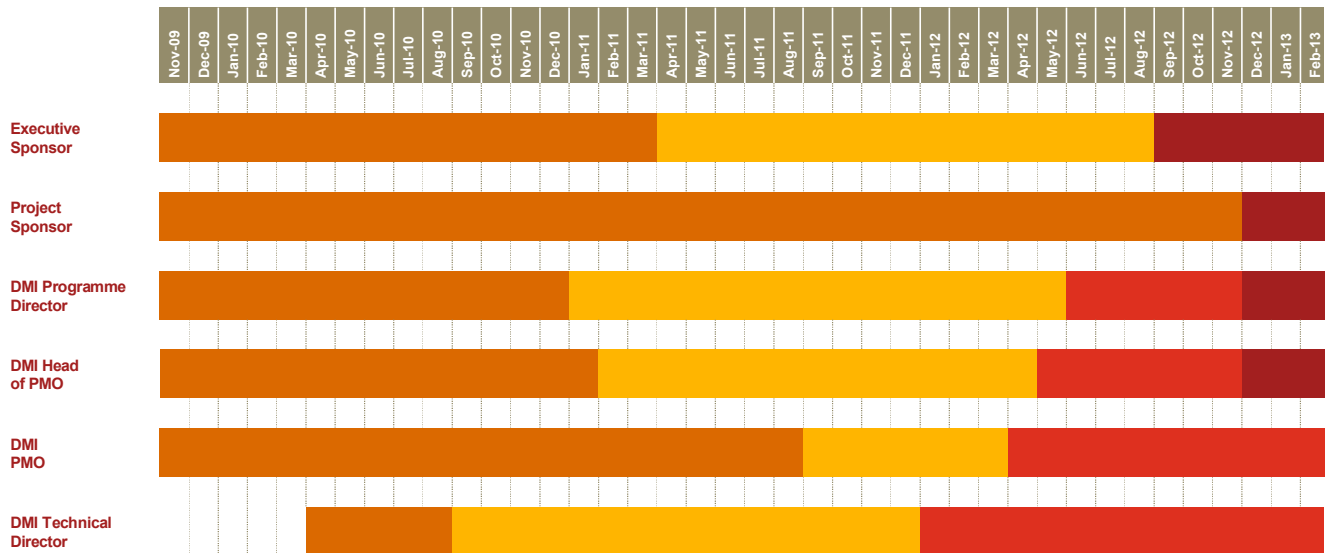


Figure 9 – Duration of individuals in key DMI roles

## The role of the Technical Quality Group

The role of the Technical Quality Group is described in Figure 4 – Definition of DMI governance forums and was to ensure alignment to BBC Technology Strategy and drive best practice.

Acting as the Design Authority for DMI, the Technical Quality Group's aims were:

1. To provide strategic direction throughout the design and build of the solution.
2. To ensure the solution's alignment with the business requirements and the wider BBC Enterprise Architecture.
3. To act as a gate keeper for each formal stage gate in the development lifecycle.

To achieve these aims, the Technical Quality Group could have implemented stronger design governance principles, been responsible for mitigation of technical risks and driven effective business engagement as part of any Change Management processes.

From our review of DMI it is unclear how frequently the Technical Quality Group met, the influence it had on the design and delivery of the technology, or the guidance it sought from a BBC-wide technology strategy body.

## *The role of the Trust in the Governance of DMI*

It is important to understand the role of the Trust versus the role of BBC management in respect of ensuring that programmes of the size and nature of DMI are successfully delivered. The responsibility of the Trust is to set the strategic objectives for the BBC and to get the best out of the BBC for licence fee payers. The Executive Board of the BBC is responsible for the operational delivery of BBC services and the direction of BBC editorial and creative output in line with the framework set by the Trust.

The Trust was not part of the formal governance structure of DMI, as articulated in the DMI Governance structure produced in 2010. The Trust received updates on a quarterly basis at the Trust FC, which were based on information reported to the DG Finance Committee. As the Trust was not part of the formal DMI governance structure, updates were to provide a view on the status of the programme to enable the Trust to determine whether intervention was required.

There is evidence that the Trust challenged DMI, both when the project was approved by the Trust in May 2010 and when the Trust first became aware in July 2012 that the status of DMI was classified as red in the October-December 2011 BBC PMO report.

Given the high risk nature of the project and the interest expressed by the Public Accounts Committee in February 2011, it is reasonable to ask whether the Trust could have asked more questions and exerted greater challenge during 2011 when the project first reported Amber/Red due to risks in the delivery of benefits (See Question 2).

We have already commented on the transparency of reporting from DMI to the governance bodies in Question 1. It is our view that if the Trust had had a Trustee with greater technology knowledge and programme delivery experience it would have been able to further interrogate and investigate the information it was given. We recognise, however, that the Trust was entitled to expect the BBC Executive to provide the necessary expert challenge to the project. Without duplicating this expertise, the Trust was unlikely to be in a position to challenge assumptions or assertions presented by BBC management that DMI could deliver the benefits or deliver them within the agreed budget or timescale. DMI reporting to the Executive Board and the Trust is described in the response to question 4.

## *Conclusion*

We conclude that the DMI governance arrangements were not fit for purpose for the following reasons:

- The DMI governance structure lacked an executive steering board which could effectively challenge the progress of DMI against agreed quality, time and cost metrics.
- The DG Finance Committee undertook some elements of the role that an executive steering board would have – namely to ensure the practice of good financial governance and enforcing BBC Investment Policy and Guidelines. However, the DG Finance Committee lacked the depth of independent technical solution knowledge or technology programme experience which could have provided a broader, more robust oversight of DMI.
- Whilst the overall status of DMI was known formally through the quarterly reporting provided by the BBC PMO, confidence that DMI would eventually deliver was not sufficiently challenged or supported by evidence of detailed specific remediation plans.

---

# Question 2 – Project and financial management

*What project and financial management arrangements were put in place to ensure DMI delivered the anticipated benefits on time and to budget and did these arrangements follow an agreed BBC methodology? Were they fit for purpose and followed?*

## *Background*

A detailed Business Case was in place, approved by the DG Finance Committee in April 2010 and subsequently by the Executive Board and then the Trust. It articulated benefits, profiled over the life of the programme to 2017 and aligned to the original DMI release schedule, and costs by year and major category.

The DMI Steering Group was responsible for managing delivery within the delegated authority of the DG Finance Committee as stated in the Business Case. The Business Case required that a quarterly financial report be submitted to the DG Finance Committee and that a cost-benefit analysis follow the delivery of each DMI release to ensure it was in line with the proposed delivery of benefits.

## *Benefits definition and measurement*

A detailed benefits model was developed to support the Business Case that was signed off at DG Finance Committee on the 1st April 2010 and approved by the Trust on the 28th June 2010. The Business Case articulates the financial benefits of DMI under three core categories:

- Cost reduction – to reduce operating cost across Vision, North, A&M, I&A and FM&T (52%).
- Cost avoidance – avoidance of costs coming from the establishment of digital islands that would otherwise need to be incurred without DMI (30%).
- Creative dividend – reduce cost by substituting or repurposing existing content for new uses (18%).

All projected financial benefits were signed off by the relevant divisions and were tracked not only by DMI but also by Divisions, initially as part of the CI programme and subsequently through the DQF programme. Due to DMI's delivery phasing, the majority of benefits expected to be delivered in 2010 and 2011 came from 'cost avoidance'.

These benefits can also be grouped by owner as of the 1st April 2010, giving an indication of the areas of the business responsible for delivery of these benefits in line with their operational plans:

- FM&T (including I&A) – ~46%.
- Vision – 39%.
- North – ~12%.
- News – 3%.
- A &M – <1%.

This grouping shows that the majority of benefits (46%) envisaged at the time the Business Case was approved were to be delivered by FM&T either in I&A (through the retirement of Infax) or FM&T (through the avoidance of digital islands and the retirement of P4A). These benefits would be owned and delivered by the Project Sponsor.

Benefits from Vision would come from cost reduction (26%) and creative dividend (13%). Vision tracked cost reduction benefits in their plans for CI, and latterly DQF, however as timescales for DMI slipped Vision deferred any cost savings coming from DMI to subsequent years and brought forward other initiatives to meet the agreed DQF targets.

A more detailed breakdown of how these benefits would be delivered by category, department and financial year can be viewed in Figure 10 – Summary of benefits as detailed in the DMI Business Case (2010).

Annual savings £m's Benefit	Dept	Financial Year										Total	%	
		0708 Yr1	0809 Yr2	0910 Yr3	1011 Yr4	1112 Yr5	1213 Yr6	1314 Yr7	1415 Yr8	1516 Yr9	1617 Yr10			
<b>Cost reduction</b>														
Religion	North			0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.7	1%	
Entertainment	Vision			0.0	0.0	0.1	0.4	0.4	0.4	0.4	0.4	1.8	2%	
Manchester entertainment	North			0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	1.0	1%	
London factual	Vision			0.0	0.1	0.6	2.4	2.4	2.4	2.4	2.4	12.5	13%	
Current affairs	Vision/news			0.0	0.0	0.2	0.6	0.6	0.6	0.6	0.6	3.4	3%	
Classical music TV	A&M			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0%	
TV music entertainment	A&M			0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.4	0%	
Comedy	Vision			0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.3	0%	
Manchester comedy	North			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0%	
Bristol factual	Vision			0.0	0.0	0.6	0.8	0.8	0.8	0.8	0.8	4.9	5%	
NHU	Vision			0.0	0.0	0.5	0.6	0.6	0.6	0.6	0.6	3.5	4%	
Children's	North			0.0	0.1	0.5	0.5	0.5	0.5	0.5	0.5	3.0	3%	
Challenge	Vision			0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	3.4	2%	
Archive	I&A			0.0	0.0	0.9	1.4	1.4	1.4	1.4	1.4	8.1	8%	
Multiplatform saving	Vision			0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3	0%	
Infax saving	I&A			0.0	0.4	0.8	0.8	0.8	0.8	0.8	0.8	5.2	5%	
P4A saving	FM&T			0.0	0.4	0.5	0.5	0.5	0.5	0.5	0.5	3.2	3%	
Repeats and reversioning	Vision			0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0%	
<b>Sub-total</b>				<b>0.0</b>	<b>1.1</b>	<b>5.2</b>	<b>8.9</b>	<b>9.0</b>	<b>9.0</b>	<b>9.0</b>	<b>9.0</b>	<b>51.2</b>	<b>52%</b>	
<b>Cost-avoidance</b>														
Digital island avoidance	FM&T			0.0	4.1	8.0	4.5	2.8	4.5	3.1	2.8	29.8	30%	
<b>Sub-total</b>				<b>0.0</b>	<b>4.1</b>	<b>8.0</b>	<b>4.5</b>	<b>2.8</b>	<b>4.5</b>	<b>3.1</b>	<b>2.8</b>	<b>29.8</b>	<b>30%</b>	
<b>Creative dividend</b>														
Multiplatform saving	Vision			0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	4.0	4%	
Children's	North			0.0	0.0	0.4	0.8	0.8	0.8	0.8	0.8	4.5	5%	
Repurposed output	Vision			0.0	0.0	0.2	0.2	1.8	1.9	2.1	2.3	8.5	9%	
<b>Sub-total</b>				<b>0.0</b>	<b>0.0</b>	<b>0.6</b>	<b>1.1</b>	<b>3.6</b>	<b>3.7</b>	<b>3.9</b>	<b>4.1</b>	<b>17.0</b>	<b>17%</b>	
<b>Total</b>				<b>0.0</b>	<b>5.2</b>	<b>13.7</b>	<b>14.4</b>	<b>15.3</b>	<b>17.3</b>	<b>16.0</b>	<b>16.0</b>	<b>97.9</b>	<b>100%</b>	

Figure 10 – Summary of benefits as detailed in the DMI Business Case (2010)

The graph in Figure 11 – Analysis of benefits per the BBC financial Business Case and Quarterly PMO reports shows how the actual delivery of benefits fell short of target over the life of DMI and how expected benefits from DMI were significantly reduced following an analysis carried out by the BBC PMO in October 2012. The extent of this shortfall in 2010 and early 2011 would have been unclear at the time as cost avoidance savings were being reported which tracked the approved benefits profile.

Late in 2010 it became apparent to Vision that delays in delivery by DMI would result in the expected Vision benefits being deferred. This resulted in DMI cost savings that had been planned in the Vision budget for that period to be replaced by other savings.

In Q1 2011/12 £11.4m of benefits attributable to DMI were classified as at risk (approximately 11%) which resulted in a benefits review being carried out in July 2011 by DMI at the request of the DG Finance Committee. It was reported to the Trust FC in September 2011 that the DG Finance Committee continued to review the benefits profile and delivery mechanisms for each project, with reference in the Top Hat to DMI that “a proposal to ensure the benefits of Fabric, delivered by the DMI project, are accelerated and the current deficit recovered”.

It was a key assumption of the review that the full functionality outlined in the Business Case would be delivered over the life of DMI out to 2017.

In December 2011, when it became apparent that DMI could not meet a major delivery milestone in the Project North plan, concerns were raised by Project North and also by the DG Finance Committee as to DMI’s ability to deliver on its projected benefits. Following a series of interventions into DMI during

the first half of 2012, it was confirmed in September that the original Business Case was no longer valid. This resulted in the Business Case re-submission process being triggered in line with the BBC’s investment policy, which states that business cases must be returned to the DG Finance Committee for additional approval if the costs or benefits over the whole life of a project change by the lower of £1 million or 10%. It was at this point that it became clear that a major element of the benefits claimed as realised were in fact based on the avoidance of digital islands, which reflected an estimated run rate of amounts not incurred on technology that would have been eventually replaced by DMI.

Based on our observations above, we would have expected this to have been triggered at the latest during the Q2 2011/12 quarterly reporting cycle.

### Cost definition and measurement

The Business Case included a summary of the budget required to deliver DMI over multiple years, broken down into categories of spend.

An overview implementation plan was included in the Business Case (as shown in Figure 12 – BBC’s proposed delivery timeline (per the 2010 Business Case).

This was phased to deliver benefits as early as possible over six distinct solution releases. A view of the costs associated with the delivery of each release was not provided in the Business Case, which would have made it impossible to match costs against benefits to provide a picture of whether benefits could be delivered for the overall budget once the programme had commenced delivery.

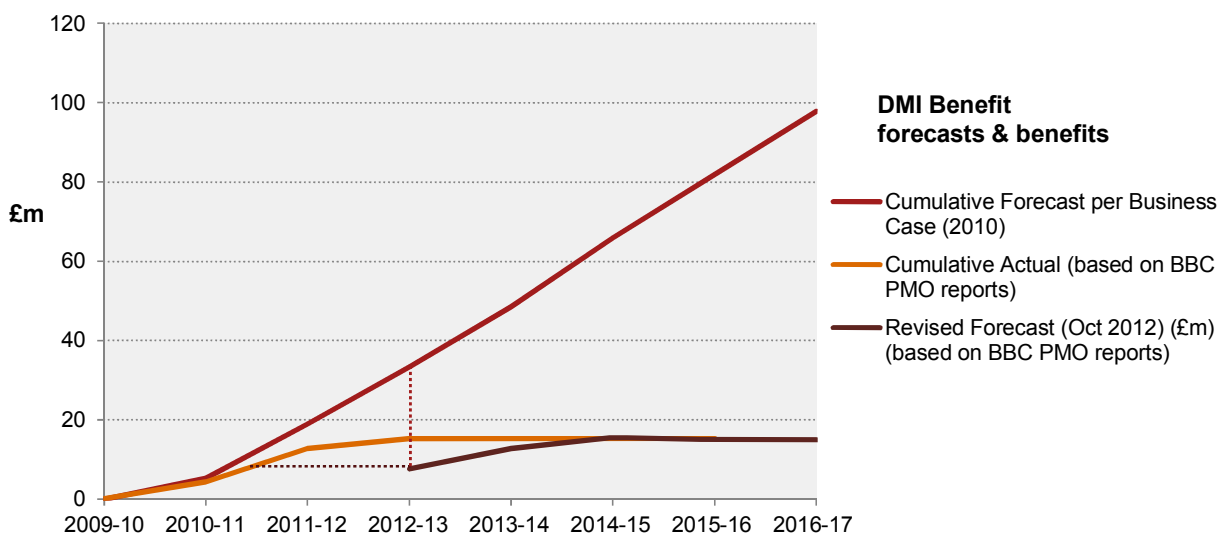


Figure 11 – Analysis of benefits per the BBC financial Business Case and Quarterly PMO reports



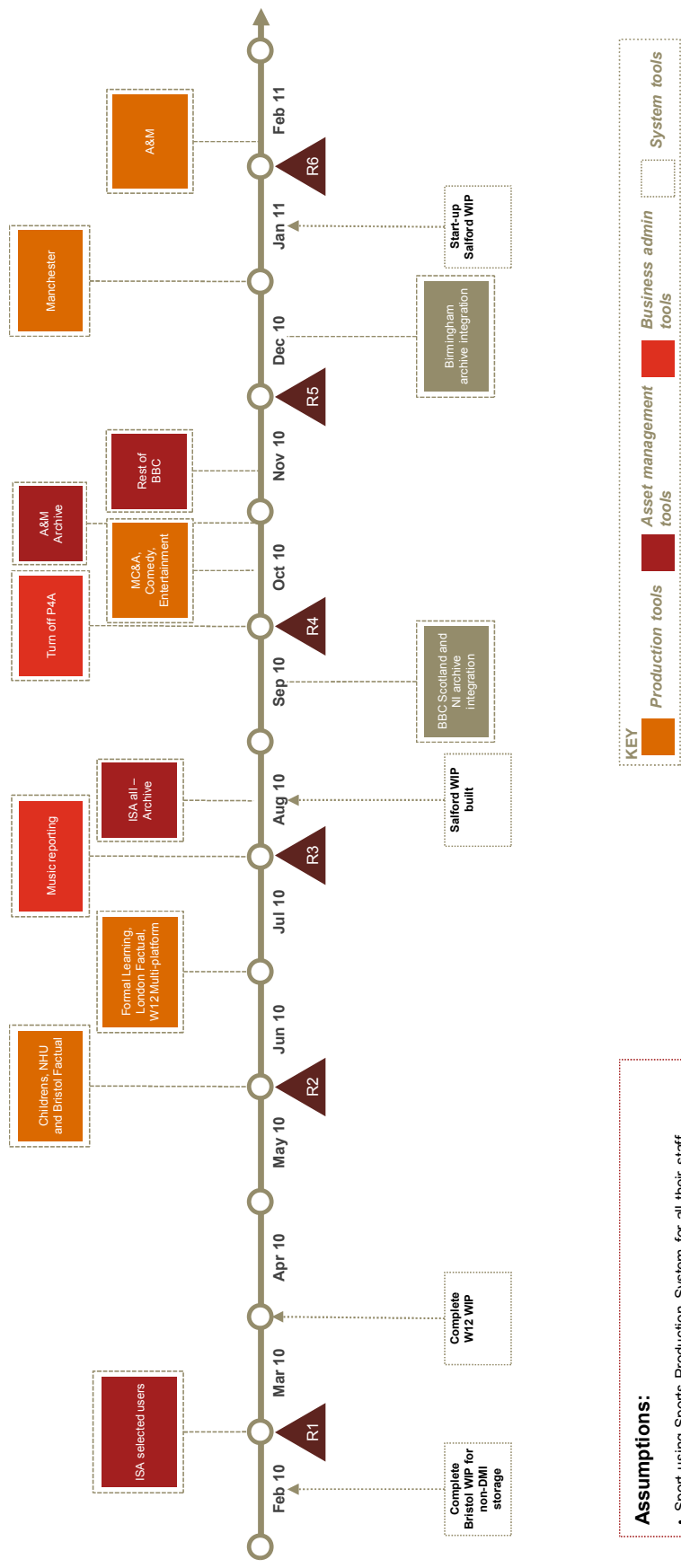


Figure 12 – BBC's proposed delivery timeline (per the 2010 business case)

We have not been provided with cumulative cost data for DMI. We have therefore created the following analysis in Figure 13 – Analysis of budget and cost per the BBC financial Business Case and Quarterly PMO reports from the BBC PMO reports provided to us.

Based on the analysis shown in Figure 13, the cost profile fluctuated significantly between original budget, revised in year budget, forecast and actual during 2011. Although the total forecast cost of DMI did not change, the change in spend profile during 2011 suggests that the original Business Case should have been reviewed and resubmitted at this time. The benefits review that took place in July 2011, when taken together with the change in spend profile, supports DMI’s view that the original benefits were at risk of not being delivered. It should however be noted that, at the same time, the BBC was exploring partnerships and potential commercial opportunities, which could have generated new benefits.

During the life of the programme, the delivery schedule changed from the proposed release strategy. This further complicated the ability to provide a picture of costs versus benefits at any one point in time.

## Programme budget and reporting

On approval of the business case the DG Finance Committee delegated responsibility for budgetary control within agreed limits of the programme to the DMI Steering Group. Costs were tracked by the programme and reported back to the DG Finance Committee as spend against total budget and contingency draw down or top up. However, without a

clear breakdown of the cost to deliver functionality in each release, or an accurate forecast of the cost to deliver the remaining functionality, it would have been unclear to DMI or the DG Finance Committee whether DMI could be delivered within budget and when a review of the Business Case should have been triggered under the BBC’s investment policy.

## Conclusion

We conclude that the project and financial management arrangements were partially fit for purpose and not fully followed:

- We would have expected costs to be tracked against either delivery milestones or components of the solution delivered. We have seen no evidence that this was the case, which would have made it difficult for the programme to understand costs spent against progress achieved.
- It is normal practice for programmes to provide estimates of cost to complete. Without this, DMI would not have been able to determine whether the totality of the Business Case could be delivered for the budget that had been delegated to it by the DG Finance Committee.
- Whilst a benefits review was undertaken in July 2011 following a report by DMI that £11.4m of benefits forecasted were at risk, we would have expected this to trigger a complete review of the business case. Had this happened, a true picture of the projected costs and benefits from DMI would have been established.

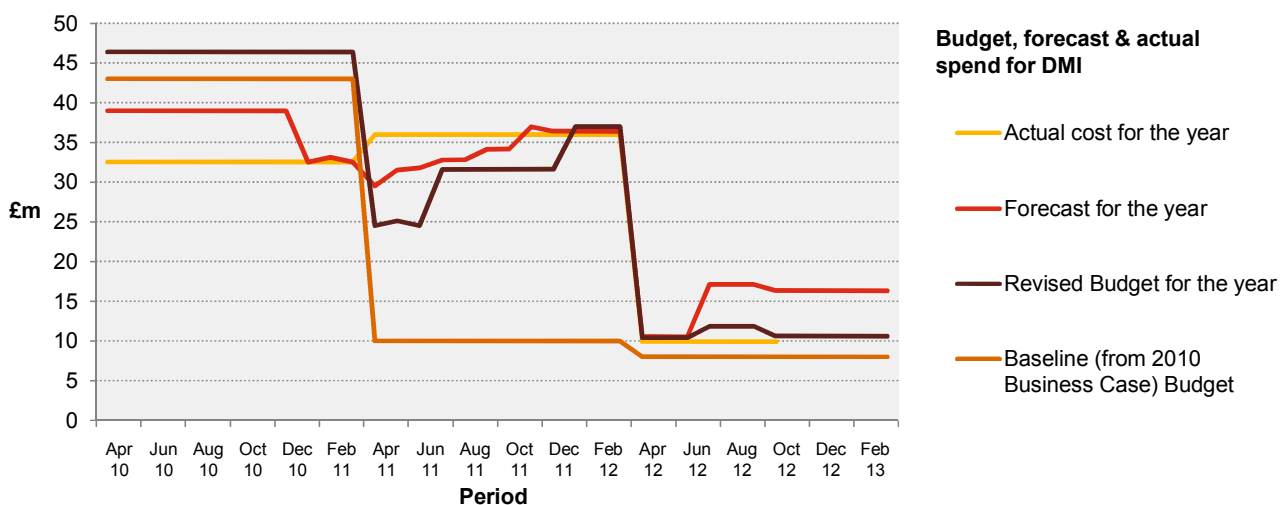


Figure 13 – Analysis of budget and cost per the BBC financial Business Case and Quarterly PMO reports

---

# Question 3 – Risk management

*What risk management arrangements were put in place and did these arrangements follow an agreed BBC methodology? Were they fit for purpose and followed?*

## *Background*

At the time of Business Case approval in April 2010, the DMI risk management approach appears to have been consistent with our understanding of the way in which risks were managed across the BBC. The Business Case clearly identifies risks and owners and clearance was provided at the time by Risk Management based on DMI being responsible for identification and ownership of individual risks.

DMI's approach to risk and issue management was documented in the DMI Programme Handbook and supported by the risk and issue log. The approach provides basic guidance, supported by information available through the BBC Way, on how issues and risks are defined, identified and escalated. However there were no explicit guidelines on how risks were to be managed by DMI.

## *Risk identification and management*

Risks presented in the Business Case and managed by DMI predominantly related to technical delivery or to financial benefits, but did not represent a robust appraisal of the achievability of delivering unproven technologies or the ability of DMI to deliver the business change required to achieve transformation. Without a detailed assessment of these potential drivers of risk, DMI would not have been in a position to report a holistic view of the risks faced through its delivery lifecycle. This would also have made it difficult for bodies outside of DMI to understand the level of risk inherent in DMI relating to organisational impact and change.

We also noted that the risks and issues logs were not kept up-to-date (this was also identified by Internal Audit – discussed in more detail later in this section). This would have hampered an overall view of the level of risks being carried by the programme and the mitigating actions required to reduce these. On this basis, it is unlikely that the governance bodies above the DMI Steering Group would have had the information necessary to give them sufficient insight into whether DMI could be delivered within an acceptable risk profile for the BBC.

Effective risk and issue management is based upon ensuring that the process is fit for purpose, i.e. that it provides for challenge and scrutiny without placing excessive burden on a programme team. In our experience, projects do not always observe good risk and issue management practice and thus it is not surprising that this was also a challenge we observed with DMI. That said the lack of robust risk and issue management prevented an aggregated and focused view being formed of the many different challenges that were being experienced by DMI.

## *Holistic assurance planning and delivery*

We understand that there was no end-to-end assurance plan defined for DMI. As part of programme initiation, it is good practice to agree a single integrated assurance plan which sets out the key roles and responsibilities of various bodies in providing assurance to the programme and senior stakeholder group.

In the context of DMI, assurance bodies would have included the BBC PMO, Internal Audit, quality assurance within the programme delivery and various parties engaged to provide ad-hoc assurance activities focused on particular aspects of DMI (e.g. reviewing the viability of the technology solution). These activities were mainly conducted at the request of the DG Finance Committee to provide a detailed understanding of the issues faced in order to inform and improve the effectiveness of decision-making.

The diagram below shows the timeline of assurance interventions into DMI. As can be seen from the diagram in Figure 14 – Analysis of assurance interventions from various DMI management reports, apart from the Quarterly BBC PMO reporting, the programme was not subject to independent scrutiny between the last quarter of 2010 and the second quarter of 2012.

### Internal Audit’s role in risk management

Internal Audit has a responsibility to ensure that an appropriate control framework is implemented and operating at the BBC. The annual internal audit plan is created in December of each year using a risk-based approach. The BBC Executive Audit Committee review and approve the plan in December and fieldwork commences in January. Major projects, such as DMI, are incorporated into this plan once the timing of the audit is agreed between Internal Audit and each project. Findings and recommendations coming from the activities on this plan are reported to the Executive Board and the Executive Audit Committee. Updates are made periodically to the Trust by the Director of Risk or at the request of the Trust.

We understand that DMI was presented at the September 2011 Executive Board and then subsequently on the same day at the Executive Audit Committee. At this time DMI was reported in the 2011/12 Q1 PMO report as moving from Amber to Amber-Red status. At this meeting, the Executive Audit Committee agreed that the 2011 Internal Audit review of DMI would be postponed until 2012 as a consequence of DMI working to implement the actions coming from the NAO review. The following observations around risks are quoted from the Internal Audit report, issued in July 2012:

1. The steering group had not embedded an independent assurance function within the programme governance structure. Had this been in place, a more balanced view on the programme's status, issues and risks may have been reported.
2. The programme Risks, Assumptions, Issues and Dependencies (RAID) log had also not been consistently maintained, with significant risk and issues not being captured on the log. In addition, formal review of the log by management has not taken place in the period January to April 2012. The RAID log focuses mainly on detailed delivery risks and issues and not the delivery of the steps to address them.

Whilst the Internal Audit review included recommendations, the consequence of these findings, combined with the lack of independent assurance activities in 2011, meant that there was no independent view on the risks DMI faced in delivery of the solution and realisation of the benefits.

BBC DMI programme – Assurance interventions



Figure 14 – Analysis of assurance interventions from various DMI management reports

## *Conclusion*

We conclude that DMI's risk management processes were not fit for purpose for the following reasons:

- The programme did not follow the risk and issue management process as defined in the DMI Programme Handbook. This prevented DMI from providing a holistic view of risks from both the delivery of technology and the business benefits.
- The lack of an integrated assurance plan meant that the risk management arrangements were not sufficient to support a complex programme such as DMI.
- The independent activities undertaken on an ad hoc basis did not provide a holistic view of risk. They were commissioned by members of the BBC Executive to provide insight on specific issues at single points in time rather than as an on-going set of assurance activities.
- Given the change in status from Amber to Amber-Red, it is not clear why the Executive Audit Committee chose to accept a delay in a review of DMI by Internal Audit.

---

# Question 4 – Executive reporting

*What project reporting arrangements (including information on project delivery, technical delivery approach, costs and risks) were put in place for the Executive Audit Committee, the Executive Board and the BBC Trust? Were they fit for purpose and followed?*

## **Background**

DMI was required to report to two BBC Governing bodies (the DG Finance Committee on a quarterly basis and the Executive Board on a monthly basis) and the BBC PMO (on a monthly basis) as outlined in the April 2010 Business Case. The reporting to BBC PMO subsequently changed frequency to quarterly reporting once the governance model became operational. As such DMI reported quarterly to the DG Finance Committee and briefed the Executive Board through reports prepared by the BBC PMO.

On a quarterly basis the BBC PMO prepared an overview of the status of the BBC Portfolio of critical projects, including DMI, to provide a consolidated view to the DG Finance Committee of the BBC Portfolio. We understand from our interviews that the quarterly PMO status reports drew on the standard BBC PMO Project Performance Pack, which was required to be completed by the DMI project team, together with input from a range of stakeholders including dedicated corporate finance resource and business representatives. The overall assessment rating was the BBC PMO's. The BBC PMO reporting was not designed to replace the more detailed governance provided by project steering groups.

The DMI Steering Group was given a separate reporting pack. Both the quarterly PMO status reports and the DMI Steering Group reporting pack largely focused on technology risks and issues rather than the ability of DMI to drive operational change to business practices in the BBC.

Each quarterly BBC PMO report was initially submitted to the DG Finance Committee for approval. Decisions or clarifications coming from the DG Finance Committee would be included in a cover note – known as the ‘Top Hat’ – aimed at providing a high level update on the BBC Portfolio of critical projects, together with a summary of the issues arising from the DG Finance Committee scrutiny of report. On approval by DG Finance Committee, the quarterly report and the Top Hat cover note were then submitted to the Executive Board, the BBC Executive Audit Committee and the Trust FC.

In all cases, the respective board or committee were not asked to make a decision on the status report – the report was presented for discussion only with the board or committee invited to note and discuss the points and actions arising from the BBC Portfolio status report. On occasion, a board or committee would request a specific update on a particular programme to be made at a subsequent meeting.

The papers were discussed and approved by the respective committees, the timing of which would have been dependent on the standing schedule of these committees. The time taken from initial production of the report to final review by the Trust would typically be three months after the end of the reporting period.

The diagram in Figure 15 – Interpretation of the reporting flow between DMI and BBC Corporate shows the flow of reporting within the DMI Governance and BBC Corporate Governance layers.

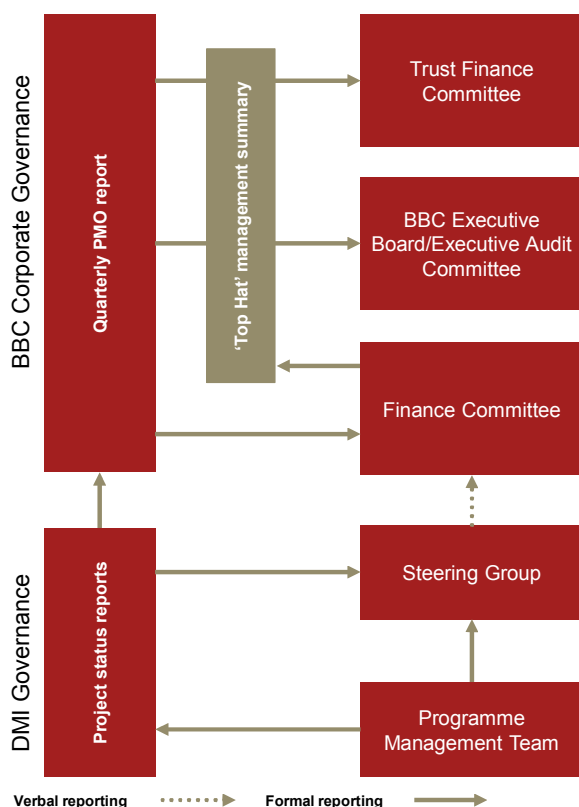


Figure 15 – Interpretation of the reporting flow between DMI and BBC Corporate

## Reporting to the BBC Executive Board

The BBC Executive Board is responsible for operational management of the BBC and for the delivery of BBC services according to the plans that have been agreed with the Trust. The BBC Executive Board delegates some of its responsibilities to the Audit, Fair Trading, Nominations and Remuneration subcommittees. The BBC Executive Board is also supported by a number of management groups, including the BBC Management Board<sup>1</sup>, the DG Finance Committee, and boards at the Group level, such as Television and Radio. The boards of BBC Commercial Holdings and BBC Worldwide support the BBC Executive Board on commercial matters.

When the Business Case for DMI was approved in April 2010, it was expected that DMI would report monthly to the BBC Executive Board. Analysis of the publicly available meeting minutes from these board meetings suggests that prior to 2012 DMI would only have been reported in the context of the BBC Portfolio or as an extraordinary agenda item such as the June

2011 meeting. DMI featured regularly as an independent item from October 2012. More detail on the specifics of DMI reporting at these meetings can be found in Appendix B. Given the remit of the BBC Executive Board, it is unclear why DMI would be required to report monthly when only reporting to the DG Finance Committee on a quarterly basis.

From our interviews, we understand that DMI would have been discussed more frequently amongst the BBC Executive and that DMI provided regular verbal briefings to the BDG. The timings of these briefings were varied and ad hoc in nature, which could at times have resulted in conflicting views on the progress, risks and issues with DMI. Members of the BBC Executive Board would have also sat on a number of the other bodies where DMI would have been discussed, including the DG Finance Committee, Vision Board and North Board.

We understand from our interviews that the BBC Executive Board would have relied upon the specific expertise of Non-Executive Directors to provide external challenge on the technical delivery of DMI, as the BBC Executive Board did not have the right experience in delivery of technology programmes of this nature to provide the appropriate level of challenge.

<sup>1</sup> Previously called the Business Direction Group (BDG)

## *Reporting to the BBC Executive Audit Committee*

Initially there were four, later increasing to five, meetings of the BBC Executive Audit Committee per year during the timescales covered under this review, each scheduled to last 2 hours. Each BBC Executive Audit Committee meeting included routine reporting on the activities of the Internal Audit team, the quarterly report from the PMO and risk reporting. The BBC Executive Audit Committee also includes discussions on non-routine topics focusing on the current matters of concern.

Reporting on DMI would have been provided in the context of the BBC Portfolio or as a consequence of Internal Audit's activities relating to DMI. We understand from our interviews that DMI was referenced in discussions on risk as being a large, complicated project facing challenges in meeting the planned delivery timescales.

Since it was agreed that the Internal Audit review into DMI would be postponed in 2011, due to the NAO having just completed their review of DMI, it was not until after the Internal Audit review of DMI in July 2012 that the first serious concerns in relation to DMI were formally raised at the Executive Audit Committee.

## *Reporting to the BBC Trust*

We describe the role of the Trust in the governance of DMI in our response to Question 1. The Trust received updates on a quarterly basis at the Trust FC, which were based on information reported to the DG Finance Committee. As the Trust was not part of the formal DMI governance structure, updates were to provide a view on the status of DMI to enable the Trust to determine whether intervention was required.

There is evidence that the Trust challenged DMI, both when the project was approved by the Trust in May 2010 and when the Trust first became aware in July 2012 that the status of DMI was classified as red in the October-December 2011 BBC PMO report.

## *Delays in reporting to the Executive Board, BBC Executive Audit Committee and the BBC Trust on changing status of DMI*

From April 2010, DMI was reporting Amber on a quarterly basis in the BBC Portfolio status report, reporting Amber/Red in Q1 and Q2 of 2011-12. During this period, reports on DMI focused on the risks of non-delivery of benefits and spend against budget, giving a clear indication that DMI was late in delivery but implying that eventually DMI would complete on budget and deliver the agreed benefits. As a consequence the BBC's investment policy which could have forced a review and re-submission of the Business Case was not triggered.

In February 2012, the Q3 2011-12 BBC PMO report on the portfolio of critical projects reported to the DG Finance Committee that the overall status of DMI was Red. A 'Red' status for the report was defined as *"There are major issues which at this stage do not appear to be manageable or resolvable. Re-baselining and/or overall viability to be re-assessed."*

As a consequence of this change in DMI status, combined with DMI missing a critical milestone for delivery to Project North, the DG Finance Committee requested in the February 2012 meeting that clear options for remediation of the issues be included with this report before it was submitted to the Trust.

Timing of the remediation option exercise resulted in the report being unavailable in time for submission to the Trust FC meeting at the end of March. As a result, the issues DMI faced were not presented to the Trust by the Executive until the portfolio report was next discussed in July 2012. By this time a series of interventions into DMI were underway and there was a growing recognition within the BBC Executive that a decline in benefit realisation coming from a revised plan for delivery of DMI would now result in a need to re-submit the DMI Business Case in line with the BBC's investment policy.



## *Conclusion*

We conclude that Executive Reporting arrangements were not fit for purpose for the following reasons:

- DMI did not provide clear and transparent reporting on progress against plan, cost to complete, or delivery of benefits to enable effective decision-making within the governance structure.
- The use of different reporting packs for the DMI Steering Group and DG Finance Committee may have resulted in senior management taking a view that DMI would eventually deliver the anticipated benefits despite suffering issues which are typical in complex technology development projects.
- Reporting on a quarterly basis, linked to the time taken to deliver the reports to the governance bodies, meant that the reported status of DMI lagged behind the current status at the point the reports were considered.

---

# Question 5 – Project reporting

*Were the agreed project and risk reporting arrangements followed? Were the reports fit-for-purpose? What actions resulted from the reports? Were they fit for purpose?*

## *Background*

Project reporting arrangements are described in the DMI programme handbook to meet the needs of the Governance Arrangements set out in the Business Case of April 2010 and discussed in Question 1 – Governance Arrangements. DMI reported monthly, and occasionally twice monthly, to the DMI Steering Group. The monthly report produced by DMI for this Steering Group was incorporated quarterly into the BBC Portfolio status reports.

## *DMI Steering Group reporting*

A DMI Steering Group pack was produced to report progress and critical risks and issues for information and action. According to the terms of reference for the DMI Steering Group in the Business Case, this pack should have provided an update on:

1. Status and Progress
2. Financials
3. Milestones and Dependencies
4. Risks and Issues
5. Rollout Schedule
6. Critical Success Factors
7. Business Engagement

This was subsequently changed in the DMI programme handbook to:

1. Delivery Status and Progress
2. Risks and Issues
3. Financials
4. Deployment & Roll-out
5. Roll-out Schedule

Reports during 2010 provided updates to the steering group focused on progress in technology delivery but did not present this progress as achievements against milestones, nor did they present key risks or decisions for ratification, or progress, issues or risks on business engagement.

During 2011 and 2012 reporting continued to improve and included risks related to the delivery of benefits, although reporting on progress continued to focus on issues in the delivery of the technology solution element and not business engagement or the achievement of business outcomes coming from the delivery of the DMI solution.

In April 2010, at the point of Business Case approval, there was a clearly articulated delivery strategy which showed (at a high level) when functionality would be provided to the business and what benefits would be delivered. However soon after the Business Case was approved there was a change in delivery strategy which meant that this original plan was no longer valid. The majority of the early benefits were to be achieved through cost avoidance by decommissioning legacy systems or avoidance of investment in alternative technology to DMI. The bulk of Production-related benefits would be achieved through full implementation of the end-to-end DMI solution. It was unclear from DMI reports how technology was being delivered through the development lifecycle of a release, or how these releases delivered clearly defined business outcomes and ultimately business benefits. This meant it would have been unclear to the business what DMI would deliver and when.

The link between solution components, business outcomes and benefits is shown in Figure 16 – BBC PMO’s ‘BID’ benefits mapping framework and provides a framework for the management and reporting of benefits delivered by projects.

When taking into account the findings related to Question 3 – Risk Management, it would have also been unclear to the business or the DMI governing bodies what risks and issues DMI was facing. This conclusion is supported by findings in the Internal Audit report in 2012 that:

- Risks, Actions, Issues and Dependencies were not being consistently maintained.
- Significant risks and issues were not being captured with formal review of these by management not taking place in the period January to April 2012.
- DMI focused mainly on detailed delivery risks and issues and not the delivery of the steps to address them.

Actions agreed at the DMI Steering Group meeting were documented in the minutes, with progress discussed at the subsequent meeting. Reporting on actions, updates and their closure is consistent with what we have seen on other projects, however without clear view on progress against plan or a holistic view of risks it would appear that actions arising from the DMI Steering Group were focused on current issues and not the management and mitigation of risk.

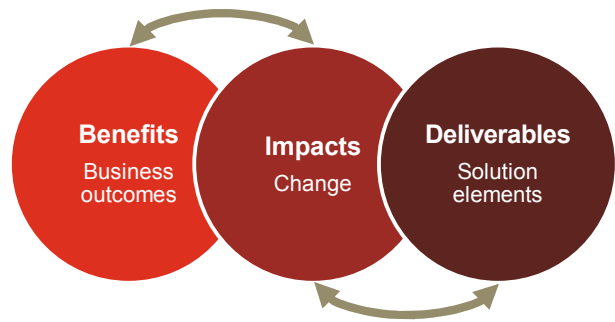


Figure 16 – BBC PMO’s ‘BID’ benefits mapping framework

## Conclusion

We conclude that DMI’s project reporting arrangements were not fit for purpose for the following reasons:

- DMI did not consistently follow the project reporting arrangements set out and agreed in the Business Case.
- There was a lack of clear and transparent reporting around progress against plan, cost to complete, management of issues and risks, or delivery of the benefits.
- Actions resulting from the reports were focused on the day-to-day issues faced by DMI and not the management and mitigation of risk.

---

# Question 6 – Implementation of NAO findings

## *Did the BBC Executive implement the recommendations focusing on project management governance, and risk management from the NAO’s 2011 report on the management of DMI?*

The NAO report published in January 2011 looked at the programme in two phases:

- The period when the programme was contracted out until the BBC brought it in-house.
- How the BBC was managing the in-house delivery of the programme.

The BBC published a management response to the report. Following this response, DMI established a log of actions for implementation to address each of the six NAO recommendations at that point in time. Verification work undertaken by Internal Audit in July 2011, Jan 2012 and during the Internal Audit of DMI in April 2012 confirmed that all actions relevant to DMI were complete, subject to the limitations of the Trust’s response to Recommendation B.

The NAO report raised six recommendations relating to the management of DMI. We discuss each recommendation in turn.

### *Recommendation A:*

*“The BBC did not have an up-to-date assessment of its contractor’s capacity and capability to deliver the Programme. The BBC assessed Siemens during a competitive procurement process in 2004 when it entered into a ten-and-a-half year Technology Framework Agreement with Siemens as the BBC’s strategic partner responsible for its information systems. The BBC did not have to have a competitive procurement for the Digital Media Initiative as it could appoint Siemens to deliver the Programme in a straightforward and quick procurement under that Framework. However, to provide assurance the BBC is not making procurement decisions on sub-optimal grounds, it should demonstrate in investment cases why its procurement route is likely to offer the best value for money.”*

The BBC took a forward-looking view by applying this recommendation to the BBC’s investment guidelines to include the requirement for: “*sign-off by the Director of Procurement to verify (amongst other things) that the commercial deal ensures best value on a whole life basis and that the procurement (sourcing) strategy is appropriate for the particular tender and fits to the overall outsourcing strategy.*” Our remit does not include the investigation as to whether this requirement has been upheld in the approval of other major BBC projects since January 2011.

### *Recommendation B:*

*“Although it took the Programme technology development in-house, the BBC did not test whether that was the best option. To manage risks and maximise the cost-benefit of investments:*

- the BBC should promptly re-submit for approval those approved programmes where there are significant changes in the delivery model, risk profile or cost-benefit projection; and*
- the BBC Trust should adopt referral thresholds based on the forecast cost-benefit of investments rather than a narrow financial threshold.”*

In December 2011 changes were made to BBC protocol E1 – Trust oversight of the BBC, to reflect that for any initiative previously approved by the Trust, further approval should be sought where a significant change to the scale of operation, delivery model, risk profile or anticipated benefits took place after the initiative was approved. As major projects, such as DMI, reported quarterly to the DG Finance Committee this was deemed by the Internal Audit as sufficient to satisfy bullet point 1 of Recommendation B.

As the Trust’s referral thresholds were expanded to address the NAO’s recommendation in relation to bullet point 1, Internal Audit concluded that both actions associated with this recommendation were complete.

### *Recommendation C:*

*“Without a proper understanding of the approach being followed by a contractor and the ability to intervene, the BBC will be unable to act as an intelligent client. The BBC should:*

- commission independent technical assurance reports on system design when contracting-out software development;*
- establish the minimum technical and management requirements for effective oversight of contracts on a contract-by-contract basis; and*
- establish how and when it will be able to intervene to secure delivery of outsourced contracts rather than waiting for either contract non-delivery or termination.”*

In the response to the NAO, the BBC agreed with this recommendation, and stated that this was already being implemented for new contracts. As a consequence, all investment cases submitted to the DG Finance Committee were required to demonstrate *“how the contract governance structure allows for effective contract management.”*

Contracts with suppliers were already in place for DMI at the time the NAO published their report. The BBC were undertaking ad hoc independent technical assurance reviews on the delivery of the DMI solution, and had in place technical and management oversight on a contract-by-contract basis. This was sufficient to address the recommendation at the point in time and we understand that the suppliers have since fulfilled the obligations of their contracts on DMI.

### *Recommendation D:*

*“The financial benefits of the Programme were initially overstated. The BBC should continue to test the benefits projections with the rigour it showed in reviewing the revised investment cases for the Programme by:*

- securing sign-up for benefits from those responsible for delivering them;*
- reducing budgets to reflect projected benefits; and*
- establishing baselines against which it can demonstrate savings.”*

Our assumption, as was the BBC’s, is that this recommendation comes from the NAO’s review of the period when DMI was contracted out until the BBC brought it in-house. Whilst the BBC acknowledged that a level of rigour was applied in the April 2010 Business Case for DMI, there is no requirement for DMI to periodically review the Business Case – only when the referral thresholds are deemed to have been triggered, as described in Recommendation B. Benefits were however subject to regular review, and the project reported to DG Finance Committee every quarter.

### *Recommendation E:*

*“There will be lessons to be learnt from the initial contract for the Programme. Although the BBC and Siemens had separate internal lessons learning reviews they did not share their understanding of the programme in a no-blame environment, even after they had settled the contractual dispute, to generate an agreed and comprehensive record of lessons learned. The BBC should invite Siemens to draw up a joint understanding of lessons to be learnt, not least because they have common business interests in the form of the Technology Framework Contract which runs until March 2015.”*

The BBC has sought to take a ‘lessons learnt’ approach as part of its large programme and project closure. Through the BBC PMO, a series of lessons learnt sessions have been conducted across the portfolio of major programmes, assessing progress made, issues experienced, and how to take forward better practice to future projects.

Internal Audit verified in January 2012 that the BBC continued to work with Atos (formerly Siemens) to ensure lessons learnt are fully considered as part of the continuous review of services and methods of service delivery, and through due diligence following the takeover of Siemens by Atos Origin.

### *Recommendation F:*

*“The technology system supporting the Programme has so far been shown to be valid but the BBC has not yet as at October 2010 put in place to the level required the full range of processes and controls that should allow it to complete the development of the technology to the planned time, budget and functionality. Specifically, it should:*

- for its technical solution, complete the independent technical assurance of the design to provide a framework against which it can assess interdependencies and the impact of change control requests;*
- for its technology planning, draw up more detailed team-based plans specifying resource requirements and responsibilities for each team;*
- for its testing, document a testing strategy to embed the discipline of testing and increase the use of automated testing tools to improve efficiency and acceptability of new technology components; and*
- for supplier management, ensure that the supplier management lead appointed in October 2010 sets out how he will secure early understanding of the delivery risks and potential mitigation posed by third party suppliers.”*

In response to the NAO recommendation, the BBC provided:

- Evidence that independent technical assurance of the design of the technical solution was carried out.
- A revised organisational chart, giving a greater level of detail for the functional teams;
- A testing strategy as approved by the programme leadership team
- Evidence of the supplier management arrangements for DMI.

Due to the scope of our review, we have not assessed the level of independent scrutiny given to validate whether DMI had not just implemented the recommendation, but that the approach taken was fit for purpose. In all cases, we would have expected DMI to demonstrate evidence of:

- An active design authority, supported by on-going technical assurance applied to DMI, with periodic reviews of the approach taken to design and deliver the solution, and regular assessments of quality inherent in the solution build.
- A programme organisation that has been designed to be effective in delivery of the programme outcome, independently verified and periodically reviewed.

- Independent assurance review of the testing strategy supported by quality assurance of the approach taken to plan and deliver testing.
- A single integrated approach to supplier management aligned to activities in the programme approach, which transfers risk onto the supplier, and includes clear criteria for measuring supplier performance.

### *Conclusion*

Following publication of the NAO Report, DMI established a log of actions for implementation to address each of the six NAO recommendations at that point in time. Verification work undertaken by Internal Audit in July 2011, Jan 2012 and during the Internal Audit of DMI in April 2012 confirmed all action relevant to DMI as complete, subject to the limitations of the Trust’s response to Recommendation.

In reviewing the actions implemented by DMI, the emphasis was on demonstrating that the risks highlighted by the NAO had been addressed at that point in time. The improvement of programme controls to manage on-going risk has not been implemented. We therefore conclude that the recommendations were mostly implemented by the BBC.

---

# Question 7 – Recommendations

*What are the wider project management and reporting lessons that can be learnt from DMI and applied to other BBC projects?*

## *Background*

We have considered the findings in the above sections and make recommendations related to questions 1 to 5 as set out in Figure 1. We recognise that the BBC is in the process of maturing their programme management methodology (the BBC Way) and that certain aspects of our recommendations are in the process of being implemented.

The key lessons to be learned have been broken down into the following areas:

- Programme and Corporate Governance.
- Programme Lifecycle Management.
- Risk and Issue Management.
- Programme Assurance Planning.
- Financial Management.
- Benefits Management and Tracking.

Recommendations have been grouped together to reflect the normal flow of programme initiation and execution rather than indicating a priority for implementation. Our recommendations reflect what we have observed in carrying out this review of DMI. They are based on good practice for managing programmes. We are aware that other large projects and programmes have adopted these good practices, and that there are publicly recognised examples of excellent project management at the BBC (Project W1). Therefore our recommendations, while appropriate for projects which combine complex organisational change with complex technology implementation, may not be relevant or needed for all BBC projects.

## *Programme and corporate governance*

### *Programme governance structure*

The programme governance structure should reflect the needs of the programme to enable the programme to achieve the desired outcome. It has to be appropriate for the type of programme being executed and to provide clarity around the accountabilities for success at all layers in the governance structure, the levels at which decisions are made and risks are managed, and the way in which capital investment and resources are allocated.

The programme governance structure should have clear guidelines on the roles and responsibilities of each governance layer and on the delegated authority for decision-making that can be made at each level. The role of each layer of the governance model should focus on addressing the risks / issues and making decisions rather than being forums for providing an update on progress to stakeholders. Participation in each layer should be restricted to those individuals required to manage the programme and attendance should be mandated.

A key role in the governance structure is that of the sponsor. Programmes should have a single sponsor, responsible for owning the successful delivery of, and outcome for, the programme. The sponsor should have appropriate knowledge of the areas impacted by the programme and have a sufficient level of authority and responsibility within the organisation to deliver the business benefits described in the Business Case.



The key elements of governance for a technology-enabled transformation programme such as DMI are outlined in the table below:

<b>Group</b>	<b>Meeting frequency</b>	<b>Owner</b>	<b>Role</b>	<b>Reports to</b>
<b>Corporate Governance Bodies</b>	Quarterly	Various	The Corporate Governance bodies should be responsible for commissioning programmes and agreeing the key tolerances for delivery.	N/A
<b>Executive Steering Board (ESB)</b>	Monthly	Executive Sponsor	The ESB should be responsible for setting the direction of the programme. They have overall accountability / responsibility for the programme, as long as forecasts remain within tolerances.	Corporate Governance Bodies
<b>Programme Steering Group (PSG)</b>	Weekly / Bi-monthly	Programme Director/Manager	The Programme Steering Group should be responsible for managing the delivery of each stage of the programme. Any deviation from the delivery timelines should be escalated to the ESB.	ESB
<b>Project Workstreams (PW)</b>	Weekly	PMO / Team Manager	The Project Workstreams should be responsible for delivery of individual work packages in line with agreed tolerances. Any movement outside those tolerances should be passed to the PMB.	PSG
<b>Design Authority</b>	Varies	Design Lead	The Design Authority should be responsible for aligning the current and future business requirements to the overall solution.	PW and Corporate Design Authority

*Figure 17 - Recommended governance forums*

As the programme moves through each stage of its lifecycle, changes may be required to the organisation or governance structure to reflect the changing focus from design through to implementation.

### *Recommendation A*

- Programmes should adopt a three-tier governance structure where the programme delivers change to the business. For in flight programmes, the governance arrangements should be reviewed and appropriate improvements made where the risk of significant disruption can be managed.
- Attendance at programme governance meetings should be mandatory for all key stakeholders, and attendance monitored closely. Where it is genuinely not possible for key stakeholders to attend, decision-making authority should be delegated to an appropriate person for the meeting in question. This ensures that key progress reporting information can be communicated and that key decisions can be made and the information cascaded down to the relevant parties.
- A single sponsor (sometimes known as a Senior Responsible Owner) for each programme should be appointed during programme start-up. This sponsor will be accountable for the programme's overall success and empowered to make the most important decisions. The sponsor will need to own the Business Case, take accountability for realising the expected benefits, ensure that the business teams are actively engaged throughout the programme and also that the programme maintains its alignment to the business's strategy. The sponsor should have successful delivery of the Business Case embedded in to their objectives.

### *Role of the Design Authority*

The role of the Design Authority is central to providing strategic direction throughout the design and implementation of a technology solution. The Design Authority should ensure the solution's alignment with the business requirements as well as acting as a gate keeper for each formal stage gate in the development lifecycle.

The Design Authority should also take responsibility for implementing strong design governance principles as part of any change management processes.

The size of the Design Authority function on any programme will depend on the scale and complexity of the solution to be delivered.

### *Recommendation B*

- The BBC should formalise the role of the Design Authority as part of the overall programme governance framework. The Design Authority should be clearly linked to the BBC Technology Enterprise Architecture function. The role of the Design Authority should include:
  - Overseeing the technical design of solutions to ensure alignment with good practice as well as alignment with overall technology strategy.
  - Responsibility for ensuring the solution design satisfies the business requirements and that change requests align to the business requirements and Business Case.
  - Ensuring that there is effective engagement from the business in the development of the solution impact assessment. This will improve the likelihood that the developed solution meets the business requirements and results in the expected business benefits.

## *Role of Corporate Governance*

The BBC's Corporate Governance bodies should be responsible for providing oversight and authorisation for a programme to proceed or stop, rather than to be an active part of day-to-day programme governance. How the programme engages with the Corporate Governance bodies and the information it can provide on progress, risk and issues will be key to ensuring that programmes are successful.

### *Recommendation C*

- The BBC should review the roles and responsibilities between its different corporate and programme governance bodies to implement clearer delineation between corporate and programme roles. This is particularly relevant for both approving and tracking large, complex investment programmes. This review should also include the role and responsibilities of the Trust, DG Finance Committee, BBC PMO, Internal Audit and the programmes.
- Based on our review of DMI and the BBC corporate governance model in place at the time of DMI, we believe that the BBC should introduce a Portfolio Management capability, implemented as part of its current governance structure. Supported by the BBC PMO, the responsibility of Portfolio Management would be to provide oversight, control and authorisation for Capital Expenditure ("Capex") Management of the portfolio of change programmes. This function would monitor progress, interdependencies between programmes and provide assurance that programmes are adhering to the 'BBC Way'. In addition, the function should look at managing the holistic risks of the entire portfolio, including financial, reputational, and delivery risks.

## *Programme reporting*

Programme reporting is central to the effective operation of a programme's governance model. It is essential that the programme sponsor and other stakeholders have accurate and timely information which reflects the current status of the programme and enables them to make informed decisions. Reporting should focus on delivery of the business outcomes and should reflect the programme's key success criteria, deliverables and defined tolerances.

Typical programme reporting includes a combination of:

- Progress reporting, including tracking delivery against key milestones / stage gates, last period's activities and forthcoming activities, dependencies, deliverables, forecasted time to complete, upcoming workload versus resource forecasting.
- Change requests requiring sign-off, including options analysis and associated budget impacts
- Risk management reporting, including key risks and issues that require actions and an overall risk assessment based on cumulative levels of risks from across the programme.
- Financial reporting, including current project run-rates, cumulative programme costs to date against budget as well as a projection of the likely cost to complete.
- Benefits tracking, including tracking of key programme KPIs and forecasted benefits delivery.

### *Recommendation D*

- The BBC should review existing templates and evolve these in line with other recommendations set out in this report to define a standardised reporting framework and templates, which should be mandated on all programmes. The reporting framework should clearly define the level and type of reporting that is appropriate for each layer in the governance structure.

## *Programme lifecycle management*

### *Agreeing on a common approach*

The BBC does not mandate a common approach to programme lifecycle management or enforce adherence to a common set of standards around Capital Expenditure (“Capex”) approval processes and project management. The closest example is the BBC Way, which provides an optional set of guidance for project managers on effective programme management methods. These methods include stage gate delivery, good practice project management guidelines and a number of document templates.

We believe that implementing a standard stage gate framework for programme lifecycle management would provide tangible benefits in programme management and delivery. The adoption of a common lifecycle management approach would provide greater transparency and control of budgeting, spend and forecast through all stages of the lifecycle. A common stage gate process also enables the right controls and checkpoints to be implemented allowing progress to be closely monitored and deviations from plan to be identified and their impacts assessed. This is particularly important for programmes and projects which employ third party vendors operating under their own methodologies, as it enables more consistent, transparent progress reporting across programmes and projects.

### *Recommendation E*

- The BBC Way should be used as the basis for mandating a common project and programme lifecycle management approach. The BBC will need to perform a detailed review of the BBC Way to identify improvements and implement a plan to enhance and embed the approach across the Corporation. Adherence to the common programme lifecycle should be included in the objectives of all programme managers and in contracts with third parties.
- The BBC Way will need to be closely integrated with the suggested Portfolio Management Board and Programme Governance structures to give greater transparency of progress against plan and control of budget.

## *Programme planning and plan management*

Programme plans should be developed as part of programme initiation and have clear linkage to the delivery of technology components, business capabilities, business outcomes and benefits. Programmes should develop a high level plan on a page as part of the Business Case to provide clarity on key milestones. The plan should be aligned to the key stage gates outlined in the BBC Way and baselined as part of a programme’s approval process.

Each project should develop mid-level project plans and detailed workstream project plans as part of the preparation for the entry into any new stage gate. Wherever possible, plans should be constructed in line with the BBC’s preferred Prince II methodology and include information on activities, milestones, deliverables, resourcing, responsibilities, dependencies and the critical path. Plans should be agreed with each of the key project workstreams and baselined, to enable the programme manager to monitor progress against key milestones and deviations to be tracked. Workstream project plans should be integrated into a mid-level end-to-end programme plan, which in turn should roll up into the programme plan on a page.

### *Recommendation F*

- The BBC should ensure that programme planning is a key component of large scale projects and plans should be aligned to the stage gate process defined in the BBC Way. Programme plans should be periodically reviewed, baselined at the beginning of each stage and aligned to the timelines specified in the overall programme plan. Requests to re-baseline plans should be managed through change control at an Executive Steering Board level and the impact on the Business Case reviewed and approved.

## *Risk and issue management*

The implementation of risk and issue management, as defined in the BBC Way, can support the BBC in developing a more in-depth, consistent, understanding of its risk profile at both programme and portfolio level and will provide a greater focus on understanding business impacts and mitigation options, developing cumulative risk assessments and providing transparent reporting to key stakeholders.

### *Recommendation G*

- The BBC should ensure that appropriate risk and issues management processes, RAID logs and templates are made available as part of the BBC Way.
- Programmes should undertake a formal risk assessment at the outset to capture risks that need to be managed throughout the life cycle of the programme. This assessment would inform the Business Case, provide the initial base line for the RAID logs and be managed through the formal risk and issues management processes. Periodically a formal review of the risks should be undertaken to ensure that the programme is maintaining adequate focus on the identified risks and has clear plans to mitigate them.

## *Programme assurance planning*

### *Recommendation H*

- An integrated assurance plan should be a mandatory deliverable as part of the initial set-up of a programme and should be monitored periodically to ensure it remains valid as the programme moves through its lifecycle. The plan should outline the key entry and exit criteria for each programme stage, the key assurance activities aligned to the programme plan and the roles and responsibilities of various bodies in providing assurance to the programme.
- Assurance activities should be performed periodically and around key stage gates, with the independent assurance bodies empowered to raise key risks and issues and provide recommendations for their resolution.

## *Financial management*

Our recommendations on project financial management relate to the approval of the initial Business Case and the on-going management and tracking of spend and forecasting the cost to complete.

### *Business Case definition and approval*

Both corporate and programme governance bodies require accurate and timely Business Case data to make the right investment decisions before a programme is approved or funding is released.

Business Case approval is a key milestone on any programme. The programme sponsor is responsible for agreeing the Business Case with both key business stakeholders and the finance team prior to programme approval.

Key stakeholder communities are required to play an active role in the approval of Business Cases. They will need to understand, review and approve the Business Case and consider the:

- Validity of the estimated cost of delivery, including the likely internal resource requirements, sourcing strategy, time lines, risks and issues.
- Alignment of the programme to the BBC's strategic objectives.
- Ability of the programme and the business to deliver the business benefits they have agreed to.
- Programme's ability to deliver the identified outcomes, including any dependencies with other programmes or external factors, the timelines, availability of resources and the achievability of the milestones.

The Business Case should be baselined as part of the programme approval process and reviewed as part of every stage gate review or when significant changes to either the programme's objectives or delivery plan are required.

### *Recommendation I*

- The BBC should review the Business Case approval process and ensure that an appropriate sponsor is responsible for both the Business Case definition and delivering the business benefits.
- The Business Case is a living document that should be reviewed periodically as well as when the BBC's current re-approval limits are hit.

## *Project financial management*

Currently, on approval of a BBC Business Case, the DG Finance Committee delegates responsibility for budgetary control within agreed limits to the Programme Steering Board.

### *Recommendation J*

- Clear guidelines should be in place to enable programmes to estimate cost and track and report spend at a granular level against clearly defined delivery milestones. Monitoring both cost to complete and/or budget burn-down enables the programme manager and governance bodies to track progress against budget and identify over-runs earlier in the process.
- Delegation of authority for programme finances should be aligned to the programme governance structures in place.
- The BBC should consistently implement a formal process for estimating and tracking spend through all stages of the life cycle through to delivery of the expected benefits.
- The BBC should review a programme's financials as part of each major stage gate review. There should be a set of clear guidelines in place to ensure that each programme knows when they should re-baseline their Business Case.

## *Benefits management and tracking*

It is good practice to monitor a programme's ability to deliver against the initial Business Case throughout its duration. Taking a proactive view of business benefit management often helps maintain a programme's focus on delivering business outcomes as well as the ability to deliver to time and budget.

Changes in the programme need to be assessed for their impact on the programme's ability to deliver the defined benefits. The programme should also monitor the influence of any external factors or programmes which could impact the cost, or the realisation of the benefits.

### *Recommendation K*

- Programmes should set up business benefit management and tracking processes as part of initiation and closely link these to the delivery timelines, budget, target KPI's and associated business benefits. Programmes should state how they will adhere to the Trust's published guidelines on Business Case re-approval and set clear criteria for triggering the process to revise and reapprove the Business Case.

---

# *Appendices*

# Appendix A: Timeline and key events

The following table sets out key governance events during the period of the DMI project. This timeline has been provided by the BBC and the BBC Trust and has not been validated for accuracy by PwC.

<i>Date</i>	<i>Key events</i>		
	<i>BBC Executive</i>	<i>BBC Trust</i>	<i>NAO &amp; PAC</i>
<b>Nov 2005</b>	The Digital Media Initiative (DMI) concept was created to “fully prepare the BBC for the on-demand digital world”.		
<b>Dec 2007</b>	After several iterations, the final Phase 1 business case was submitted to release funds (budget - £81.7m) for the implementation phase.		
<b>Feb 2008</b>	A Call Off contract (for £79.8m) under the Technology Framework Contract was put in place with Siemens to deliver the project in two releases.		
<b>July 2009</b>	The contract with Siemens was terminated and responsibility for delivering the DMI programme was brought in-house to the BBC.		
<b>Apr 2010</b>	The BBC Executive Board approved the DMI business case.		
<b>May 2010</b>	Release 2 “Fabric Workspace” was successfully deployed and made available to production staff in London Factual.	Trust FC discussed the business case for DMI and noted a lack of clarity over scope, what needed approval, and benefits.	
<b>Jun 2010</b>		Trust FC discussed the re-submitted business case for DMI and found it more helpful, but noted that further input was required prior to approval.  The business case for DMI was approved by Trust between the June and July meetings. Trust noted that DMI had adopted an iterative approach, which was new for the BBC and carried risks. Trust noted that the project team needed to clarify delivery outcomes and timescales and needed to re-confirm benefits. The CFO confirmed that DMI was under executive scrutiny and was being treated as the project with the highest risk.	



<i>Date</i>	<i>Key events</i>		
	<i>BBC Executive</i>	<i>BBC Trust</i>	<i>NAO &amp; PAC</i>
<b>Sep 2010</b>	<p>A no-fault settlement agreement was signed by the BBC and Siemens, delivering £27.5m for the BBC.</p> <p>An Independent Healthcheck on the DMI Programme was completed by an external third party, having been commissioned in June 2010.</p> <p>The DMI programme team prepared a revised delivery schedule to complete delivery by July 2011.</p>		
<b>Oct 2010</b>			An external third party completed a Value for Money review of the DMI Programme, commissioned by the NAO.
<b>Nov 2010</b>	DG Finance Committee noted that the programme was on track to deliver in July 2011, but that £4m of benefits were at risk.		
<b>Dec 2010</b>	<p>The transition of BBC DMI assets and control from Siemens management was completed.</p> <p>DG Finance Committee approved a mandate for DMI procurement. DMI delivered a release of Advanced Editing Tools.</p>		
<b>Jan 2011</b>	DMI was discussed at BBC Executive Board. The BBC Executive Board noted the NAO report and approved the management response for onward submission to the Trust.		NAO report on DMI published by the Trust.
<b>Feb 2011</b>	The Director of FM&T and Executive Sponsor for DMI leaves the BBC at the end of February.		Public Accounts Committee hearing on DMI.
<b>Mar 2011</b>	<p>Following the departure of the Director of FM&amp;T and Executive Sponsor, the FM&amp;T division was split into Future Media and Technology. The Chief Operating Officer took over DMI as Executive Sponsor. The Chief Technology Officer joined DG Finance Committee as a member.</p> <p>The pan-BBC project portfolio was discussed at the BBC Executive Board through a Quarterly PMO Update (Q3 10/11). No specific reference to DMI was made.</p>		Public Accounts Committee report on DMI published.
<b>Apr 2011</b>	Key recommendations of the NAO report were implemented by the BBC.		

<i>Date</i>	<i>Key events</i>		
		<i>BBC Executive</i>	<i>BBC Trust</i>
			<i>NAO &amp; PAC</i>
<b>May 2011</b>	The DMI Steering Group noted that £7m of the benefits forecast were at risk.		
<b>Jun 2011</b>	<p>The DMI Steering Group reported that £11.4m of the benefits forecast were at risk.</p> <p>The DG Finance Committee approved contingency funds to complete the development of a module on metadata management and requested for a benefits case to be presented.</p> <p>DMI was discussed at the BBC Executive Board through a DMI Update paper. The paper provided members of the BBC Executive Board with a summary of progress on DMI to date and laid the groundwork for a separate DMI commercial paper to follow. The Board asked for a DMI update to return in September, including particular focus on the Vision area.</p>		
<b>July 2011</b>	The pan-BBC project portfolio was discussed at the DG Finance Committee through a Quarterly PMO Update (Q1 11/12). A benefits deficit of £11.4 million was reported on DMI. The project risk profile was classified as amber/red status. The PMO stated to the DG Finance Committee that over half of the milestones missed across the pan-BBC project portfolio were DMI-related.		
<b>Sep 2011</b>	<p>The pan-BBC project portfolio was discussed at the BBC Executive Board through a Quarterly PMO Update (Q1 11/12). The Board noted the update and emphasised that the benefits of big projects (such as DMI) now needed to be achieved.</p> <p>It was noted at the Executive Audit Committee that the planned 2011 Internal Audit Review of DMI would be postponed until 2012.</p>	<p>The April to June PMO report (Q1 2011/12) is received by the Trust FC.</p> <p>The PMO paper shows that DMI has been classified as an amber/red risk for the first time and states that 'project delivery has slipped with the benefits at risk being re-planned'.</p>	
<b>Oct 2011</b>	An interim solution for the Sport Digital Production Library was approved by the DG Finance Committee, following DMI delays.		
<b>Nov 2011</b>	The pan-BBC project portfolio was discussed at the DG Finance Committee through a Quarterly PMO Update (Q2 11/12). The project risk profile was classified as amber/red status. Concerns about issues with DMI in BBC North were raised. The BBC PMO reported that 'delivery of technology solutions is progressing, but challenges remain' and recommended a review of the 'organisational ability to close the £11 million benefits gap and how this will be achieved following project closure'. This report was received by the BBC Executive Board and Trust FC in December 2011.		

<i>Date</i>	<i>Key events</i>	<i>BBC Executive</i>	<i>BBC Trust</i>	<i>NAO &amp; PAC</i>
<b>Dec 2011</b>	The pan-BBC project portfolio was discussed at the BBC Executive Board through a quarterly PMO Update. No specific reference to DMI was made.		<p>The July to September (Q2 2011/12) PMO report is received by the Trust FC.</p> <p>The report shows that the project is still an amber/red risk and states that 'delivery of technology solutions progressing, but challenges remain' and recommends a review of the 'organisational ability to close the £11 million benefits gap and how this will be achieved 'following project closure'.</p>	
<b>Feb 2012</b>	<p>The pan-BBC project portfolio was discussed at the DG Finance Committee through a Quarterly PMO Update (Q3 11/12).</p> <p>The project risk profile was classified as red status. This report was discussed at the DG Finance Committee, but was not conveyed to the BBC Executive Board, Executive Audit Committee or the Trust, as DG Finance Committee required a major review of benefits.</p> <p>The DG Finance Committee approved contingency funds for programme resourcing to complete the scope of work outlined in the revised business case, subject to a number of actions by the DMI Steering Group.</p>			
<b>Mar 2012</b>	The DG Finance Committee approved the commercialisation of DMI in principle, subject to a number of actions including approval being obtained from the BDG, the BBC Executive Board and Trust FC.			
<b>Apr 2012</b>	BBC Internal Audit commenced planning for their review of DMI.			
<b>May 2012</b>	<p>The pan-BBC project portfolio was discussed at the DG Finance Committee through a Quarterly PMO Update (Q4 11/12).</p> <p>The DG Finance Committee asked for the DMI Steering Group to be reconstituted with new members and for a brief pause to get the DMI rollout right due to continuing issues and difficulties in BBC North.</p> <p>DMI was discussed at BBC Executive Board through a Finance Update. The Board spoke about the DMI project and agreed an update should be provided to the Board before the summer.</p> <p>The COO agreed at a BDG meeting to task the PMO with undertaking a thorough situation report on DMI roll-out, for discussion at DG Finance Committee along with subsequent regular updates.</p>			

<i>Date</i>	<i>Key events</i>	<i>NAO &amp; PAC</i>
	<i>BBC Executive</i>	<i>BBC Trust</i>
<b>Feb-May 2012</b>	A series of BBC Executive interventions were made to attempt to bring the programme back on track.	On 28 May Trust receives a letter from a whistle-blower reporting problems on DMI, suggesting that the NAO report was inaccurate about DMI's progress and therefore that the Trust, the NAO and PAC may have been misled.
<b>Jun 2012</b>	The pan-BBC project portfolio was discussed at the BBC Executive Board through a Quarterly PMO Update (Q4 11/12). No specific reference to DMI was made.	Trust replies on 12 June to the whistle-blower to ask if the issues raised can be explored directly with the Executive and then the NAO. Shortly afterwards the Trust Unit receives formal notification via the BBC's PMO that the project has been classified as a red risk and investigations begin.
<b>July 2012</b>	<p>The pan-BBC project portfolio was discussed at the BBC Executive Board through a Finance Update. It was noted that a report on DMI would come to the Board the following month.</p> <p>BBC North deployed an editing solution following the delays in delivering DMI.</p> <p>The BBC Internal Audit report on DMI was issued.</p>	<p>PMO report for the period Jan to March (Q4 2011-12) informs the Trust that the project's risk profile has been classified as red for the first time. This was discussed at Trust Finance Committee on 5 July (as it could not be taken at the June Meeting).</p> <p>The Executive reports that an investigation is underway and that the results will be reported to the Trust.</p>
<b>Aug 2012</b>	The DG Finance Committee stated that the DMI Programme team needed to take time to pause and re-plan.	
<b>Sept 2012</b>	<p>DMI and the pan-BBC project portfolio were discussed at the BBC Executive Board through a Quarterly PMO Update (Q1 12/13). The Board briefly discussed the PMO report and noted that DMI continued to be problematic. The project was being re-planned and it was agreed that a substantive update should be provided to the Board at the appropriate point.</p> <p>The Chief Operating Officer and Executive Sponsor leaves the BBC. The CFO becomes the Executive Sponsor.</p>	The Executive informs the Trust that DMI's future is being reconsidered. The Trust concludes that a revised business case will require Trust approval.
<b>Oct 2012</b>	<p>The DMI programme was paused by the DG Finance Committee for an operational review to be conducted, including a full technical assessment. The End-to-End Digital programme was established by the Director of Operations to carry out this review. DMI's ongoing delivery was moved under the sponsorship of the Chief Creative Officer.</p> <p>DMI was discussed at the BBC Executive Board through a DMI Update. This provided the position on DMI, noting that a paper would be provided to the Board for approval on this topic.</p> <p>DMI expenditure was substantially put on hold by the Executive while a new business case was prepared for the Trust.</p>	Trust Finance Committee asks that an interim status report on costs, project outcomes and benefits should be submitted to its November meeting.

<b>Date</b>	<b>Key events</b>		
	<b>BBC Executive</b>	<b>BBC Trust</b>	<b>NAO &amp; PAC</b>
<b>Nov 2012</b>	<p>DMI was discussed at the BBC Executive Board through a general finance update, noting that the programme had currently been paused.</p> <p>A DMI interim status report was circulated to the BBC Executive Board and the Trust FC. The paper stated that benefits were £11million behind profile and costs £18m ahead of profile but asserted that key hardware and software had been delivered and the rationale for pursuing the objectives of the programme remained very strong.</p>	<p>Interim report is presented to Executive Board and the Trust Finance Committee.</p> <p>The paper states that key hardware and software has been delivered and the rationale for pursuing the objectives of the programme remain strong but reports that benefits are £11 million behind schedule and costs are £18 million ahead of the forecast expenditure profile (although still within the overall budget limit).</p> <p>The Trust wrote to Margaret Hodge MP to update the Public Accounts Committee and suggests the NAO should carry out a VFM review once the project's future has been determined.</p>	
<b>Dec 2012</b>	<p>DMI was discussed at the BBC Executive Board through a DMI update, prior to the full business case returning to the Board for approval. The Board noted that a new team was now managing the project. It was agreed that it would be helpful to engage some of the non-executive directors in both the Technology Review and DMI. The Board asked for an in-depth discussion on the topic prior to consideration of the full business case early the following year. The purpose of this would be to ensure that the Board had an opportunity to explore the project fully and seek assurance that appropriate challenges had been made. The Board was keen to understand how many £20m+ technology projects were currently underway.</p>		
<b>Jan 2013</b>	<p>The BBC Executive appointed an external third party to carry out a comprehensive technical review to inform the new business case.</p>		
<b>Feb 2013</b>			
<b>Mar 2013</b>	<p>An external third party completed their technical review.</p>		
<b>Apr 2013</b>			
<b>May 2013</b>		<p>Trust Finance Committee approves the Executive's proposal to close DMI. Trust writes to the Public Accounts Committee to inform them of this decision.</p> <p>The Trust agrees to commission external consultants to carry out an independent review.</p>	

# Appendix B: Summary of meeting minutes where DMI has been referenced

## Summary of minutes from the BBC Executive Board:

<i>Date</i>	<i>DMI discussed</i>	<i>Portfolio discussed</i>	<i>Discussion points relating to DMI</i>
<b>Jan-11</b>	Yes		The Executive Board noted the NAO report and approved the management response for onward submission to the Trust.
<b>Mar-11</b>		Yes	Quarterly PMO Update: No specific reference to DMI.
<b>Jun-11</b>	Yes		DMI update: provided members of the Executive Board with a summary of progress on DMI to date and laid the groundwork for a separate DMI commercial paper to follow. The Board asked for a DMI update to be provided in September, including particular focus on the Vision area.
<b>Sep-11</b>		Yes	Quarterly PMO Update: No specific reference to DMI.
<b>Dec-11</b>		Yes	Quarterly PMO Update: No specific reference to DMI.
<b>May-12</b>	Yes		Finance Update: The Board also spoke about the DMI project (in the Finance Update context) and agreed an update should be provided to the Board before the summer.
<b>Jun-12</b>		Yes	Quarterly PMO Update: No specific reference to DMI.
<b>Jul-12</b>		Yes	Finance Update: A report on DMI would be provided to the Board the following month.
<b>Sep-12</b>	Yes	Yes	Quarterly PMO Update: The Board briefly discussed the PMO report and noted that DMI continued to be problematic. The project was being re-planned and it was agreed that a substantive update should be provided to the Board at the appropriate point.
<b>Oct-12</b>	Yes		DMI Update: provided on the position with DMI, noting that a paper would be provided to the Board for approval on this topic.
<b>Nov-12</b>	Yes		DMI Update: noting that it had currently paused.
<b>Dec-12</b>	Yes		DMI Update: prior to the full business case returning to the Board for approval. The Board noted that a new team was now managing the project. It was agreed that it would be helpful to engage some of the non-executive directors in both the Technology Review and DMI. The Board asked for an in-depth discussion on the topic prior to consideration of the full business case early the following year. The purpose of this would be to ensure that the Board had an opportunity to explore the project fully and seek assurance that appropriate challenges had been made. The Board was keen to understand how many £20m+ technology projects were currently underway.
<b>Apr-13</b>	Yes		End to End Digital update: The Board discussed closure of the Digital Media Initiative project, lessons learned and associated costs.
<b>May-13</b>		Yes	End to End Digital update: The Board discussed closure of the Digital Media Initiative project, lessons learned and associated costs.

## Summary of minutes from the Trust FC:

Date	Discussion Points relating to DMI
May-10	FC discussed the business case for DMI and noted a lack of clarity over scope, what needed approval, benefits.
Jun-10	FC discussed the re-submitted business case for DMI and found it more helpful – but still lacked key views on DMI.
Jul-10	<ul style="list-style-type: none"><li>• Business case for DMI had been approved by the FC between the June and July meetings.</li><li>• FC noted that DMI had adopted an iterative approach, which was new for the BBC and carried risks – FC noted that the project team needed to clarify delivery outcomes and timescales and needed to re-confirm benefits.</li><li>• CFO confirmed that DMI was under executive scrutiny and was being treated as the project with the highest risk.</li></ul>
Oct-10	FC noted that the National Audit Office (NAO) was examining the process by which DMI had been brought in-house.
Nov-10	FC suggested that the Executive's Audit Committee consider the findings on the identification of benefits in the NAO's value for money study on DMI when they are made available.
Dec-10	<ul style="list-style-type: none"><li>• The initial draft of the NAO report on DMI was discussed, including how to deal with the risk of bringing DMI in-house and the lack of competitive tender when it was brought in-house.</li><li>• FC felt that the report did not sufficiently articulate the need for the BBC to have invested in DMI and the cost/benefit decision that was made.</li></ul>
Jan-11	FC reviewed the Executive's response to the NAO's DMI report and concluded that the response should have changes to tone, clarification of certain aspects of the sequence of events, clarification of the need for the BBC to undertake the project and its associated benefits, and an explanation of the purpose of the IT framework.
Feb-11	Project North had begun taking delivery of DMI and early indications suggested it was fit for purpose – and Exec attendees at the meeting expressed confidence that the IT would prove to be sufficiently flexible to adapt to future innovations.
Apr-11	<ul style="list-style-type: none"><li>• FC noted that the Commons Committee of Public Accounts had published its report on the value for money study recently concluded on DMI.</li><li>• It was noted that the latest version of DMI had been delivered to Project North as planned.</li></ul>
Jun-11	One of the D-G's top risks was that DMI was due to be implemented fully within Salford in October, although the version to be implemented would still need enhancements – the Executive were keen to press ahead instead of delaying. There had been some issues with the speed of the system but this was not caused by the quality of the code. It was noted that DMI had important implications for delivering DQF (Delivering Quality First) because implementing DMI presented more options.
Jul-11	<ul style="list-style-type: none"><li>• Project PC Refresh was experiencing delays due to issues including lack of compatibility with DMI software – FC's priority was that Refresh should not interfere with DMI.</li><li>• Project North was reported as being on track, with DMI progressing well and content already having been broadcast from BBC North.</li></ul>
Sep-11	<ul style="list-style-type: none"><li>• FC were informed in a briefing paper that the overall portfolio of projects contained a higher cumulative risk profile than that of individual projects – due to high levels of dependencies and the current delivery peak.</li><li>• There was a focus in the portfolio status report on ensuring that benefits will be derived from DMI.</li></ul>
Jul-12	Three key milestones on DMI had been missed and the overall situation was deemed sufficiently serious that the D-G had requested a specific report.
Sep 12	TFC noted that the Executive were currently reconsidering the future of the project; Trustees requested that any amended proposals for the future of the project be put before them for consideration.

<i>Date</i>	<i>Discussion Points relating to DMI</i>
<b>Oct 12</b>	The quarterly PMO report was discussed, which included reference to DMI. TFC heard that DMI's sponsor and director had been replaced and that the project had been paused, pending a new business case. It was agreed that the Trustees would receive a concise paper comparing the original objectives of DMI with the current position covering costs, direct project outcomes, and direct project benefits.
<b>Nov 12</b>	The Executive presented an update paper on the future of DMI; Trustees voiced their disquiet at the current state of the project, and it was agreed that the TFC Chairman would write to the Chair of the PAC. All but essential expenditure would also be halted and the TFC would invite the NAO to perform a follow-up to their earlier review of DMI.
<b>Dec 12</b>	TFC noted that the BBC was proposing to appoint independent external consultants with experience of BBC technology projects to review project progress. High level options for DMI were also discussed.
<b>Feb 13</b>	TFC heard that the BBC had commissioned a third party to conduct an in-depth review of DMI.
<b>Mar 13</b>	Trustees were given an update on the progress of the external technical review.
<b>Apr 13</b>	The Committee noted that the next update on DMI and how it would be taken forward was due in May, and noted that almost all expenditure had now been stopped.
<b>May 13</b>	<p>Trustees discussed a briefing they had received the previous day on DMI. Trustees expressed extreme concern at the findings of the report by the external consultants. It was agreed that the committee chairman would write to:</p> <ul style="list-style-type: none"> <li>• The D-G, to request an immediate halt to expenditure, to request confirmation that expenditure on all other technology-based projects was being properly reported, scrutinised and controlled, and to request that he should advise the Trust as to who should be held responsible for DMI.</li> <li>• The Chair of PAC, to notify her of the Trust's current position in relation to DMI.</li> </ul> <p>It was also agreed that the chairman would discuss the matter offline with the non-exec Chair of the Executive Audit Committee. Finally it was agreed that Trustees would appoint an external consultant to report on the history of DMI.</p> <p>Subsequent to the meeting the Trust received and approved the Executive's proposal to close the DMI project.</p>







This document has been prepared only for The BBC Trust and solely for the purpose and on the terms agreed with The BBC Trust in our agreement dated 24 May 2013. We accept no liability (including for negligence) to anyone else in connection with this document, and it may not be provided to anyone else.

© 2013 PricewaterhouseCoopers LLP. All rights reserved. In this document, "PwC" refers to PricewaterhouseCoopers LLP (a limited liability partnership in the United Kingdom), which is a member firm of PricewaterhouseCoopers International Limited, each member firm of which is a separate legal entity.

131202-142635-DM-UK