

## EXECUTIVE MINUTE

on  
**JOINT COMMITTEE OF PUBLIC ACCOUNTS AND AUDIT**  
**REPORT NO. 468**  
**Defence Major Projects Report (2015-16)**  
**Inquiry based on Auditor-General's report 40 (2016-17)**

### Response to the recommendation(s)

**Recommendation No. 1**                      **paragraph 2.20**

*To ensure consistency with project level risk information and to improve reliability, the Committee recommends that the Department of Defence review the procedure for the development of expected capability estimates for future Major Projects Reports. The outcome of this review should be provided to the Committee within six months of the tabling of this report. Further, the Committee requests that Defence provide a progress report within three months of the tabling of this report.*

### Response: Agree

Defence has conducted a schedule baseline validation activity for the Major Projects Report (MPR) projects and has identified minor discrepancies in 2016-17 MPR projects which require further investigation between the milestones in the Materiel Acquisition Agreements (MAA) and the project baseline schedules.

To rectify this deficiency, Defence will conduct the following:

- a) For the identified projects with misalignment between the approved project schedule baseline and the MAA, undertake a re-alignment program between April 2018 and December 2018. Projects only requiring a schedule update will be remediated quickly. Projects requiring a change to the MAA will require approvals and take more time.

Reporting on actual capability delivery during the life cycle of a project is complex and varies due to the features of the capabilities and the nature of materiel readiness. A pre-requisite of this level of reporting requires consistency of the depth of specification of capability needs in both the schedules and the MAA.

Defence will:

- a) Review the MAAs to determine if modification is necessary to better reflect capability needs and review the consistency of detail that is achievable;
- b) Ensure alignment between the MAA policy and the Project Maturity Scores procedure by end of June 2018; and
- c) Develop and publish guidance on the development of project schedules using standardised milestones.

Once the above activities are completed the Committee should expect to see higher levels of consistency in the constitution of Initial Materiel Release and Final Materiel Release which provides the basis for the Materiel Capability Delivery Performance reported in the MPR.

Further, as advised to the Committee in March, Capability Acquisition and Sustainment Group (CASG) will continue to work with the ANAO and Force Design to identify how Defence can measure and report on capability delivery. This reform will need to continue to balance transparency and security.

Defence will endeavour to incorporate this into the new whole of Defence reporting system (the Enterprise Resource Planning (ERP) System) which is expected to roll-out in Financial Year 2020-21. Once the ERP system is rolled out the Committee should expect to see incremental changes in the reporting of actual capability delivery for future MPRs.

**Recommendation No. 2**                      **paragraph 2.25**

*The Committee recommends that the Department of Defence: commence discussions with the Australian National Audit Office on updating Project Maturity Scores, with a view to advising the Committee on a way forward prior to the first sitting week of 2018 and provide the Committee with an update on the progress of this dialogue within six months of the tabling of this report.*

**Response: Agree**

Defence wrote to Australian National Audit Office (ANAO) on 14 March 2018 with two options on re-calibrating the scoring methodology of Project Maturity Scores, to better align with the Capability Lifecycle (i.e. expanding the scale between Initial Materiel Release, Initial Operational Capability, Final Materiel Release and Final Operational Capability). Defence will continue to work with ANAO on the recalibration ensuring we make safe incremental improvements which are enduring. Defence aims to include where we are up to in the 2018-19 Major Projects Report Guidelines in August 2018.

Defence will continue to reinvigorate the Project Maturity Score discipline within projects and test the validity of the scores through the Independent Assurance Reviews and CASG Quarterly Performance Report provided to the Ministers

**Recommendation No. 3**                      **paragraph 2.27**

*The Committee recommends that the Department of Defence examine the guidelines and methodology used by the United Kingdom's Ministry of Defence to report on major projects, and report back to the Committee within six months of the tabling of this report. Defence's report back to the Committee should consider whether any features of the United Kingdom's guidelines and methodology would enhance major projects reporting in Australia. If Defence finds the United Kingdom's guidelines and methodology unsuitable, the Committee requests that Defence provide reasons why they reached this conclusion.*

**Response: Agree**

As advised to the Committee in March, Defence has conducted extensive research on what is publicly available on the United Kingdom (UK) Government websites which indicated that the UK have moved away from the detailed MPR process that Australia based its approach to the MPR on some ten years ago.

The detailed UK MPR (approximately 312 pages) has been replaced with section D “Project Performance Summary Table (PPST)” (4 pages) within the UK Defence Equipment Plan (Attachment A). Additional supplementary reporting is done through the Infrastructure and Projects Authority (I&PA) “Annual Report on Major Projects 2016-17” (20 pages), providing a high level review of 143 projects from across the UK Government Major Projects Portfolio, including 27 military capability projects UK Ministry of Defence (MoD) projects (Attachment B).

Defence received a response from our MoD counterparts on 22 March 2018 which confirmed that the research we had conducted via the UK Government websites was accurate. Further, we were advised that the UK moved away from the detailed MPR as it was deemed unsustainable by the National Audit Office (NAO) given the redirected focus on the Defence Equipment Plan and NAO’s noted improvements in the MoD’s internal data systems and controls. Consequently, it was agreed that the MoD would assume responsibility for reporting, through the PPST, to Parliament on the delivery of its largest equipment procurement projects.

In addition, the UK MoD previously produced a classified version of the MPR each year, which was discontinued at the same time as the NAO’s MPR. The rationale being that one unclassified report, the PPST, provides the essential material for the Public Accounts Committee (PAC). However, if the PAC deems necessary they can still request a classified briefing from the MoD on equipment projects and also call upon a project’s Senior Responsible Owner to provide an update.

Defence would be happy to move to a new streamlined reporting approach this however would need to be done in consultation with the ANAO and the JCPAA.

**Recommendation No. 4**

**paragraph 2.35**

*The Committee recommends that the Department of Defence devise a single methodology to calculate the cost per flying hour for fixed wing aircraft and helicopters, and use this single methodology in all internal and public reporting and in responses to queries from the Australian National Audit Office. Defence should provide this information to the Committee prior to the first sitting week of 2018.*

**Response: Agree**

Defence considers that the appropriate methodology to calculate the cost per flying hour is the cost of sustainment, crew, and fuel that are directly linked to the platform, divided by the flying hours of the aircraft over the relevant period.

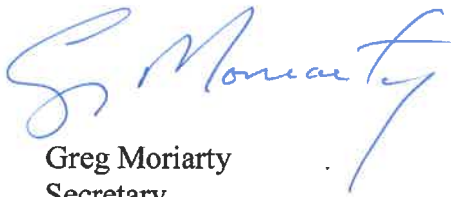
Defence will develop definitions for each of sustainment, crew, fuel and flying hours, which will allow comparisons of the same platform over time.

The definitions will also be consistent between aviation platforms as far as possible. However, it may not always be possible to measure each component of the cost per flying hour equation in exactly the same way between different aircraft. This may reflect, for example, engineering factors or contractual arrangements with suppliers.

Using the cost per flying hour data to compare different platforms should be done in consultation with Defence.

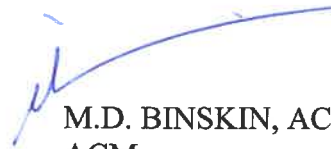
These definitions will be included in an updated version of the internal manual *Resource Costing Manual: Usage Costs for Defence Resources and Assets (FINMAN 4)*. FINMAN 4 is available to all Defence staff. Once the update is complete, the requirement to use FINMAN 4 definitions in providing advice on cost per flying hour will be widely communicated within Defence. Defence will internally publish an updated FINMAN4 by the end of 2018.

The revised FINMAN4 will include explanatory information concerning each platform, including the elements that are unique to the particular platform's cost structure. This will assist Defence to present information in like-for-like assessments.



Greg Moriarty  
Secretary

6 April 2018



M.D. BINSKIN, AC  
ACM  
Chief of the Defence Force

↑ April 2018



## Annual Report on Major Projects 2016-17





# The Infrastructure and Projects Authority



*The IPA oversees an evolving portfolio of the most complex and strategically significant projects and programmes across government.*

From top:  
MOD Spearfish  
MOJ Digital Courts  
CO GOV.UK Verify  
DEFRA Thames Tideway Tunnel

The IPA is the government's centre of expertise for infrastructure and major projects. We sit at the heart of government, reporting to the Cabinet Office and HM Treasury.

We work across government to support the successful delivery of all types of infrastructure and major projects; ranging from railways, schools, hospitals and housing, to defence, IT and major transformation programmes.

Our purpose is to continuously improve the way infrastructure and major projects are delivered in order to support government priorities and improve people's lives. We aspire to create the best-performing project system of any government in the world.

To achieve this, the IPA prioritises the following four activities:

- Setting up projects for success
- Creating market confidence
- Building delivery capability in government
- Measuring and improving performance.

The IPA operates as the home of the Project Delivery function across government, helping government to deliver projects better and bringing specialist project delivery skills to the Civil Service. The Project Delivery function is part of a wider community of other functions in government such as Commercial, Communications and Digital.

## The IPA and the Government Major Projects Portfolio (GMPP)

The IPA oversees and provides support to the GMPP – an evolving portfolio of the most complex and strategically significant projects and programmes across government. This includes arranging and managing more than 200 independent expert assurance reviews of major government projects each year and providing bespoke project support throughout each project's lifecycle. Projects on the GMPP provide quarterly returns of key data to enable the IPA to monitor their progress.

## The Annual Report and transparency data on major projects

Under its mandate from the Prime Minister, the IPA is required to produce an Annual Report on the GMPP. This is the fifth Annual Report, with some previous reports having been published by the Major Projects Authority (MPA). In accordance with the government's major projects transparency policy, the Annual Report is published at the same time as departments publish the data on their projects that are part of the GMPP. The data published this year was submitted to the IPA in September 2016. The delivery confidence assessments within that data, and included in this report, are as assessed by the IPA at that time. The narratives from departments that accompany their published data provide an update on progress since then.

Departments are only permitted to exempt data from publication under exceptional circumstances and in accordance with freedom-of-information requirements, for example regarding national security or commercial confidentiality.

## Foreword

### Parliamentary Under Secretary of State for the Cabinet Office Exchequer Secretary to the Treasury



It is our responsibility to ensure that the government is providing public services and spending taxpayers' money as efficiently and effectively as possible. This year's Annual Report on the Government Major Projects Portfolio (GMPP) shows how we deliver some of the largest and most complex projects in the world for the British people.

Projects on the GMPP reflect the government's priorities: making our infrastructure fit for the 21st century, maintaining the security of the realm, and modernising and digitising our public services. As we continue to deliver these projects, their benefits will be felt across the nation.



The largest growth area in the portfolio has been in infrastructure and construction, with infrastructure projects reaching a record £222 billion, making up almost half the value of the GMPP. This is in line with our commitment to infrastructure investment and the record levels of investment in the National Infrastructure and Construction Pipeline.<sup>1</sup>

Government Service Delivery and Transformation projects remain the most complex and challenging projects to deliver. This is unsurprising given the level of organisational and societal change they often require. We are getting better at understanding what it takes to deliver these unique programmes, and our enduring ambition in this area is reflected by the fact that, at 40 projects, it continues to represent the largest GMPP category by number.

We continue to make steady improvements in the way we deliver government projects. This is thanks to the hard work of the cadre of world-class project delivery professionals working across government. The IPA's expertise and independence supports departments to deliver, and enables a process of continuous improvement in the way we deliver projects in this country.

The government is also committed to transparency, and to being responsive and accountable to the public we serve. Accordingly, we have collected and published this data consistently over the past five years, enabling us to track the progress of projects on the GMPP over time.

We will continue to be responsive and accountable to the public. This will include navigating our exit from the European Union, and continuing to deliver complex and challenging projects in the emerging landscape that this will create. We remain dedicated to improving capability and investing in infrastructure so that we can meet these new challenges and continue to deliver improvements, as part of the government's commitment to support growth right across our country for the benefit of every community.

**Caroline Nokes MP**  
*Parliamentary Under Secretary  
of State for the Cabinet Office*

**Andrew Jones MP**  
*Exchequer Secretary  
to the Treasury*

<sup>1</sup> <https://www.gov.uk/government/publications/national-infrastructure-and-construction-pipeline-2016>



## Introduction

### Tony Meggs, Chief Executive, IPA



*We aspire to create the best-performing project system of any country in the world. To do this, we first need to be able to measure performance, so we can learn important lessons and make continuous improvements to the system over time.*

The vast majority of government policies are delivered through projects of various forms. It is therefore vital that we deliver projects successfully, and continuously build our capability to do so. If projects fail, then the government's policy objectives are not delivered.

This year's portfolio of major government projects continues to reflect a broad and ambitious policy agenda. In total, on the GMPP alone, the government is delivering 143 projects worth over £455 billion.

These projects are diverse in their nature, scale and objectives. They span 17 government departments, and range from capital-intensive infrastructure projects that drive economic growth and productivity, to ICT and transformation programmes, that change the way the government provides services to its citizens.

The IPA is the guardian of this portfolio. We have set ourselves the aspirational goal of creating the best-performing project system of any country in the world. To do this, we first need to be able to measure performance, so we can learn important lessons and make continuous improvements to the system over time.

The purpose of the Annual Report is to give a snapshot of the major projects currently in delivery, and to provide analysis of how well they are performing each year. This year, we continue to see slow and steady improvement, with most projects' Delivery Confidence Assessment (DCA) ratings improving as they progress on the GMPP.

Nevertheless, the majority of government projects are complex, and there are still many areas for further improvement. We are building a Performance Framework that will enable us to better understand project performance over time, and we continue to work with government departments and industry to improve the way individual projects are being delivered. One of our priorities is to build the necessary delivery capability in government so we have the very best people managing our projects.

The most recent data indicates that Senior Responsible Owner (SRO) turnover is falling, and project leaders are spending on average three to three-and-a-half years in post on projects. If this trend continues, then it is a good sign, as consistency and continuity in project leadership are key for successful delivery.

Another vital component is ensuring projects are initiated in the right way, a theme we draw particular attention to in this year's report. Evidence shows that the best way to ensure successful delivery is by setting up projects correctly in the first place. The most common causes of failure are well rehearsed: lack of clear objectives, insufficient resources, and over-ambitious cost and schedule, among others. All these mistakes can be avoided if tackled early and effectively.

Therefore early engagement and support has been a key focus for the IPA this year. Our collective progress in this regard is an ongoing endeavour, and I encourage all departments to continue to work with us on projects as early as possible so we can help ensure they are set up for success.

#### **Tony Meggs**

*Chief Executive, Infrastructure and Projects Authority*

## The Government Major Projects Portfolio

The 2016-17 Annual Report continues to reflect a broad and ambitious portfolio of major projects across government and demonstrates the government's policy priorities: improving and enhancing the UK's infrastructure, transforming public services, and maintaining the security of the nation.

The GMPP includes the largest, most complex and highest risk projects across government. Though the number and type of projects on the GMPP varies as projects join and leave, the criteria for inclusion remain unchanged. These are mainly projects where approval is required from HM Treasury, either because the budget exceeds a department's delegated authority level, or because the project is novel, complex or requires primary legislation.

In September 2016, the GMPP comprised 143 major projects representing £455.5 billion in expenditure across 17 government departments. Over the course of the past year, 36 projects left the GMPP and were replaced by 36 new projects.

There are four main categories of project on the GMPP: government transformation and service delivery (transformation), information and communication technology (ICT), military capability, and infrastructure and construction. This year, we have seen a reduction in the number of transformation projects, offset by an increase from the other three categories, primarily from infrastructure and construction.

Figure 1: Summary of the 2016-2017 GMPP

Number of projects	<b>143</b>
Whole-life cost of GMPP	<b>£455.5bn</b>
2016-17 budget	<b>£24.6bn</b>
Government transformation and service delivery <b>40 projects worth</b>	<b>£71.1bn</b>
ICT <b>39 projects worth</b>	<b>£18.6bn</b>
Infrastructure and construction <b>37 projects worth</b>	<b>£222.5bn</b>
Military capability <b>27 projects worth</b>	<b>£143.3bn</b>

Data used to calculate these figures can be found in the GMPP data table.

<http://www.gov.uk/government/publications/infrastructure-and-projects-authority-annual-report-2017>

### Project categories

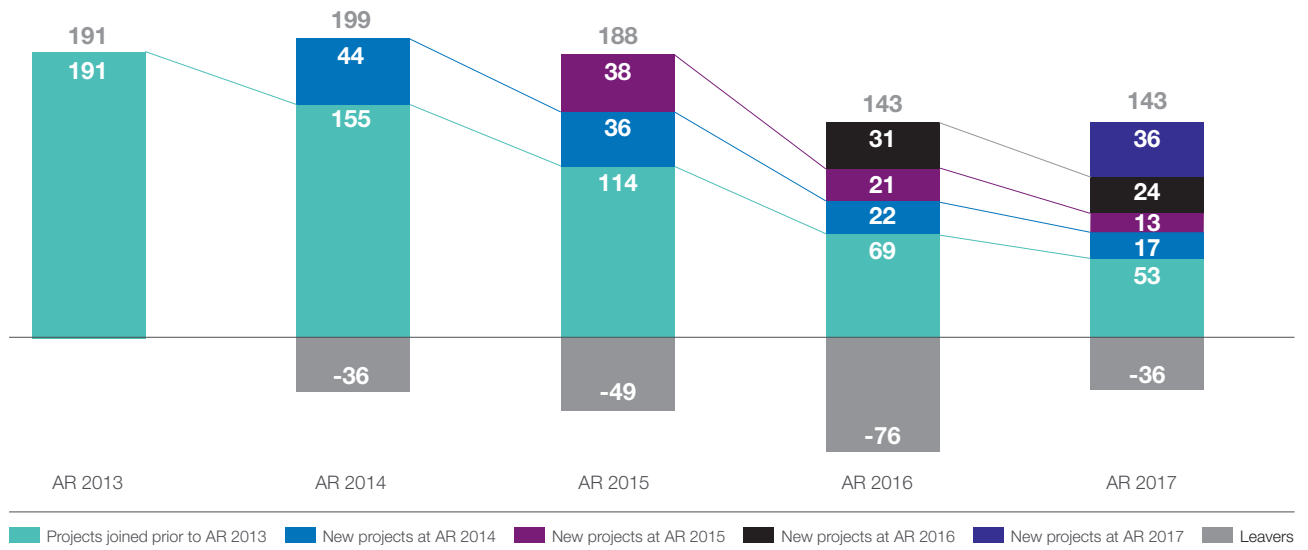
With 40 projects, transformation remains the largest single category in the portfolio, despite a net reduction of 13 in the year. Transformation continues to be an area of high priority for government as we strive to deliver government services more efficiently and to improve the way government interacts with its citizens.

ICT represents the second largest group with 39 projects, though these have the lowest total whole-life cost. ICT projects enable cost savings through the restructuring of legacy IT contracts and the development of new, flexible and more effective systems.

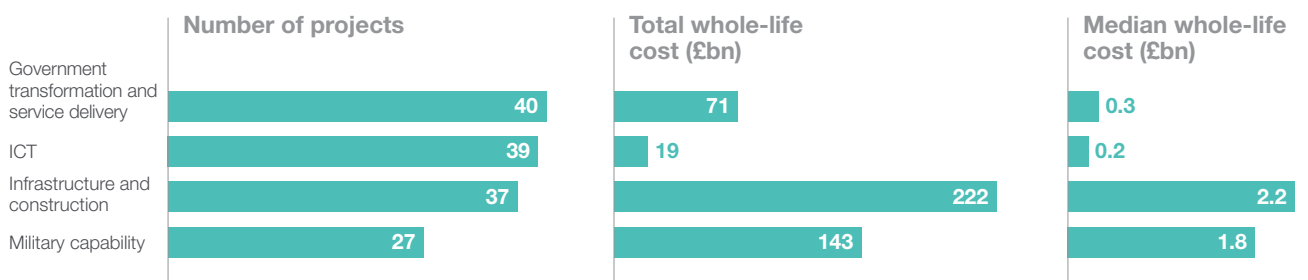
Infrastructure and construction represents the largest growth area, with nine new projects joining, including five Network Rail projects following the reclassification of Network Rail as a central government body. It is also the largest category in terms of whole-life cost, with a current value of over £222.5 billion. This is consistent with levels of investment in the National Infrastructure and Construction Pipeline, and government investment in UK economic infrastructure.

Military capability continues to be the smallest category by number, with 27 projects, but as with last year, it remains the second highest in terms of whole-life cost. This reflects the complexity and scale of individual military projects, and the continuing investment in maintaining UK national security.

**Figure 2: Movement of projects on the GMPP since 2013 Annual Report (AR)**



**Figure 3: Summary of 2016-2017 GMPP by project category**



The Government Major Projects Portfolio continued

Figure 4: Example project from each category



## Projects by department

As of September 2016, the portfolio included projects from 17 government departments, demonstrating the continued breadth of government project delivery activity.

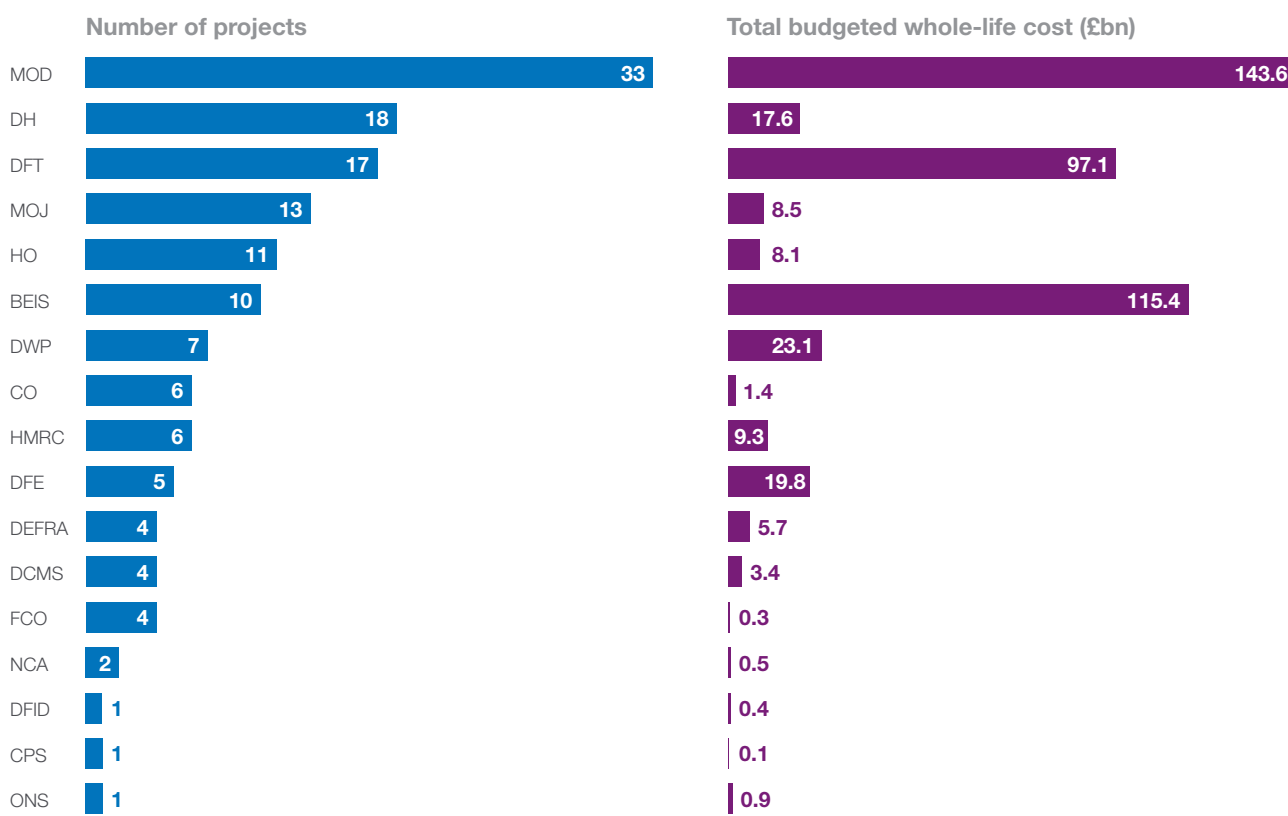
As with previous years, the Ministry of Defence (MOD) continues to be the largest contributor, both in terms of the number of projects and their whole-life cost. These are primarily military equipment projects, such as the Merlin Mk2 Helicopter Programme, which delivered the upgrade of the Royal Navy's anti-submarine helicopters, plus a smaller number of ICT projects, such as the Emporium Programme, which develops cloud-based hosting for defence applications.

The Department for Business, Energy and Industrial Strategy (BEIS) is the second largest contributor to whole-life cost with a total of £115.4 billion spread across 10 projects. Many of these involve nuclear energy or nuclear decommissioning.

The Department for Transport (DFT) is the third largest contributor with £97.1 billion in whole-life costs. In the year, eight projects joined the portfolio, of which five were Network Rail.

Overall MOD, BEIS and DFT account for 75% of the whole-life cost of the portfolio, and 42% of the total number of projects.

**Figure 5: Breakdown of projects on the GMPP by government department**



The Government Major Projects Portfolio continued

Progress this year

The Delivery Confidence Assessment (DCA) is the IPA's evaluation of a project's likelihood of achieving its aims and objectives, and doing so on time and on budget.

We continue to use a standard five-point scale ranging from green, where successful delivery is highly likely, to red, where delivery appears unachievable unless significant, urgent and often substantial action is taken.

The data in this year's report provides a snapshot of how well projects are progressing as of September 2016. The data shows that of the 143 projects in the GMPP, worth a total of £455.5 billion in whole-life cost, only four, worth a combined £2.4 billion (0.5%), were rated red. Over 60% of projects by whole-life cost were rated amber or better.

By consolidating DCAs, we are able to identify those categories that are performing well. For example, this year 68% of infrastructure projects by whole-life cost have a DCA rating of amber or better. Eight are currently rated amber/red, and only two are red. The two red projects represent just 0.3% of the whole-life cost of this category.

Since the last Annual Report, the total number of projects has remained the same, but the number rated red or amber/red has reduced from 44 to 38, thus continuing the improvement from 48 seen the previous year. At the same time, there has been a reduction in the number of green and amber/green rated projects, from 39 to 28. However, the picture is not straightforward as projects will have joined and left the portfolio as well as changed DCA during the course of the year.

Figure 6: Summary of DCAs for projects on the GMPP<sup>2</sup>

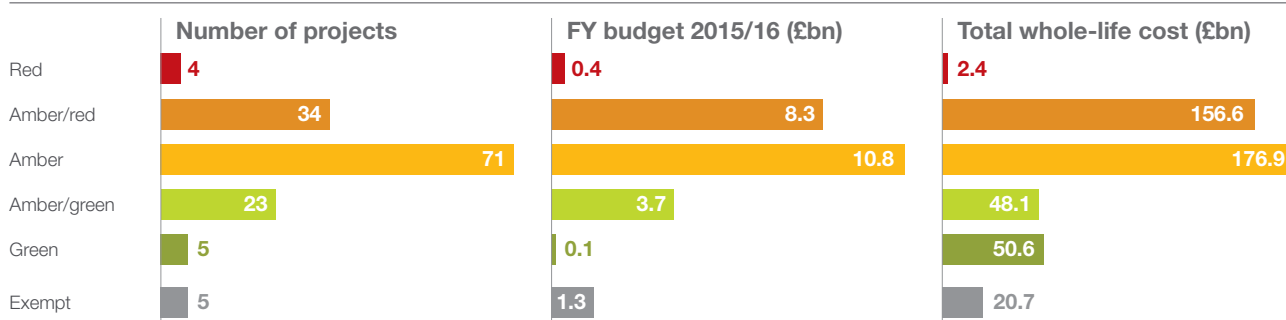


Figure 7: DCA by project category

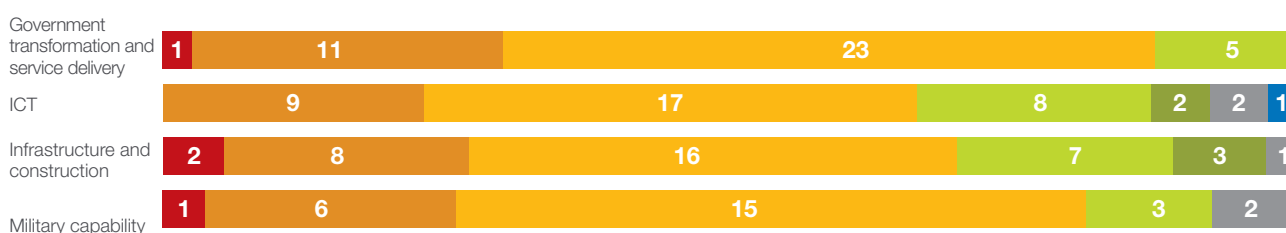
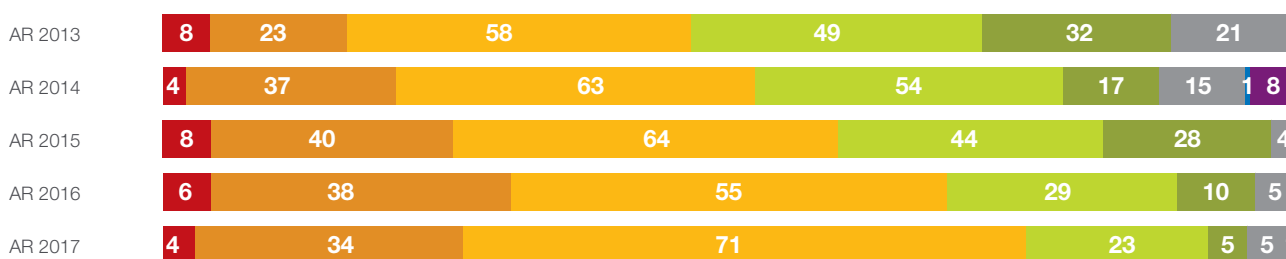


Figure 8: DCA analysis of projects 2013-2017



2 This chart does not include the one ICT project that has been reset this year.

### Progress over time

Delivery confidence tends to improve over the time a project spends on the GMPP, as evidenced by an improved DCA rating. This is because when a project comes on it will be at an early stage of development, and so more likely to have a higher number of inherent risks. By being on the GMPP, projects are able to access greater levels of support, such as independent expert assurance reviews, with the aim of addressing risks and improving the probability of success.

Collecting data consistently over the past five years has enabled the IPA to track the progress of a particular tranche of projects over time. Based on currently available data, we are seeing signs of steady improvement in the delivery of government projects. We have seen a minor reduction in amber/red projects since last year's report, reflecting the overall improvement of projects as they progress through delivery.

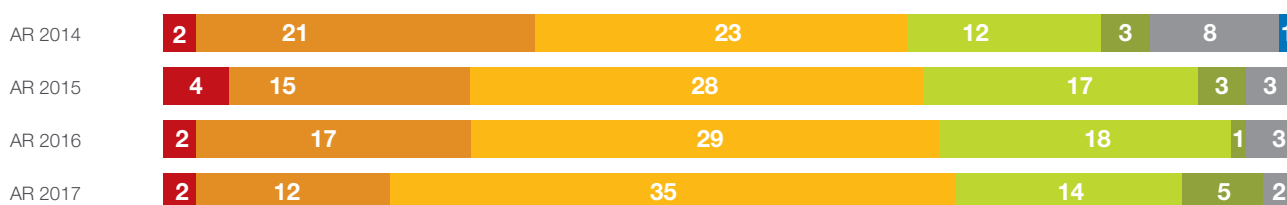
In the majority of cases, once a project has reached the point of likely delivery and is suitably mature in its delivery lifecycle, it would then be in a position to be

considered ready to exit the GMPP. One example of these projects was the Office for National Statistics European Systems of Accounting Project, which left the GMPP in Q4 2015-2016 having gradually improved its DCA over its lifecycle. At its last IPA assurance review, this project was judged to be on track to deliver, with low levels of residual risk, and assurance activity was able to be passed to the department.

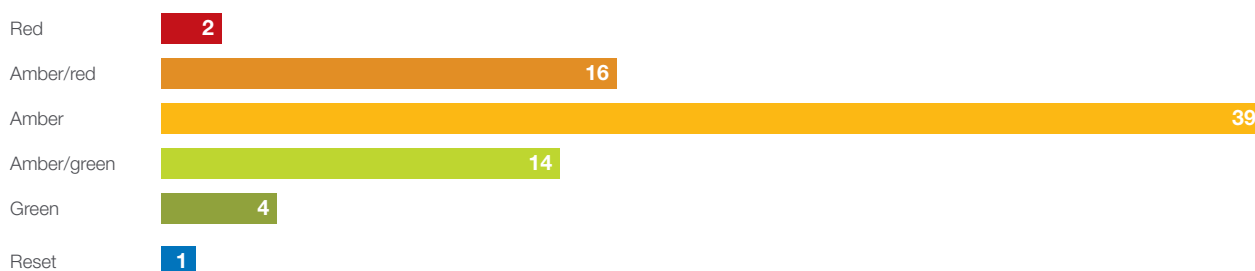
When looking at the tranche of 70 projects that have been on the GMPP since 2014, there is an overall trend of steady improvement, with a gradual reduction in the number of amber/red or red ratings.

When we look at the 76 projects expected to complete by 2020, 18 are rated red or amber/red, while 39 are rated amber, and 18 amber/green or green. This reflects the assessment that a significant portion of the tranche is currently on track to deliver, recognising that some projects will need more support and oversight than others to maximise their chances of successful delivery.

**Figure 9: Comparison of DCA ratings from 2014-2017, tranche of 70 projects**



**Figure 10: DCA ratings for tranche of 76 projects expected to complete by 2020**



The Government Major Projects Portfolio continued

Leaving the GMPP

Projects leave the GMPP for a variety of reasons. In the majority of cases, it is because they have been delivered effectively, and last year 30 of the 36 projects leaving the GMPP did so with a DCA of green, amber/green or amber. Five left with a DCA of amber/red, and one with a DCA of red.<sup>3</sup>

An example of a project that left the GMPP this year with a green DCA was the DWP’s New State Pension Project, which enabled citizens to claim and receive their correct pension entitlement under the Pensions Act 2014. The project team were asked to deliver a year ahead of the original target of April 2017, which they did successfully by changing the approach and the way the new system was delivered.

Another example is Thames Tideway Tunnel, a brand new 15-mile sewer which will help clean up the River Thames in London. Construction started in 2016 and is due to complete in 2023. The programme left

the GMPP with an amber/green rating – a significant improvement from its amber/red rating the first time it featured in 2013/14.

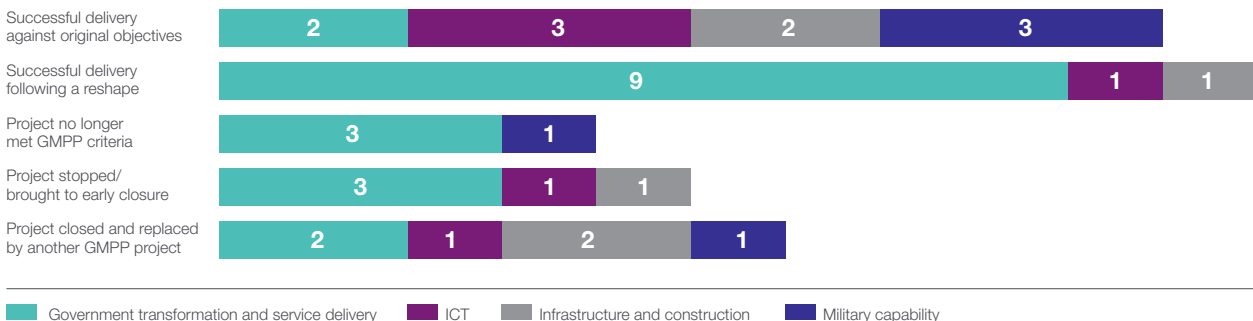
Projects also leave the GMPP for other reasons: four did so as they no longer met the criteria for inclusion (with departmental assurance teams continuing to provide assurance), and six changed status as they were either merged with or replaced by another project on the GMPP. This is recognised practice as departments merge or compartmentalise projects as required to ensure effective delivery.

A further five projects left the GMPP because they were stopped altogether. This can happen for a number of reasons, including changes in government priorities. One example is the DECC Carbon Capture and Storage Commercialisation Programme, which was cancelled as funding was reprioritised toward other initiatives.

Figure 11: DCA comparison of projects that left and joined the GMPP this year



Figure 12: Breakdown of reasons for leaving the GMPP, by project category



<sup>3</sup> The red-rated project that exited during the period was stopped and superseded by a new programme. The exit was agreed jointly between IPA and the relevant department.



### CASE STUDY: DCMS Super Connected Cities Programme (SCCP)

The Department for Culture, Media and Sport's Super Connected Cities Programme (SCCP) is an example of a project that was delivered effectively this year and left the GMPP. Its main objective was to improve the digital infrastructure of UK cities by increasing the availability of fast broadband. It extended the Connection Voucher Scheme – from 22 to 50 cities – so that 42,500 small businesses had access to faster broadband.

The SCCP exceeded its delivery targets, completing on time and almost 25% under budget. The project enabled many thousands of businesses and third-sector organisations to reap the benefits of an improved broadband connection, and an impact study found it had successfully removed a key barrier for small businesses.<sup>4</sup>

The IPA supported DCMS with this project while on the GMPP by providing:

- Five independent expert assurance reviews throughout the project's lifecycle
- Commercial support during the project's initiation
- Training for the project team.

*“Assurance reviews throughout the lifecycle of the programme by the IPA helped to shape the approach to the programme, and kept focus on the importance of having the programme's objectives at the forefront of our minds.”*

**Dean Creamer**  
SCCP Programme Director



The Government Major Projects Portfolio continued

**Project leadership**

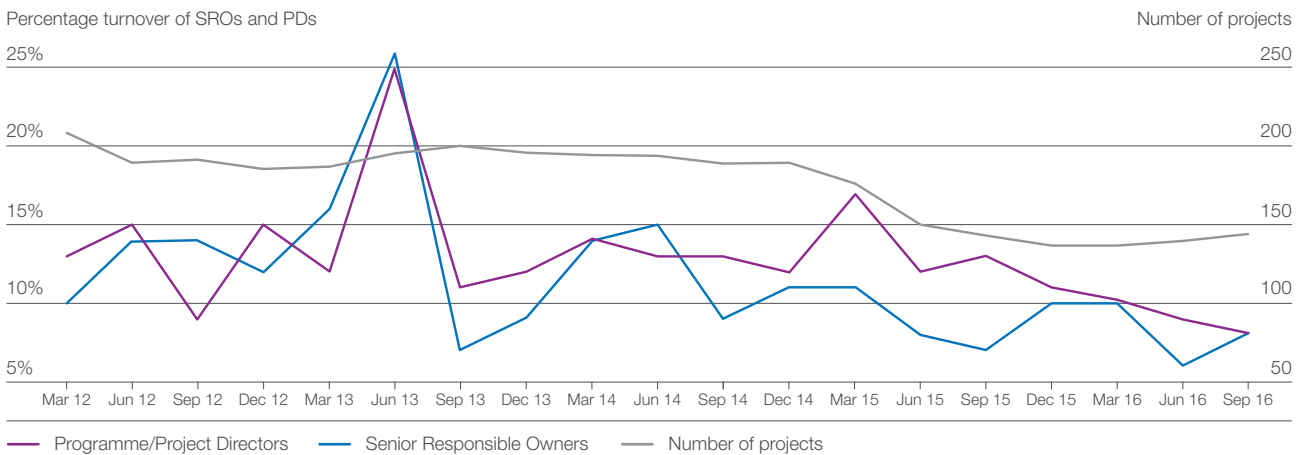
Projects are delivered by a cadre of over 10,000 project delivery professionals across government. They are responsible for delivering some of the largest and most complex projects anywhere in the world.

We know that great project leaders deliver great projects. One of the IPA’s main priorities is to build capability in government by leading the project delivery profession. We do this by shaping career pathways, setting standards for how professionals deliver projects, and by providing world-class project leadership programmes such as the Major Projects Leadership Academy (MPLA). More than 400 professionals have enrolled on the MPLA and 250 have graduated to date.

This year’s report shows we are seeing consistency and continuity in project leadership across government, and perhaps early signs of a more encouraging trend: a reduction in the turnover of project leaders. The average turnover of Senior Responsible Owners (SROs) and Programme Directors (PDs) recently reduced to 8% a quarter, down from a previous consistent average of 11%. If this trend continues, it will mean leaders spend longer – around three to three-and-a-half years on average – in post on projects.

While some turnover is inevitable, we seek to minimise frequent changes in leadership and achieve continuity and consistency where possible, so as to minimise disruption to delivery. We are also supporting our project delivery community in innovative ways through such initiatives as the Project Delivery Capability Framework.

**Figure 13: Turnover of SROs and PDs**



**Project Delivery Capability Framework<sup>5</sup>**

In May 2017, the IPA, in collaboration with government departments, launched a new Project Delivery Capability Framework – a tool that provides a common language and perspective on jobs, grades and skills for the project delivery profession.

The Framework comprises three main elements: career pathways and a common set of job roles; technical and behavioural competencies aligned to these roles; and links to development opportunities specific to job roles.

The aim of the Framework is to drive consistency in language, recruitment and job specification across government, and to ensure the right people with the right skills are working on the right projects.

Ultimately, it will help project delivery professionals manage their own careers more effectively, and enable them to move across departments and up into project leadership roles.

<sup>5</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/613477/project\\_delivery\\_capability\\_framework.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/613477/project_delivery_capability_framework.pdf)

# Improving our delivery of major projects

## Setting up projects for success

Evidence shows that success or failure of a project is very often determined by how it is set up. A well-initiated project has a good chance of succeeding; a poorly set up one is almost guaranteed to fail.

The National Audit Office<sup>6</sup> and the 2010 Infrastructure Cost Review<sup>7</sup> both noted that projects continued to encounter problems in their early stages, particularly when project timelines and costs are publicly announced before they have been properly tested for deliverability.

More recently, the Public Accounts Committee (PAC)<sup>8</sup> emphasised the importance of understanding the interventions required at the start of projects, and recommended the IPA identify how it can support projects in their early stages.

Consequently, one of the IPA's key priorities is to help set up projects for success. It is our aim to help any new or emerging initiatives, or potential future projects on the GMPP, to be set up in the right way. We do this by influencing the policy environment, deploying our expertise as early as possible, developing useful tools and standards to ensure realistic project objectives are established from the outset, and helping projects access the resources they need.

We encourage all departments to work with the IPA at the early stages of their projects, and to draw upon the IPA's following products and services.

### Early Development Pool

The IPA has increased its capacity to engage projects or proposed initiatives at the very early stages of development – usually when departments have identified them as being of potentially significant complexity and/or impact.

The IPA provides a tailored support offer to match the needs of initiatives in their early development phase. These tools can include:

- Project Initiation Routemap
- Critical Friend Review
- Project Validation Review
- Bespoke workshops to address key challenges, such as governance or risk management
- Specialist advice.

Through this early phase of engagement, there is no formal reporting requirement. Entry onto the GMPP is discussed and agreed with departments when projects are sufficiently developed.

### Specialist advice

The IPA deploys a range of commercial and project specialists who have experience and expertise in setting up projects and putting in place the governance necessary to enable effective decision-making from the start. We deploy these resources within departments, policy teams and major project teams to provide strategic advice.

Because the IPA provides objective advice on delivery, we are able to ask pertinent questions and facilitate in-depth exploration of delivery issues ahead of these issues becoming critical. This enables delivery to be more soundly based, and better grounded in past experience and market knowledge.

<sup>6</sup> <https://www.nao.org.uk/report/delivering-major-projects-in-government-a-briefing-for-the-committee-of-public-accounts/>

<sup>7</sup> <https://www.gov.uk/government/publications/infrastructure-cost-review>

<sup>8</sup> <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/public-accounts-committee/delivering-major-projects-in-government/oral/27233.html>

### PROJECT VALIDATION REVIEW CASE STUDY: MOJ Digital and Change Programme

The Ministry of Justice's Digital and Change programme was designed to modernise ICT provision for prison staff and prisoners. An initial Project Validation Review was carried out in order to assess the project's viability. The review team saw a worthwhile programme that supported the government's commitment to reduce reoffending and improve prisoner and staff safety and security.

As part of this process, the review team highlighted best programme management practices to significantly improve the clarity and management of objectives. Consequently, a structured programme for the project was formally established, and strategic products such as a clear blueprint and vision were developed by the project team early on. The review also enabled more coordinated planning, risk and dependency management, and the team subsequently established a governance framework and cohesive strategic business case.

When the project comes onto the GMPP it will be subject to rigorous independent assurance, provided by experts who have not previously engaged with it.

*"The Project Validation Review provided a useful process to enable a number of separate projects to be pulled together into a cohesive programme. It enabled business, technical and delivery representatives to understand the challenges and opportunities before setting off on a challenging change programme."*

**Bryan Clark**

Senior Responsible Owner, Her Majesty's Prison and Probation Service (HMPPS)/Ministry of Justice

### Project Initiation Routemap

A key tool which has been developed by the IPA as part of the Early Development Pool offering, in collaboration with academia and industry, is the Project Initiation Routemap. The Routemap is particularly relevant to large infrastructure and construction projects at the early stages of development, and helps sponsors align the expected project complexities with the capabilities required for delivery. The tool incorporates a large library of best practice solutions based on common

challenges, and draws upon a pool of external experts to help facilitate the process.

More than 20 major projects across the rail, road, regeneration, transformation, water, flood defence and energy sectors have now undergone a Routemap exercise. During 2016-17, 10 applications of the Routemap were completed with public, regulated and local authority stakeholders.

### PROJECT INITIATION ROUTEMAP CASE STUDY: DEFRA and EA Six-Year Capital Settlement

During 2014, DEFRA and the Environment Agency (EA) proposed extending the EA's capital programme from an annual to a six-year settlement. To apply best practice learning to the EA's existing plan for this proposal, the IPA was commissioned to carry out a Routemap exercise. This exercise focused on governance, commercial arrangements, vision, scope and requirements. The independently facilitated exercise brought together all parties who could make this transformation a success (HMT, DEFRA, EA and the supply chain) to create a single plan in which everyone had confidence from the outset. The exercise helped secure agreement for the six-year settlement, which was approved and announced in the Autumn Statement 2014.

*"The IPA Routemap exercise proved very helpful in identifying the improvements needed, and providing a process that all were comfortable with. Securing the six-year funding settlement is a very positive step forward. It provides a credible basis on which to negotiate funding contributions and consult with communities. As a result, we will greatly reduce the risk of flooding."*

**John Curtin**

Executive Director of Flood & Coastal Risk Management Environment Agency

## Looking ahead



The data in this report shows that government continues to deliver a varied, complex and challenging portfolio of projects to provide a wide range of public benefits, including better infrastructure, effective services for citizens, and ongoing national security.

Delivery of major infrastructure and construction projects continues to be a priority and, with a record £222 billion whole-life cost in this category, we should expect this to be a focus for delivery in the coming years. Transformation projects will also continue to make up a key part of the GMPP as government services are developed and updated to provide efficiency and quality for users.

Successful project delivery will become even more important in the context of Britain's exit from the EU. Projects and programmes will be the vehicles to deliver much of the essential work of making systems and services ready at the point of exit. Departments are reviewing their portfolios to assess the impact of EU exit, and the IPA will continue to provide support in setting up these projects for success.

# Statistical annexes

## Annex A

### Explanation of DCA colour ratings

The Delivery Confidence Assessment (DCA) is the IPA's evaluation of a project's likelihood of achieving its aims and objectives, and doing so on time and on budget.

#### Green

Successful delivery of the project on time, budget and quality appears highly likely and there are no major outstanding issues that at this stage appear to threaten delivery significantly.

#### Amber/Green

Successful delivery appears probable; however, constant attention will be needed to ensure risks do not materialise into major issues threatening delivery.

#### Amber

Successful delivery appears feasible but significant issues already exist, requiring management attention. These appear resolvable at this stage and, if addressed promptly, should not present a cost/schedule overrun.

#### Amber/Red

Successful delivery of the project is in doubt, with major risks or issues apparent in a number of key areas. Urgent action is needed to address these problems and/or assess whether resolution is feasible.

#### Red

Successful delivery of the project appears to be unachievable. There are major issues with project definition, schedule, budget, quality and/or benefits delivery, which at this stage do not appear to be manageable or resolvable. The project may need re-scoping and/or its overall viability reassessed.

#### Reset

A significant change to a project's baseline which involves a business case refresh or change.

## Annex B

### Key of department names

BEIS	Department for Business, Energy and Industrial Strategy
CO	Cabinet Office
CPS	Crown Prosecution Service
DCLG	Department for Communities and Local Government
DCMS	Department for Culture, Media and Sport
DEFRA	Department for Environment, Food and Rural Affairs
DFE	Department for Education
DFID	Department for International Development
DFT	Department for Transport
DH	Department of Health
DWP	Department for Work and Pensions
FCO	Foreign and Commonwealth Office
HMRC	Her Majesty's Revenue and Customs
HMT	Her Majesty's Treasury
HO	Home Office
MOD	Ministry of Defence
MOJ	Ministry of Justice
NCA	National Crime Agency
ONS	Office for National Statistics

Changes since last year reflect the formation of the Department for Business, Energy and Industrial Strategy (BEIS) following the amalgamation of Business Innovation & Skills (BIS) and Department for Energy and Climate Change (DECC).

## Annex C

### Project DCA heatmap over Annual Report years

The table below reflects the DCAs of the 143 projects that were used in the Annual Report analysis, as well as the previous DCAs if they were included in previous Annual Reports.

AR 2013	AR 2014	AR 2015	AR 2016	AR 2017	Project name	Department
					The Francis Crick Institute (formerly UKCMRI)	BEIS
					Urenco Future Options	BEIS
					Geological Disposal Facility Programme (GDF)	BEIS
					Smart Meters Programme	BEIS
					Hinkley Point C – FID-enabling	BEIS
					Magnox & RSRL PBO Competition	BEIS
					Local Land Charges (LLC) Programme	BEIS
					New Polar Research Vessel	BEIS
					Sellafield Model Change (SMC)	BEIS
					Heat Networks Investment Project	BEIS
					Government Office Hubs Programme	CO
					Commercial Capability Programme	CO
					FOXHOUND Programme	CO
					GOV.UK Verify	CO
					ISSC2	CO
					New Property Model Programme	CO
					ICT Procurement Programme	CPS
					Broadband Delivery Programme	DCMS
					The Tate Modern Project	DCMS
					Blythe House Programme	DCMS
					700 MHz Clearance Programme	DCMS
					CAP Delivery Programme (formerly the Future Options Programme)	DEFRA
					Thames Estuary Asset Management 2100 (Team 2100)	DEFRA
					Thames Tideway Tunnel	DEFRA
					DEFRA UniTy programme	DEFRA
					Student Loan ICR-M	DFE
					Priority School Building Programme - Private Finance	DFE
					30 Hours Free Childcare Project	DFE
					Priority School Building Programme (PSBP)	DFE
					Apprenticeships Reform Programme	DFE
					St Helena Airport	DFID
					Crossrail	DFT
					Shared Services Futures Project	DFT
					High Speed Rail Programme	DFT
					Intercity Express Programme (IEP)	DFT
					Search & Rescue Helicopters (SARH)	DFT
					Thameslink	DFT
					A14 Cambridge to Huntingdon Improvement Scheme	DFT
					Rail Franchising Programme	DFT
					Lower Thames Crossing	DFT
					Airport Capacity Programme	DFT
					A303 Amesbury to Berwick Down	DFT
					East West Rail Programme (Western Section)	DFT

AR 2013	AR 2014	AR 2015	AR 2016	AR 2017	Project name	Department
					Great Western Route Modernisation (GWRM) including electrification	DFT
					Midland Main Line Programme	DFT
					North of England Programme	DFT
					South West Route Capacity	DFT
					M20 Lorry Area	DFT
					Electronic Prescription Service (EPS) Release 2	DH
					CSC Local Service Provider	DH
					PHE Science Hub	DH
					General Practice System of Choice (GPSoC) Replacement	DH
					Liaison and Diversion Programme	DH
					National Pandemic Flu Service	DH
					National Proton Beam Therapy (PBT) Service Development Programme	DH
					Childhood Flu Immunisation Programme	DH
					NHS e-Referral Service	DH
					Health and Social Care Network	DH
					NHSmail2	DH
					NHS Electronic Staff Record Reprourement Project	DH
					NHS Pension Re-let Project	DH
					100,000 Genomes Project	DH
					Visitor and Migrant NHS Cost Recovery Programme	DH
					National Data Services Development Programme	DH
					Procurement Transformation Programme	DH
					NHS UK	DH
					Automatic Enrolment Programme	DWP
					Universal Credit Programme	DWP
					Fraud, Error and Debt Programme	DWP
					Application Development Maintenance and Support (ADMS)	DWP
					DWP People and Locations Programme	DWP
					Hosting	DWP
					Work and Health Programme	DWP
					Abuja: New Office and Residence	FCO
					UKERP	FCO
					Movement of Personal Effects Contract	FCO
					Technology Overhaul	FCO
					Tax-Free Childcare	HMRC
					Columbus (formerly Aspire Replacement Programme)	HMRC
					Customs Declaration Services (CDS) Programme	HMRC
					Building Our Future Locations Programme	HMRC
					Making Tax Digital for Individuals	HMRC
					Making Tax Digital for Business	HMRC
					Disclosure & Barring Service Programme	HO
					Communications Capabilities Development Programme	HO
					Emergency Services Mobile Communications Programme (ESMCP)	HO
					Immigration Platform Technologies (IPT)	HO
					Adelphi Modernisation Project	HO
					Digital Services at the Border	HO
					Technology Platforms for Tomorrow (TPT)	HO
					Home Office Biometrics Programme	HO
					Cyclamen Project	HO
					Smarter Working Programme	HO
					National Law Enforcement Data Programme	HO



AR 2013	AR 2014	AR 2015	AR 2016	AR 2017	Project name	Department
					Cryptographic Enabling Services	MOD
					A400M	MOD
					Airseeker	MOD
					Crowsnet	MOD
					Marshall	MOD
					Maritime Sustainment Programme	MOD
					Nuclear Warhead Capability Sustainment Programme	MOD
					Queen Elizabeth Programme	MOD
					Spearfish Upgrade (SFU)	MOD
					Type 26 Global Combat Ship	MOD
					Watchkeeper	MOD
					Wildcat	MOD
					Logistics Commodities Services Transformation	MOD
					New Employment Model	MOD
					Astute Boats 1-7	MOD
					Complex Weapons	MOD
					Core Production Capability	MOD
					Lightning Programme	MOD
					Successor SSBN	MOD
					Carrier Enabled Power Projection (CEPP)	MOD
					Army Basing Programme	MOD
					The Materiel Strategy	MOD
					Armoured Cavalry 2025	MOD
					Armoured Infantry 2026	MOD
					Army Reserve Development Programme	MOD
					Contracting, Purchasing and Finance	MOD
					Future Beyond Line Of Sight	MOD
					New Style of Information Technology (Base)	MOD
					New Style of Information Technology Deployed	MOD
					Armour MBT 2025	MOD
					Land Environment Tactical Communication and Information Systems	MOD
					Maritime Patrol Aircraft	MOD
					Protector	MOD
					Electronic Monitoring	MOJ
					Future IT Sourcing Programme (FITS)	MOJ
					Integrated Delivery Programme	MOJ
					Shared Services (ISSC2) Evolve	MOJ
					NOMS ICT Services (NIS) Programme	MOJ
					CJS Common Platform	MOJ
					Berwyn Programme	MOJ
					CJS Efficiency Programme Phase 3	MOJ
					HMCTS Reform	MOJ
					Secure Training Centre (STC) Retendering Project	MOJ
					MoJ Future FM	MOJ
					Prison Estate Transformation Programme (PETP)	MOJ
					NOMS Digital Transformation Programme	MOJ
					NCA Transformation Programme	NCA
					IT Transformation Programme	NCA
					Census Transformation Programme	ONS

## **Annex D**

### **Key to years used in charts**

- AR 2013** 2012-13 Report.  
Published in 2013 using data as at September 2012
- AR 2014** 2013-14 Report.  
Published in 2014 using data as at September 2013
- AR 2015** 2014-15 Report.  
Published in 2015 using data as at September 2014
- AR 2016** 2015-16 Report.  
Published in 2016 using data as at September 2015
- AR 2017** 2016-17 Report.  
Published in 2017 using data as at September 2016
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Publication date 18 July 2017

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