



Infrastructure  
and Projects  
Authority

## Annual Report on Major Projects 2015-16



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## The Infrastructure and Projects Authority

The Infrastructure and Projects Authority (IPA) is the government's centre of expertise for project development, project financing, project assurance and project support. It was formed in January 2016 by the merger of Infrastructure UK (IUK) and the Major Projects Authority (MPA). Its purpose is the timely and cost effective delivery of infrastructure and major government projects and programmes. It does this by:

- Setting the policy environment for projects to succeed
- Giving the market confidence to deliver infrastructure
- Setting projects and programmes up for success
- Ensuring projects and programmes deliver the intended benefits
- Promoting the right operating environment for project delivery
- Developing world-class project delivery and project finance capabilities across government.

### The Annual Report and the transparency data on major projects

Under its Prime Ministerial mandate, the IPA is required to produce an Annual Report on the Government Major Projects Portfolio (GMPP). This is the fourth Annual Report, previous reports having been published by the MPA. In accordance with the government's major projects transparency policy, the IPA's 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 what was then the MPA in September 2015. The delivery confidence assessments within that data and included in this report are as assessed by the MPA 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 in the case of national security or commercial confidentiality.

## Foreword

### Minister for the Cabinet Office Chief Secretary to the Treasury



Spending public money wisely is one of the most important aspects of public service, and the newly formed Infrastructure and Projects Authority (IPA), under the leadership of Tony Meggs, has a vital role to play in delivering infrastructure and major projects and programmes that will benefit the British economy and taxpayers for generations to come. From Crossrail to Universal Credit to the Queen Elizabeth class aircraft carrier programme, the impact of these projects to improve the UK's infrastructure, transform public services and safeguard national security will be felt across the nation.



This year's Annual Report demonstrates some real progress in improving the delivery on time and on budget of many of the government's major projects. The analysis included, based on key data points for these projects, demonstrates an ongoing commitment to transparency with regards their progress. But, as always in a portfolio of such complex and challenging projects, there are some projects where delivery confidence is assessed at red or amber/red, which means there is much to do to ensure they deliver the promised benefits. Nonetheless, by highlighting these areas of significant concern, project teams are being empowered to take action to get their projects back on track.

The formation of the IPA, which brought together the outstanding project expertise of the Major Projects Authority and Infrastructure UK, along with the necessary funding authority, will make a real difference to the government's ability to support and deliver such projects. The 2015 Spending Review set out how government money will be invested over the next five years in priorities like the NHS, defence and housing, and one of the key roles of the IPA will be to help set up these projects properly.

High calibre leadership and accountability are vital for projects to succeed, and the IPA is at the centre of a change in culture that will see project management and delivery become sought-after career paths within the Civil Service. The IPA is building on the work of the MPA in developing leaders, going beyond formal training by establishing the environment and mechanisms by which people can share experiences and learn from each other. And it is looking to the future, with a fast stream entry for high flyers into a Civil Service career in project management. Furthermore, leaders are being held to account better for the projects for which they are responsible. New project owners are now required to sign up for a significant period, while accountability of existing project owners is being strengthened. Turnover has fallen again over the past year. This investment in people is as essential to the delivery of major projects as the individual project budgets themselves, and we look forward to seeing the results in the years to come.

**Rt Hon Matthew Hancock MP**  
*Minister for the Cabinet Office,  
Paymaster General*

**Rt Hon Greg Hands MP**  
*Chief Secretary to  
the Treasury*

## Introduction

### Chief Executive of the Infrastructure and Projects Authority



Projects and programmes are the means by which government policies are made real. The successful implementation of the major projects described in this report, from large infrastructure projects through to major transformation programmes, is vital to our economic wellbeing.

As the Major Project Authority merges into the newly created Infrastructure and Projects Authority, our purpose remains unchanged: an unwavering commitment to improving performance. Understanding how we're doing today is a vital step in creating a better future, and we remain committed to the transparent reporting of the Government Major Projects Portfolio (GMPP) described in this report.

The 76 projects and programmes which exited the GMPP last year delivered a substantial amount of value to the taxpayer, with most successfully achieving their aims. They cover a very wide range of activities, from major change programmes such as Electricity Market Reform, to IT services such as Spine 2, which provides the critical data infrastructure on which vital NHS applications depend.

The GMPP contains the government's largest and most challenging projects and programmes. We would therefore expect the delivery confidence assessments (DCA) to cover a wide range. This report provides clear evidence of the beneficial effects of project oversight through the GMPP, but we still have too many projects which remain in the low delivery confidence range for too long. We have a number of initiatives underway which are designed to improve performance over time.

**Early intervention** – the initiation of projects is critical to their ultimate performance; it is hard for a project or programme to succeed if it has not been set up in the right way. This means having clear and realistic objectives, good stakeholder engagement, adequate resources, and good leadership from the very start. It means creating seamless integration between policy formulation and policy delivery. We have made progress in helping projects in the early stages, developing new tools to assist with project initiation. The most comprehensive of these is the Project Routemap, developed by IUK for large infrastructure projects. As the IPA, we intend to broaden its application to more project types in the GMPP.

*Relentless and sustained focus on the themes outlined in this report will help us to ensure that taxpayers' money is wisely spent and that we all benefit from the successful delivery of major projects.*

**Performance measurement** – we are committed to improving our measurement of performance: the better we understand how we're doing today, the more we can do to improve in the future. We are making significant efforts to improve project data quality across government and to establish clear baselines against which performance can be measured. This is a complex task which will not be completed in a single cycle, but we are making progress.

We have also started to analyse the findings of the more than 1,000 project assurance reviews that have been conducted over the last four years or so. This provides a valuable insight into issues affecting the progress of major projects over their lifecycle, and lessons that can be used by other projects to improve their likelihood of successful delivery. Early results are shown in this report, but we have as yet only scratched the surface of this large and unique body of knowledge.

**Cross-government initiatives** – we are increasingly looking at how we can support cross-government portfolios of projects with similar characteristics:

- **Transformation programmes** – the GMPP contains an increasing number of complex programmes designed to transform the way individual departments operate and the way in which government services are delivered to citizens. We have created a peer group of the largest transformation programmes for the exchange of ideas, mutual support and the development of specific tools to assist all such programmes across government. This peer group will be supported by a small team of specialists housed in the IPA.

- **ICT programmes** – there are a number of programmes across government which aim to restructure legacy IT contracts to allow substantial cost savings along with flexible IT systems that are fit for the future. We are collaborating with the Government Digital Service and the Government Commercial Function to provide hands-on support to these complex change programmes.

**Capability** – underpinning all other activities, the building of project delivery capability remains a primary area of focus for the IPA. In addition to our world class leadership programmes, we are developing a number of initiatives which are designed to increase the attractiveness of project delivery as a profession in government. For example, we have made excellent progress in developing our Project Delivery Fast Stream offer for new entrants to the Civil Service, and I'm delighted to say that we will soon be receiving the first cadre of 39 Fast Stream graduates, along with around 60 Fast Track apprentices, who will join the Civil Service specifically to focus their careers on project and programme delivery.

We still have much work to do; indeed, the quest for flawless execution is never ending. Relentless and sustained focus on the themes outlined above will help us to ensure that taxpayers' money is wisely spent and that we all benefit from the successful delivery of the government's major projects.

### **Tony Meggs**

*Chief Executive*

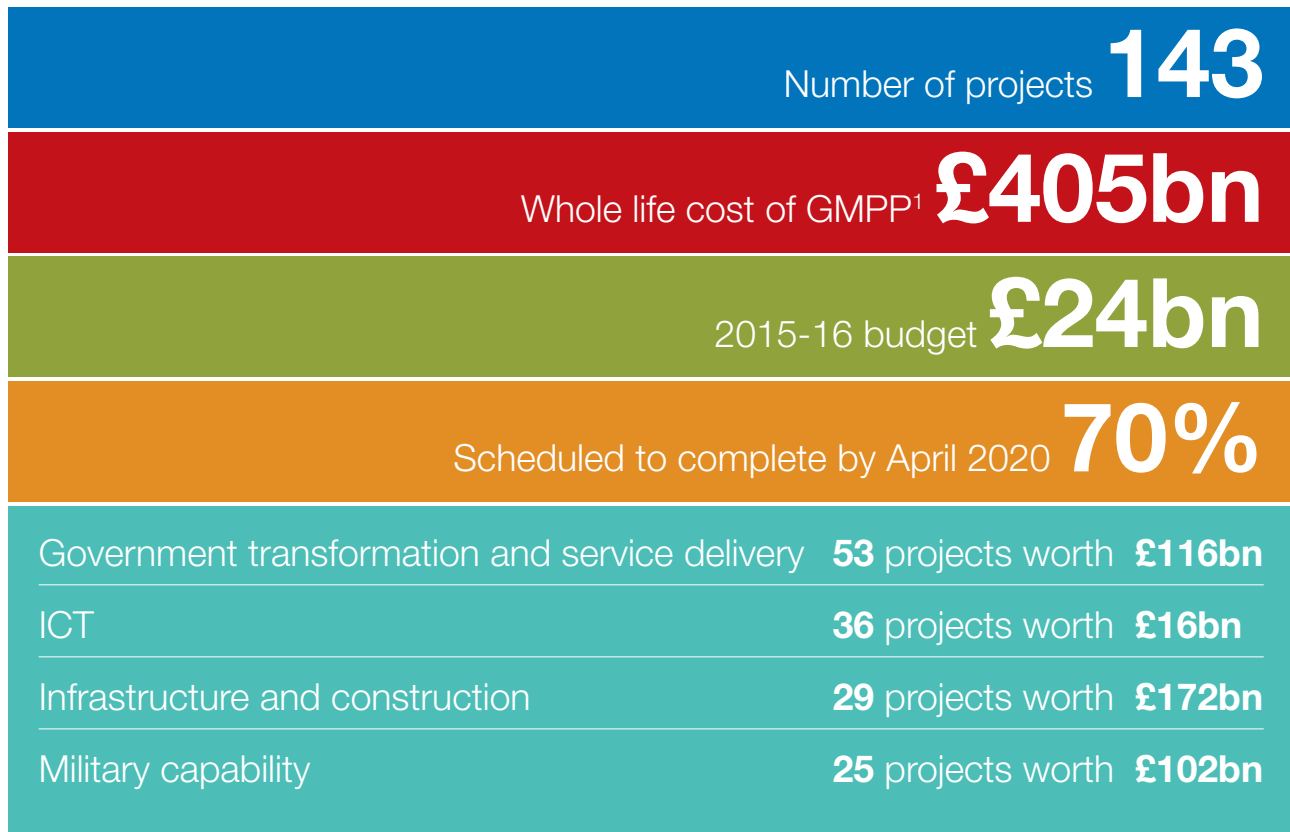
*Infrastructure and Projects Authority*

## The Government Major Projects Portfolio

The Government Major Projects Portfolio (GMPP) is composed of the largest, most innovative and highest risk projects and programmes in government.

At 30 September 2015 the GMPP contained 143 major projects representing a £405 billion investment over the next 25+ years that will improve the UK's infrastructure, transform public services and safeguard national security. The government also carries out thousands of other projects, and the improvements that the IPA is working with departments to introduce will have benefits well beyond the GMPP.

Major projects on the GMPP are those where the project needs HM Treasury approval, either because the proposed budget exceeds a department's delegated authority level or because the project is novel, contentious, potentially sets a precedent or requires primary legislation. These projects vary greatly in size and scope as illustrated by the case studies in this report which describe the Thames Tideway Tunnel (DEFRA), the National Proton Beam Therapy Service Development Programme (Department of Health), and Crossrail (Department for Transport).



<sup>1</sup> Individual lines do not add up to £405bn due to rounding.

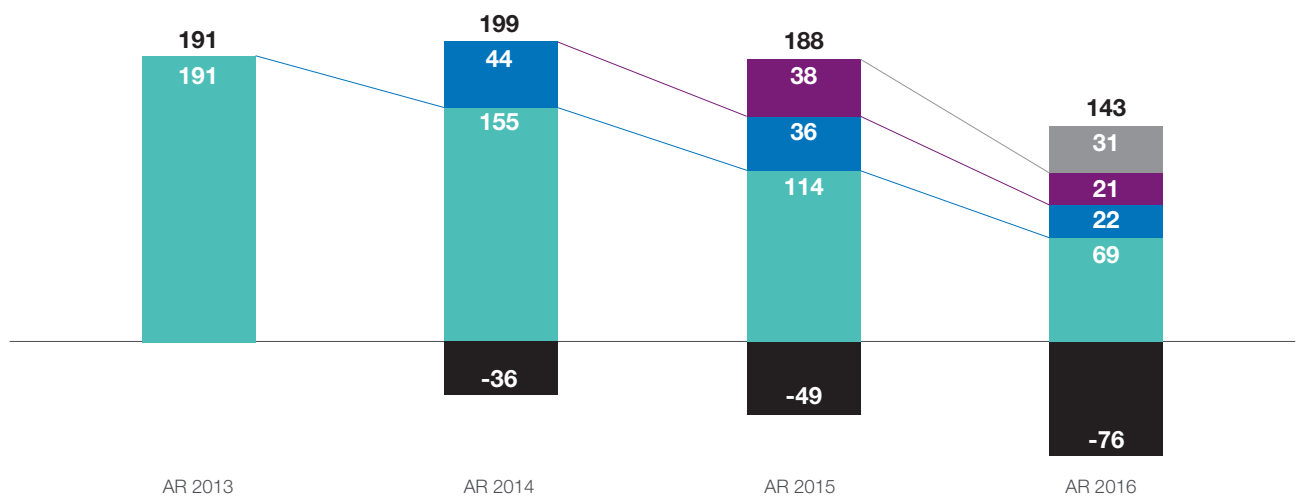
### Changing shape of the portfolio

The shape of the portfolio changes as new projects are initiated and join the GMPP, while others are completed and leave. Overall, the number of projects in the portfolio decreased from 188 to 143 during the year. This is primarily due to timing – many projects were completed at the end of the last Parliament and have left the portfolio. Meanwhile, the reporting date of September 2015 preceded the Spending Review settlement which determined funding allocations for potential new projects. We expect the number of projects to go back to a more normal level by the time of the next Annual Report.

Of the 191 projects in the portfolio in September 2012 (and reported on in the first Annual Report published in 2013), only 69 remained at September 2015, the majority having been successfully delivered (see Figure 1).

During the past year, 76 projects left the GMPP (see Table 1 on page 6), primarily because they were completed successfully (see Figure 2 on page 7 for full analysis).

Two projects, however, were stopped or paused: **Death Certification** (Department of Health) was paused due to lack of immediate funding; **Transforming Youth Custody** (Ministry of Justice) formally closed and left the GMPP in May 2015 because key elements of the programme were stopped pending a review of youth justice. Two of its constituent projects (Secure Training Centre Re-let and Youth Offender Institutions Education Reforms) were well underway, however, and were passed to the Youth Justice Board for completion.



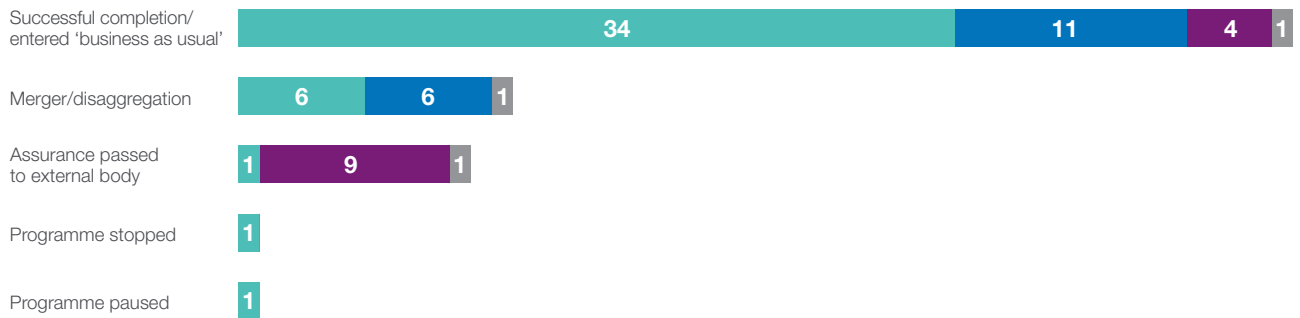
**Figure 1** Analysis of projects on GMPP at each Annual Report date

■ Projects joined prior to AR 2013 
 ■ New projects at AR 2014 
 ■ New projects at AR 2015 
 ■ New projects at AR 2016 
 ■ Leavers

Department	Number of joiners	Joiners – whole life cost excluding exempt data (£m)	Number of leavers	Leavers – whole life cost excluding exempt data (£m)
BIS	2	£1,379	4	£964
CO	6	£281	2	£468
CPS	0	£0	0	£0
DCLG	0	£0	2	£273
DCMS	0	£0	1	£135
DECC	1	£29,975	5	£120,060
DEFRA	1	£1,666	0	£0
DFE	1	£1,581	1	£6,283
DFID	0	£0	0	£0
DFT	1	£199	0	£0
DOH	2	£1,754	22	£7,761
DWP	0	£0	4	£2,937
FCO	2	£157	1	£56
HMRC	2	£671	7	£803
HMT	0	£0	2	£722
HO	2	£640	3	£997
MOD	9	£20,092	14	£57,306
MOJ	2	£205	4	£4,318
NCA	0	£0	1	£399
NS&I	0	£0	0	£0
ONS	0	£0	3	£511
Total	31	£58,600	76	£203,993

**Table 1** Number of projects that have joined or left the GMPP since the last Annual Report by department and whole life cost





**Figure 2** Why projects left the GMPP between 30 September 2014 and 30 September 2015

Government transformation and service delivery ICT Infrastructure and construction Military capability

### Projects leaving the portfolio

Over half of the projects (by whole life cost) which left the GMPP this year were from the Department of Energy & Climate Change (DECC). £91bn of this was represented by two projects aiming to ensure a secure, affordable supply of electricity generation and a transition to renewable and low carbon heat over the coming decades. This was an estimate of costs up to 2040, and includes not just government expenditure but also the long-term private sector investment in new power generation. The first, the **Electricity Market Reform Project**, has enhanced the security of the UK's electricity supply through the creation of a new form of contracting arrangement that enhances and manages capacity and supports investment in low-carbon energy. This is achieved by paying for additional capacity of energy supply to be available when needed and by providing long-term price stabilisation for low carbon energy generation through the Levy Control Framework. This allows investment to come forward at a lower cost of capital and therefore lower cost to consumers. The second, the **Renewable Heat Incentive Project**, provides financial incentives to households, businesses and industry, to encourage the uptake of renewable heat technology, thereby increasing heat generation from renewable energy sources, and helping to reduce greenhouse gas emissions which will enable the UK to meet its climate change targets.

The Ministry of Defence (MOD) accounts for the next largest group of projects which left the GMPP (£57bn of whole life cost). The largest project was the £20bn **Typhoon** programme which is delivering an agile, multi-role combat aircraft. Contracts have now been placed for 160 aircraft to be delivered in three tranches which will be overseen by the MOD. Smaller MOD projects which left the portfolio having successfully delivered their aims include the **Whole Fleet Management** programme, which has introduced

more effective and economic management of the ground-based vehicle fleet, and the **Next Generation Estates Contracts** programme, which has introduced cost-effective new maintenance contracts across the MOD estate.

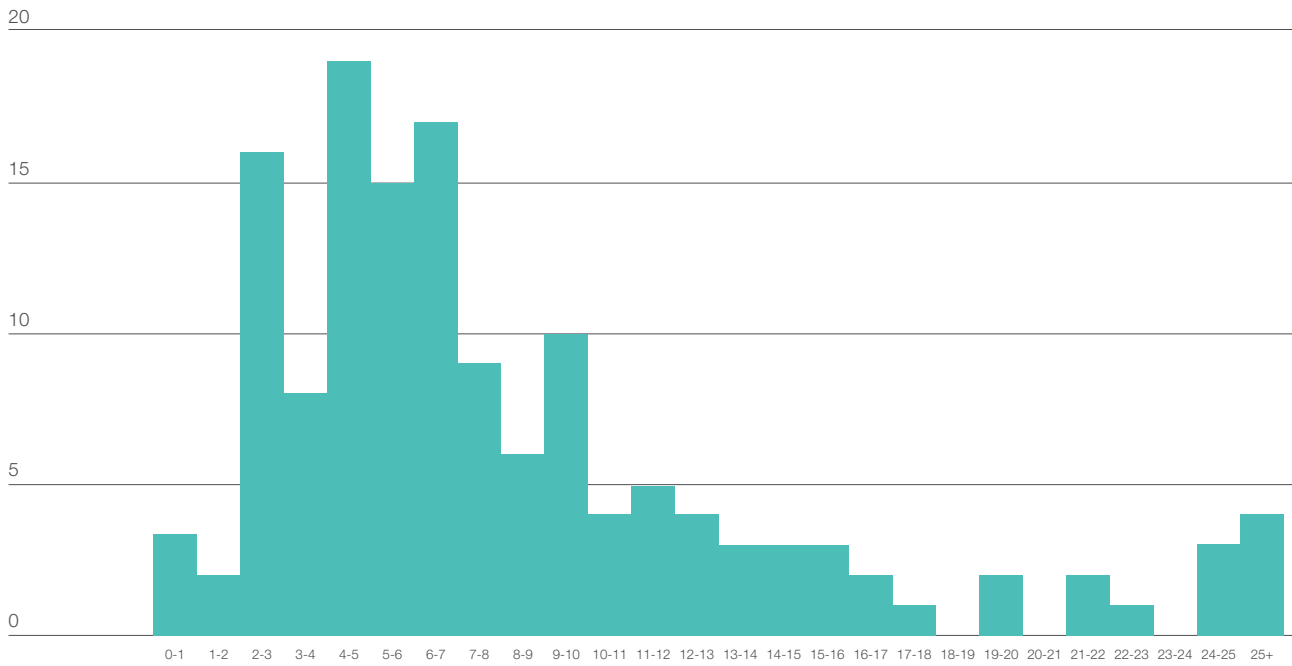
A range of projects from other departments also left the GMPP this year.

HM Revenue & Customs' (HMRC) **Real-Time Information Project** has improved the PAYE system by creating more up-to-date taxpayer records and making the system easier for employers and HMRC to administer. This has reduced administrative costs and also means that more people will pay the correct tax each month, reducing the need for adjustments at the end of the year.

The Department for Culture, Media & Sports' (DCMS) **World Conservation and Exhibitions Centre** was built within the British Museum, and provides world-class facilities for visitors and researchers, taking conservation, scientific research and collection management to a new level of excellence.

The Department of Health's (DOH) **Summary Care Record** was delivered successfully and gives healthcare staff access to important information about any medicines patients are taking and any allergies or bad reactions. This can prevent mistakes being made in an emergency, when GP practices are closed or when patients are away from home.

Projects occasionally leave the portfolio because the IPA and the department decide that assurance is more appropriately carried out elsewhere. For example, the IPA and the DOH agreed that hospital trusts should organise their own assurance for the nine NHS capital programmes which left the portfolio, because hospital trusts are governed through the NHS structure as independent organisations now overseen by NHS Improvement.



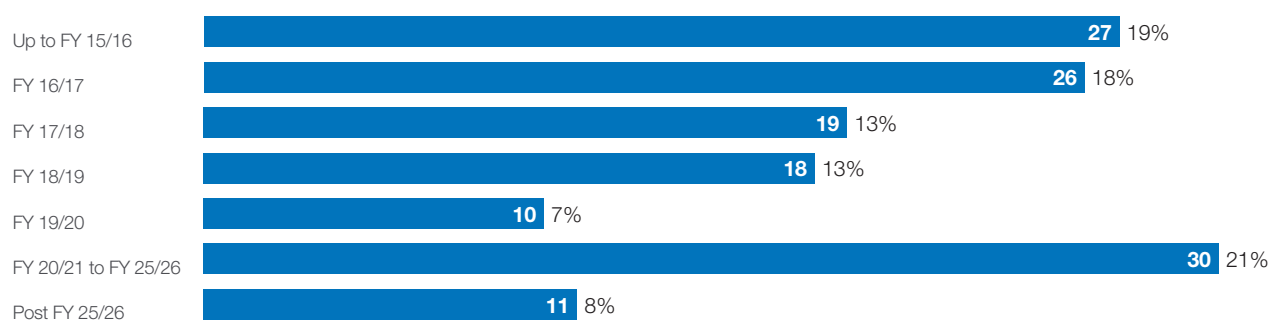
**Figure 3** Distribution of expected lifespan in years of projects at September 2015  
 Number of projects by their total duration (from start to end of project)

**Projects joining the portfolio**

Since the last Annual Report, 31 projects have joined the portfolio (see Table 1 on page 6), representing a wide range of infrastructure and change activities including:

- The Business Innovation & Skills **Polar Research Vessel**, a £200 million state-of the-art vessel to maintain the UK’s position at the forefront of climate and ocean research. The new ship will be built in Birkenhead and is scheduled to be in operation by 2019.

- The Cabinet Office’s **Verify Programme**, where the Government Digital Service is working in partnership with government departments, the private sector and the Privacy and Consumer Advisory Group to build a new secure way for users to prove their identity online when accessing government services such as viewing driving licences or completing tax returns.
- The Home Office **Biometrics Programme**, which will improve the efficiency and capability of biometric search and match capability.
- HMRC’s **Customs Declaration Services Programme** which will replace CHIEF (the current system for handling import and export freight).



**Figure 4** Projects scheduled to complete by year<sup>2,3</sup>



**Figure 5** Distribution of projects at September 2015 by total project whole life cost<sup>3</sup>

### The variety of projects on the portfolio

Projects on the portfolio vary in a number of ways.

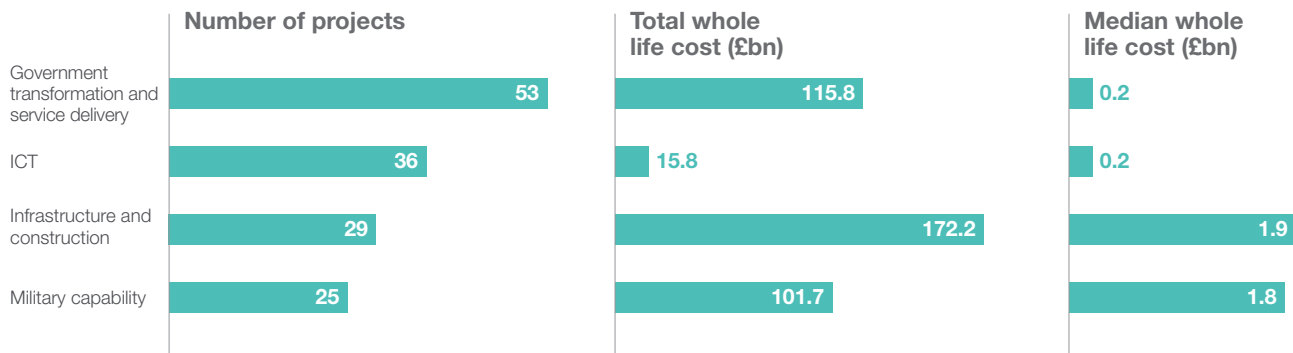
**Lifespan** (see Figure 3): the majority of projects in the GMPP have an expected total lifespan of between five and ten years. The number of projects lasting less than five years dropped from 76 last year to 47 this year, with the balance having been completed.

As per Figure 4, 70% of projects are scheduled to complete by the end of 2019-20, reflecting the investment in transformation and ICT projects which are needed to improve services and efficiency within government during the current Parliament.

**Whole life cost** (see Figure 5): almost half of the projects on the portfolio have a total whole life cost of less than £500m with only 10% of projects having an expected whole life cost of >£10bn. This reflects the large proportion of transformation and ICT projects on the GMPP at 30 September 2015 which have a lower median whole life cost than infrastructure and military capability projects (see page 10).

<sup>2</sup> Individual lines do not add up to 100% due to rounding.

<sup>3</sup> Total number of projects does not add up to 143 due to data being exempt.



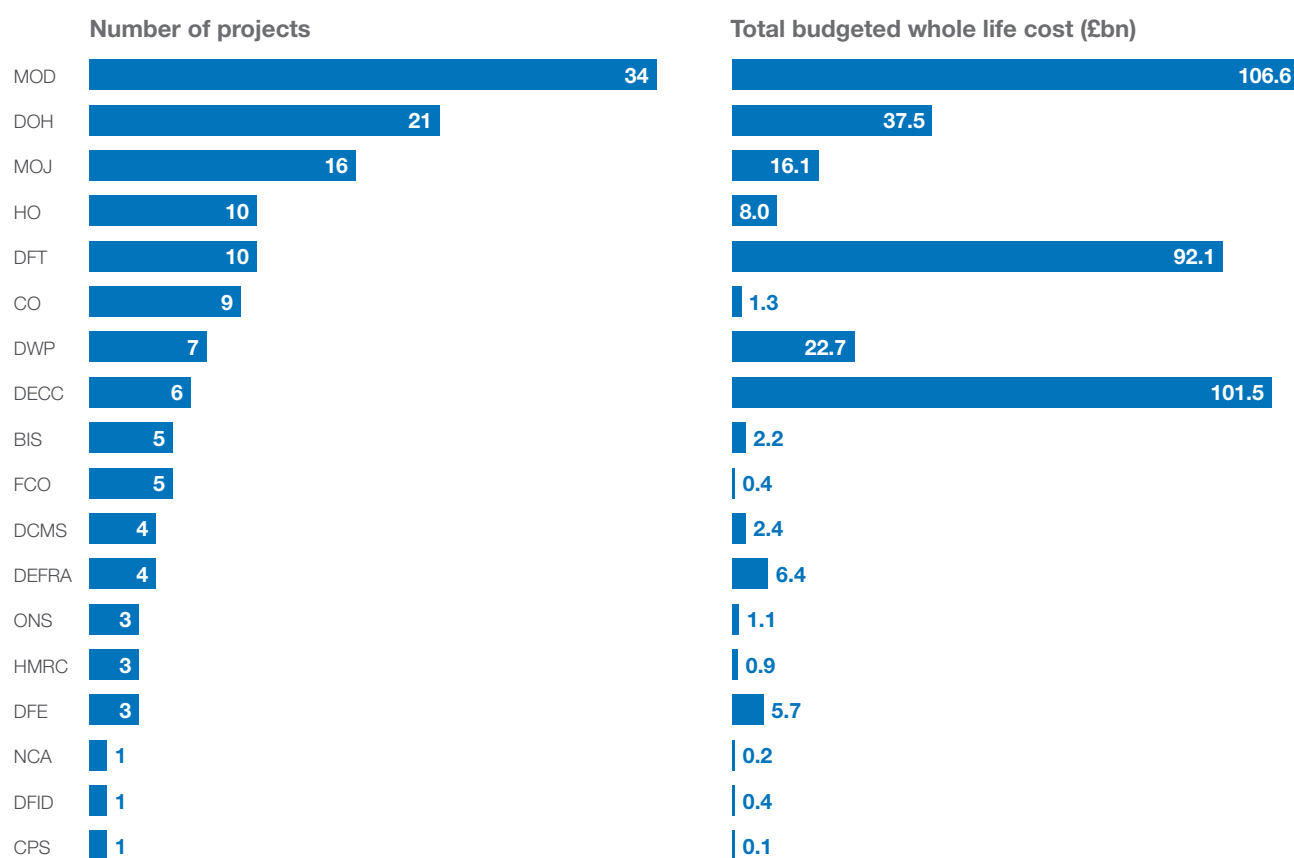
**Figure 6** Number of projects, total whole life cost, median whole life cost by project type at September 2015

**The categories of projects in the portfolio**

There are four types of project in the portfolio (see Figure 6):

- **Government transformation and service delivery projects** continue to make up the largest single category of projects by number in the portfolio. The median cost of this type of project is low (£0.2bn) but they can be the most difficult to get right due to their complex and often challenging nature. Transformation projects are often unique and therefore do not benefit from lessons learnt to the same extent that, for example, infrastructure projects do. An example of a transformation project is the Department for Work & Pensions’ (DWP) **New State Pension** Project to implement the Pensions Act 2014 by introducing a simple flat-rated state pension.
- **ICT projects** aim to restructure legacy IT contracts and introduce flexible IT systems more aligned to the future. These projects make up 25% of the number of projects on the GMPP but less than 5% of its whole life cost. One example is the **Columbus** Programme, through which HMRC is replacing the government’s largest IT contract.

- **Infrastructure and construction projects** include improving and maintaining the UK’s transport, energy, sewage and water systems and constructing new public buildings. These high-investment projects are vital to the nation’s economic development and prosperity. Although they make up just 20% of projects by number, they represent the largest share of whole life cost at 43%, and also have the largest median project cost at £1.9bn. An example is the Department for Transport’s (DfT) £15bn **Crossrail** Programme, which will start delivering new rail capacity to London in 2017 and is scheduled to complete at the end of 2018.
- **Defence capability projects** are vital to the effective operation of the Armed Forces. This is the smallest category in terms of number of individual projects but second highest in terms of whole life cost, representing a significant investment to maintain our national security. An example is the **Airseeker** Programme to provide the Royal Air Force with three specialist surveillance aircraft that use advanced sensor technology to gather data and intelligence to support forces in the air and on the ground. The second aircraft was delivered ahead of schedule and the programme is on track to complete by the end of 2017.



**Figure 7** Total number of projects and whole life costs by department at September 2015

### Projects by department

The portfolio at September 2015 included projects from 18 government departments, demonstrating the wide breadth of government project delivery activity (see breakdown in Figure 7).

Unchanged from last year, the MOD has both the largest whole life cost and the largest number of projects. These are mostly defence equipment projects, but some are transformation projects. The **New Employment Model** aims to deliver a simpler, better and fairer system of pay for the Armed Forces, while the **Army Basing Programme** will bring back all units from Germany by 2020.

DFT projects (10) represent almost a quarter of the total whole life cost of the GMPP, and include the highest number of infrastructure projects. These take the longest, need the highest levels of public

investment, and often involve working in partnership with private sector finance. For example, the **Thameslink Programme** will deliver improved connections, more reliable journeys, better stations and new trains to London and the South East by 2018.

The DOH has almost 15% (21 out of 143) of the projects in the portfolio. These range from ICT projects such as the **Health & Social Care Network**, which will provide a reliable, flexible and more efficient way for health and care organisations to access and exchange electronic information, to infrastructure projects like Public Health England's **Science Hub**, which will create a centre of excellence for research, health improvement and protection, to service delivery projects like the **Childhood Flu Immunisation Programme**.

## Case study: Thames Tideway Tunnel – Collaborating for success

Thames Tideway Tunnel (TTT) is a brand new 15-mile sewer tunnel which will be constructed under the River Thames through Central London.

TTT is an essential project for Londoners today and in the future, since it will clean up the Thames, helping reduce sewage overflow into the river from 39 million tonnes per year to at most 2-3 tonnes.

TTT is being financed and delivered by the private sector, but the project is being managed by DEFRA who are helping to ensure the legal and commercial frameworks are in place so that the project is successful. The project is on track, thanks to an excellent working relationship between the IPA, DEFRA and various private sector partners. Some of the key points of engagement are shown in the timeline below.

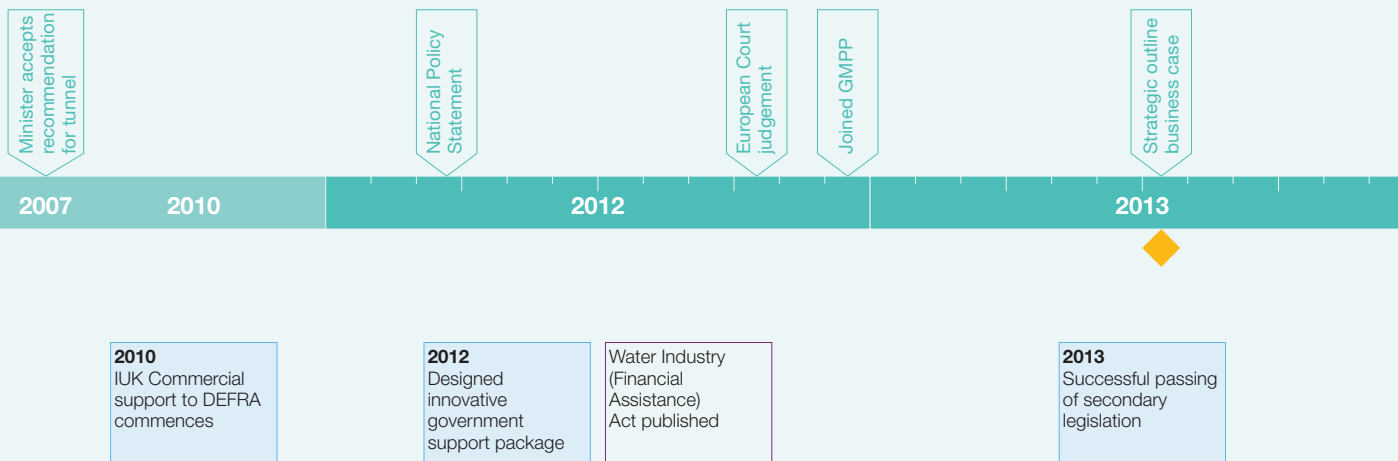


Cross-section of the proposed TTT shaft at Victoria Embankment

### TTT timetable

April 2012 onwards: regular assurance reviews of progress

DCA September 2013



### An excellent working relationship

John Bourne, TTT's Project Director from DEFRA said: 'It's been a team effort since the project started, from the first ministerial agreement in 2007 to the completion of the financial arrangements in August 2015 which allowed construction work to begin. The project successfully brought together a wide range of expertise: financial, legal, technical, insurance and regulatory. This partnership approach has helped create the conditions for success, managed the risk and reduced the cost to the taxpayer.'

### Learning from other projects

According to members of the project team, the opportunity to learn from other projects for the benefit of TTT was key to the project's success. The team drew on lessons from Crossrail and HS2, and also benefited from senior people moving onto the project at appropriate stages.

### Support from IPA

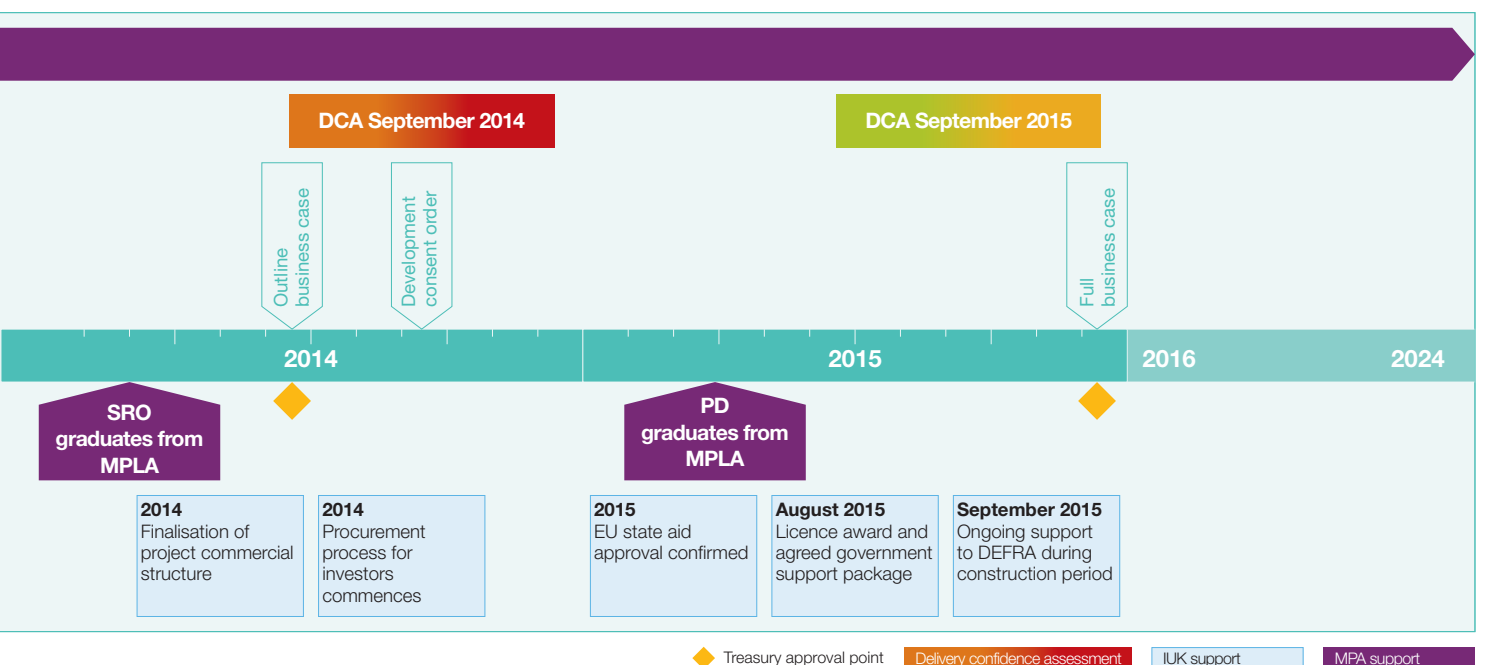
Former Senior Responsible Owner (SRO) for TTT, Sonia Phippard said: 'The core team overseeing the TTT project in DEFRA was small and the support provided by IUK and the MPA was essential. This included a long-term secondment from IUK to provide ongoing expert input into the financial arrangements as they evolved, and regular assurance reviews organised by the MPA that provided specialist input into how to overcome the challenges as the project developed.'

Sonia and John (pictured in June 2015 at the Lee Tunnel with Scott Dickson from IUK) have both graduated from the Major Projects Leadership Academy. They agreed



that it had helped them shape their approach to project management to the benefit of TTT. For Sonia, the course re-emphasised the importance of building the right relationships across government and the private sector and ensuring they had clearly agreed shared goals, a factor that was crucial to the project's overall success.

This view was echoed by one of TTT's investors. Gavin Tait, director of Amber Infrastructure, said: 'The contribution of the DEFRA team, supported by an excellent IUK team, extended far beyond the practical necessities of forming an appropriate government support package. The active and pragmatic approach adopted by them to potential investors in TTT was key to the success of getting this project financed. The private/public engagement on this project sets a benchmark for the development of all future major UK infrastructure projects.'



## Progress in delivering major projects this year

The delivery confidence assessment (DCA) is the IPA's assessment of a project's likelihood of achieving its aims and objectives on time and on budget.

It is a five-point scale ranging from green for projects where successful delivery appears highly likely, to red where successful delivery appears likely to be unachievable unless urgent and substantive action is taken<sup>4</sup>. We review projects quarterly and include evidence from independent assurance reviews as part of our delivery confidence assessment.

The DCA represents a snapshot assessment at a specific point in time and is designed to help projects and programmes succeed by focusing attention where most support is needed. The IPA will normally provide additional support to red and amber/red projects, for instance by providing additional expert support as required, and organising follow-up assurance reviews to check that the project team is taking the right action.

The DCA is an overview of the whole project, so it is quite possible for a project to achieve an overall low rating whilst having some areas of excellence. A project's DCA will often fluctuate over its lifetime and, after a decline, will generally improve again as action is taken to address specific issues and the project gets back on track.

A red rating does not mean that a project cannot be successfully delivered if the right action is taken. It does, however, mean that fundamental aspects of the project need to be addressed promptly. As the projects on the GMPP represent the largest and most complex projects being undertaken by the government, it is unrealistic to expect all projects to have a green delivery confidence throughout their life.

### Overview

An analysis of the number of projects by their whole life cost and current year budget as compared to their DCA (see Figure 8 on page 15) shows that, of the £405bn total, less than £1bn relates to projects that were rated red at September 2015. Over 78% is represented by projects whose rating is amber or better.

Since the last Annual Report, the number of projects rated red or amber/red has reduced from 48 to 44 (Figure 9 on page 15), and their whole life cost represents 22% of the portfolio. However, they make up a slightly larger share of the portfolio compared with last year, because the portfolio has reduced in size from 188 to 143 projects (Figure 10 on page 15).

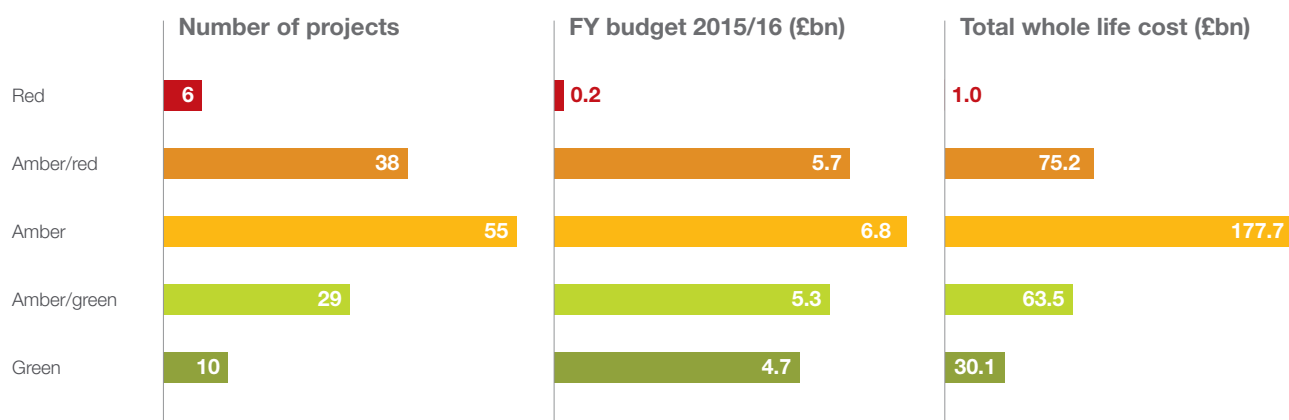
There has been a significant reduction in projects with green and amber/green ratings at 30 September 2015 because many of the projects with this rating at September 2014 have completed and left the portfolio.

As per Figure 11 on page 15, of the 76 projects which left the portfolio, 52 were rated green or amber/green at the point of exit and 12 were rated amber/red or red. Further details of the projects leaving the portfolio are provided at Figure 2 on page 7.

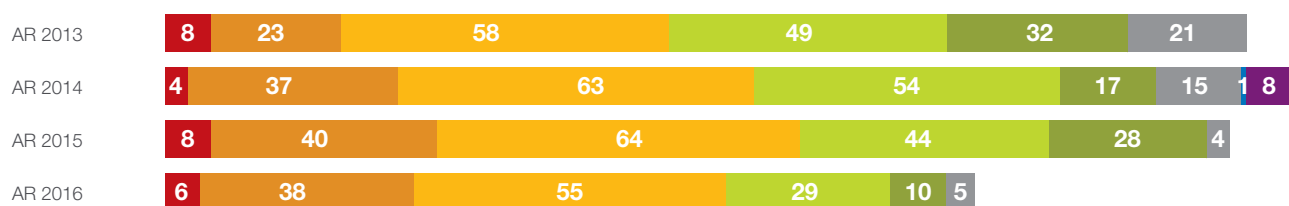
In general, delivery confidence is likely to be lower when projects join the GMPP as there is greater uncertainty about risks, constraints and funding sources. This is also illustrated in Figure 11 which shows that since last year, 31 projects have joined the portfolio and of these only three were rated amber/green compared to 13 rated red or amber/red.

<sup>4</sup> See page 25 for full DCA definitions

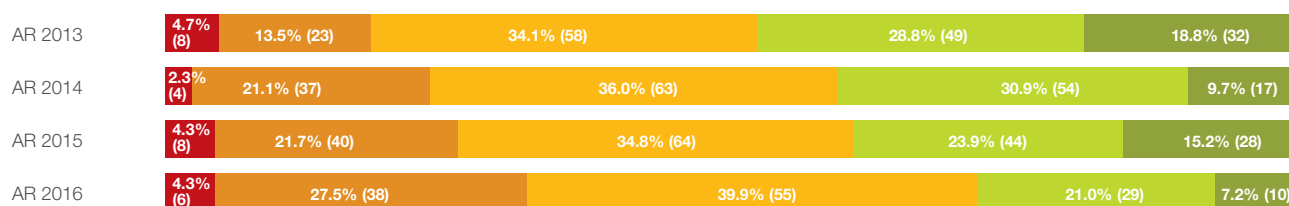




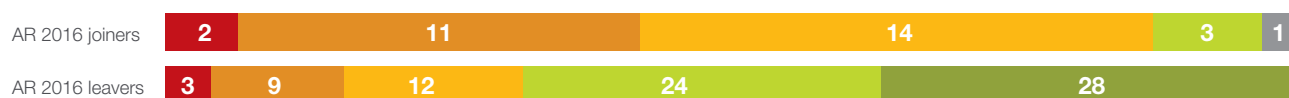
**Figure 8** DCA breakdown of GMPP by number of projects, 2015-16 budget and whole life cost<sup>5</sup>



**Figure 9** DCAs of GMPP projects over the last four years, including number of exemptions



**Figure 10** DCAs of GMPP projects as a percentage of total projects on the portfolio, excluding exemptions

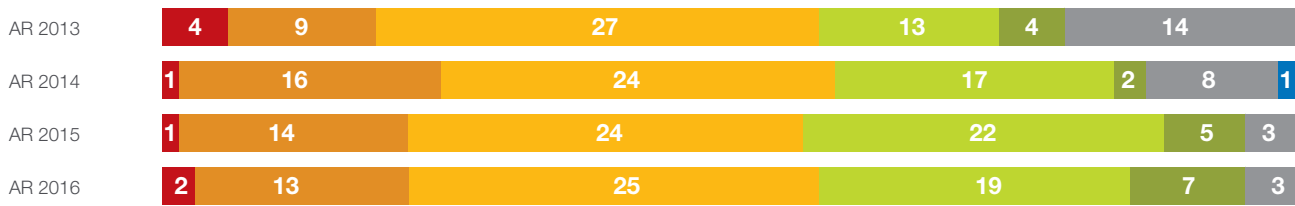


**Figure 11** DCAs of projects which have joined or left the portfolio since the previous Annual Report (%)<sup>6</sup>

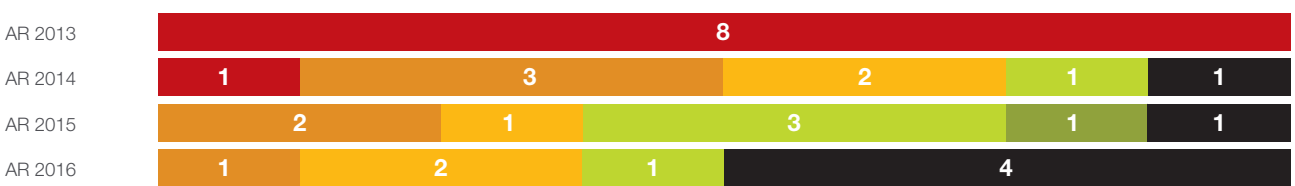
Red Amber/red Amber Amber/green Green Exempt Reset No DCA Left

5 The total whole life cost in this chart excludes costs related to projects whose DCA is exempt for transparency purposes.

6 The DCA of leavers from the GMPP is from their final quarterly return.



**Figure 12** DCA of projects on the GMPP from September 2012 onwards



**Figure 13** The progress of projects with a red DCA as at 30 September 2012

Red Amber/red Amber Amber/green Green Exempt Reset No DCA Left

The GMPP at 30 September 2015 included 69 projects that were on it at 30 September 2012 (see Figure 12). Since then, there has been a large reduction in the number of DCAs exempted from publication, which means that a comparison of the ratings of those projects since 2012 is difficult. However, a comparison between 2015 and 2016 (which have far fewer exemptions) shows that overall the DCAs have not changed significantly. The continuing presence of red and amber/red projects on the portfolio is an indicator of the level of complexity and risk in these major projects.

The DCA of projects tends to fluctuate during their life cycle and those rated red or amber/red do not generally remain so. Figure 13 shows how the DCAs of the eight projects rated red at the time of the first Annual Report in 2012-13 have changed over time.

As can be seen, only one project was still red at 30 September 2013 and none were red in the last two years. Four of these projects are shown as leaving the GMPP. Of these, two were successfully completed with green or amber/green ratings at the time of leaving. The remaining two projects are ongoing but have left the GMPP in their original form as they have either been broken down into smaller projects or merged with another GMPP project. Overall, this shows that all projects that were red at one stage of their life cycle (September 2012) have improved and those which have left the GMPP on closure were successfully delivered.

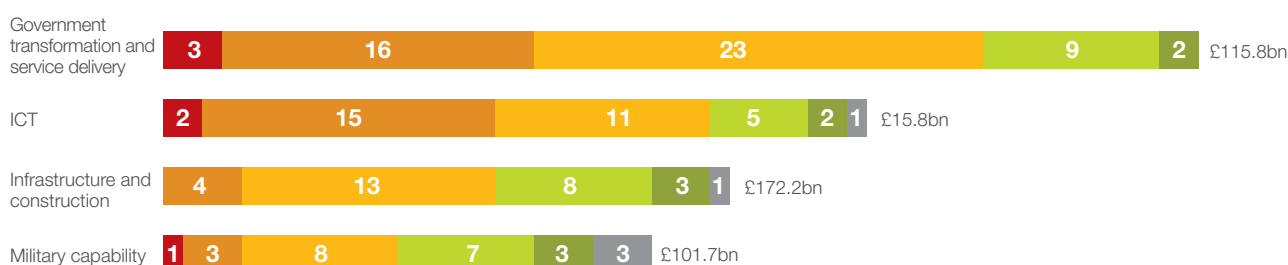
### Changes in DCA of projects between joining and leaving the GMPP

A comparison of the DCAs of projects when they joined the GMPP compared with when they left (Figure 14 on page 17) shows that 45% of projects improved their ratings, 31% remained the same, and only 12% decreased to red or amber/red.

This supports the view that being included in the GMPP and being supported by the IPA (or MPA) is helpful to projects in terms of improving their chances of successful delivery. Nonetheless, the data is not entirely clear and we need to look in particular at the 12% of projects where delivery confidence deteriorated to red or amber/red on leaving the GMPP to understand whether these projects delivered all or some of their objectives. Work is already underway with leading academics to fully understand the impact of assurance activity and other interventions on project outcomes. This work will be expanded to consider the final outcomes of projects leaving the GMPP and the extent to which the final DCA reflects this.

		Last DCA rating						
		Red	Amber/red	Amber	Amber/green	Green		
First DCA rating	Red	3	1	2	2	1		
	Amber/red	2	11	6	6	8		
	Amber	4	9	18	25	18	Improved	93 45%
	Amber/green	2	7	14	18	24	Stayed the same	65 31%
	Green			8	4	15	Worsened	50 24%

**Figure 14** Change in DCA of projects showing DCA at joining and DCA at leaving the GMPP



**Figure 15** DCA of projects by category

■ Red 
 ■ Amber/red 
 ■ Amber 
 ■ Amber/green 
 ■ Green 
 ■ Exempt 
 ■ Reset 
 ■ No DCA 
 ■ Left

### DCA by project category

An analysis of DCAs by project category (see Figure 15) shows that the majority of projects rated red or amber/red are transformation or ICT. This is unsurprising given the relative complexity of these types of projects compared with others.

#### Transformation projects

Government transformation and service delivery projects can be particularly challenging, typically involving long-term changes in the relationship between the government and the public, and the way in which services are provided. These reforms can require complex changes to organisational structures and ways of working, the skills required in the government, the nature of commercial

relationships with suppliers, and major IT development programmes. Leading and managing transformation programmes successfully requires a different approach from traditional capital programmes such as infrastructure. In recognition of the challenging nature of these programmes, the IPA has been working closely with a number of government departments to develop a better understanding of the key elements that contribute to successful delivery of transformation projects, and how the government can increase the likelihood of their success. A group of senior transformation leaders from various departments has been established to lead this work, supported by experts based in the IPA.

### **ICT projects**

The IPA has been working closely with digital and commercial Cabinet Office colleagues to consider the potential issues associated with the large number of IT contracts scheduled to expire over the course of this Parliament, and agree how best to address them. Our approach is to work with government departments to ensure they have the right level of support to facilitate the successful exit of these contracts and the establishment of new arrangements, which will provide better customer service at a lower cost. This strategic support will help reduce risk and support successful government-wide technology transformation.

### **Performance measurement**

It is crucial for the IPA to have a robust and effective project performance framework to be able to monitor and report on the progress of the GMPP as a whole and the individual projects within it. The assessment of delivery confidence is useful, as described, in identifying projects where specific focus is needed. We now want to build on this to identify, from the data collected, other projects where intervention would help secure a better overall outcome.

Over the coming year, therefore, we are planning to design and implement a new project performance framework. This will include working with all GMPP projects to agree baseline cost, schedule and benefits data, against which future progress will be measured.

For new projects joining the GMPP, baseline information will be agreed from the outset and will be updated as the projects progress through their approvals life cycle until full business case stage.

We will also be working with professional bodies, academics from major universities and project leaders to look at additional methods for tracking performance.

Major projects are by their nature complex and it will take a number of years for the new performance monitoring system to become embedded. We will report on the development and implementation of the system in next year's Annual Report.

### **Early intervention**

The IPA can add most value when we get sight of potential projects in the first phases of development. We are therefore working with departments to bridge the gap between policy development and project delivery, identifying projects emerging from their plans. Our focus is on closer working at the earliest stages to ensure that projects are set up correctly, which should increase the chance of successful delivery without adding any administrative burden. Not all of these projects will be large enough in scale to join the GMPP, so we will tailor our involvement to make sure it is proportionate for the type of project and level of expenditure.

## Case study: Innovative cancer treatment – the National Proton Beam Therapy Service

In 2018, the NHS will open the doors of the first of two new centres in the UK that will change the lives of people with cancer.

Proton beam therapy (PBT) is an advanced and innovative form of radiotherapy that reduces the potential long-term side effects of conventional radiotherapy – particularly important when treating children. With ‘high energy’ PBT, not currently available in the UK, the NHS will be able to treat patients with some of the most complex forms of cancer, who have hitherto had to travel to the USA or Switzerland to receive the best treatment. And, of course, not all patients are fit enough to travel which means that some haven’t been able to benefit from this cutting edge treatment at all. But, from 2018, British patients will be treated with PBT at the Christie NHS Foundation Trust in Manchester and, from 2019, at University College London Hospitals NHS Foundation Trust.

### Large-scale equipment for precise technology

PBT requires very precise technology with significant infrastructure. The equipment needs to sit within concrete walls up to 7.5m thick, and the fully rotating gantries that deliver the beam to the patient are two storeys high, yet able to deliver treatment at sub-millimetre accuracy. A project of this nature required meticulous planning, and a significant budget – £250m of capital funding. The Department of Health ran an internal NHS competition to decide which Trusts would be most appropriate to provide the service, and then undertook comprehensive procurement exercises to appoint a single equipment supplier and separate building contractors for the two sites. Construction is now underway in both London and Manchester.

The scale and complexity of this project cannot be overstated – from the building of the centres, the design, logistics and installation of the high specification equipment, through to planning clinical pathways and developing a National Clinical Service. To keep the project on track, we have a dedicated highly effective and proactive Programme Management Office (PMO) to support delivery at all stages and act as the ‘Delivery Engine’ for the programme.



### Planning, leadership and expertise

Karen Wheeler, Senior Responsible Owner (SRO) for PBT, explained why this complex and challenging project is proceeding on time and on budget. ‘Getting the right leadership team has been essential to this project, and we were lucky to have highly respected clinical leaders with a passion to see PBT made available on the NHS,’ she says. ‘We also needed the right highly specialised subject matter experts to assure the project from various areas of expertise – clinical, physics, commissioning, project management, technical, construction, workforce, legal, financial and commercial. With this great team we are on track to treat our first patient in 2018.’

### The future of cancer treatment

There are numerous benefits to be realised from the new PBT service. The collection of detailed clinical outcomes data will enable the NHS to evaluate the longer-term impact of PBT treatment and its cost effectiveness against conventional radiotherapy. This data will build an evidence base that will contribute to international research underpinning technical development.

*“This is an exceptional development in cancer services that will make a real difference to how we treat patients in the UK. PBT offers cutting edge technology in brand new facilities, and gives us the opportunity to realise longer-term benefits in research that will inform the development of cancer services for years to come.”*

**Dr Adrian Crellin, National PBT Clinical Lead**

## Building project delivery capability

Leadership is essential for delivering successful projects, so developing leadership skills within government is a key part of our work to build project capability.

In 2012 the Major Projects Leadership Academy (MPLA) was launched to build the skills of senior project leaders across government to enable them to deliver complex projects successfully. This builds expertise within the Civil Service, while reducing over-reliance on expensive external consultants.

The MPLA is now a well established programme, and, at 12 May 2015, 414 senior project leaders had enrolled in the programme with more than 230 having successfully graduated (the remainder are still going through the programme which lasts around 15 months). Our aim is that the vast majority of major projects are led by MPLA graduates or very experienced project delivery experts who have spent their careers running successful major projects.

Major projects are not the only ones that benefit from strong leadership. The government has other projects that, while they do not fall into the 'major' category, are nonetheless highly significant, complex and costly and require excellent leadership. The new Project Leadership Programme (PLP) was launched in June

2015 and, as well as benefiting projects in the next tier down in the medium term, will also benefit major projects in the longer term by providing the leaders of the future. To date, more than 200 participants have enrolled on the PLP.

Together, the MPLA and PLP are significantly enhancing project leadership capacity and capability across government and supporting the wider development of the project delivery profession.

To build on the success of the MPLA and the PLP, we are now working in partnership with the MPLA faculty to develop a broader range of education and awareness offerings for senior officials up to Permanent Under Secretary and Ministers. We have already run a number of workshops, which were well received, and more are planned.

### Turnover and accountability of project leaders

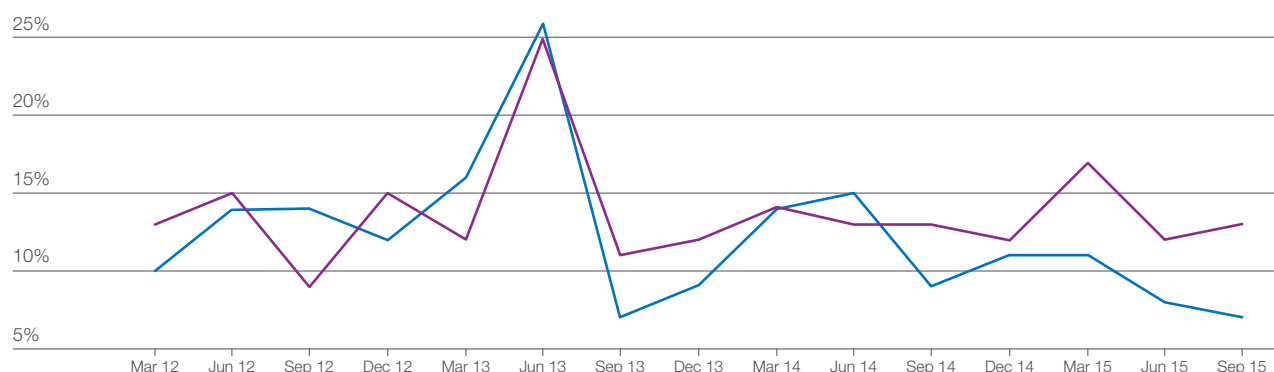
Successful delivery depends on strong and accountable leadership. Turnover of project leaders is inevitable and, in some instances, desirable. However we need to manage changes in leadership properly to minimise disruption to projects and maximise the potential for successful delivery. One of the ways we are managing this for our project leaders (Senior



### Why I value the MPLA

Fiona Spencer is the Chief Portfolio Officer and Head of Project Delivery Profession in the Home Office. In this role she has oversight of all Home Office projects and responsibility for ensuring the right people with the right skills and capabilities are placed in key project delivery roles now and in the future.

Fiona, an MPLA graduate, says: "My experience of the MPLA has been invaluable to my role as Head of Profession. By attending the course I have obtained a much broader understanding of the requirements, best practice and challenges of project delivery and the leadership required to ensure success. I am confident that as a consequence I am better able to direct the complex portfolio of projects within the Home Office to a successful conclusion."



**Figure 16 Turnover in SROs and Project Directors across GMPP projects at each quarter**

— Project Directors — Senior Responsible Owners

Responsible Owners, or SROs) is through SRO letters of appointment.

The Osmotherly guidance, issued in October 2014, makes clear that each SRO should have a letter of appointment clearly setting out their accountability, stating the point at which the SRO becomes accountable for the project, and defining the tenure of the role linked to delivery of a key milestone. This provides the SRO with more certainty with regards their accountabilities and authority, and enables better succession planning based on the tenure set out in the letters.

Since the guidance was published, 150 letters have been issued. Of the projects on the GMPP at September 2015, the vast majority had SROs with an agreed and issued letter of appointment.

The turnover of our SROs and Programme Directors (PDs) is tracked every quarter (see Figure 16). The Programme Director is accountable to the SRO for the day-to-day running of their project and for ensuring it is delivered successfully.

There has been an overall improvement in SRO turnover since March 2012, supported by the issue of letters of appointment. At September 2015 the rate of 7% turnover per quarter was well within expected margins for an average SRO tenure of four years. The turnover of PDs remains higher and we are working to understand this better so we can find the best means of addressing it.

Over the coming months as more projects join GMPP, some of our most experienced project leaders may move from existing projects to new, more complex and challenging ones. However, with more MPLA and PLP graduates coming into the resource pool, and with a number of projects being scheduled to complete successfully over the same period, we believe that this turnover can be effectively managed.

### Learning from experience

Sharing experience, learning from each other, and applying that knowledge is essential if we are to deliver projects successfully in the long term, not least because the environment in which we are working is increasingly challenging with the need to drive down costs and transform organisations to deliver best value for money. There is some leading edge practice in learning from experience in major construction projects such as Crossrail and HS2, and more broadly, projects and departments have for some time created 'lessons learned logs'. But thus far, putting those lessons into practice in subsequent projects has been patchy. Our challenge is to build on this activity and properly embed knowledge sharing into how we operate, recognising that there is no single approach to learning from experience that will fit all project environments.

We are adopting a number of approaches to ensure we learn from experience in all our projects as outlined below.

Community	Aim
Portfolio Management Network	Develop and share insights into best practice in portfolio management
Data Steering Groups	Drive a consistent and value-added approach to project data
Benefits Forum	Develop and share insights into how to compute benefits and ensure they are delivered
Assurance Reviewers Group	Support and enhance the capability of IPA Assurance Reviewers
MPLA and PLP Alumni	Continue to develop MPLA and PLP graduates

### Communities of practice

To support knowledge sharing, we have set up a number of Communities of Practice aimed at demonstrably improving project delivery by ensuring knowledge and experience is effectively disseminated within and outside government. These communities bring together project delivery professionals into effective networks to work together and share knowledge, innovative approaches and ideas. The table shows our existing communities.

### Research collaboration

In March 2016 we launched an initiative with senior academics from a number of universities supported by professional bodies and others. Through it, we aim to develop new insights into key issues around project delivery.

### Project Initiation Routemap

A number of studies of projects before 2012 identified the need for a greater focus on the early stages of projects to ensure that they are set up to succeed. Before it became part of the IPA, IUK worked with industry and academics to develop a 'Project Initiation Routemap'. This provides a framework to help identify and address many common and recurring problems during the early stages of projects.

Following an industry-wide consultation in 2013, the Routemap tools and modules were published in July 2014. Since then the tool has been used on more than 20 major infrastructure projects across the transport, water, flood, health, defence and energy sectors including Crossrail, HS2 and the Thames Estuary.

We are now working to refine the tool and extend its application beyond infrastructure projects to help more teams assess how best to approach the early stages of their projects.

### Learning legacies

'Learning legacies' are bodies of knowledge and specific good practice that project teams build up over the life of a project. The best known of these is the Olympic Learning Legacy launched by the Olympic Delivery Authority in 2011.

What is different and innovative about the Olympic Learning Legacy is that it was published online so the learning is accessible for all projects and organisations to use without cost. Previously such information would have been held within the project and its organisation and not shared more widely.

The **Olympics Learning Legacy website** went live in October 2011, and was originally hosted on the London 2012 website ([learninglegacy.london2012.com](http://learninglegacy.london2012.com)) before its move to [gov.uk](http://gov.uk) in October 2012 ([learninglegacy.independent.gov.uk](http://learninglegacy.independent.gov.uk)). More than 600 documents were uploaded to the structured lessons learned categories on the website between November 2011 and January 2013. To date 163,000 people have visited the website across 175 countries and made 527,000 downloads.

The website continues to attract around 100 visitors a day, 30% of whom are returning visitors.



## Case study: Learning in action – the Crossrail Learning Legacy

It is easy to talk in general terms about learning from experience. Crossrail is an example of a project team which has fully demonstrated a commitment to learning.

### The Crossrail Learning Legacy

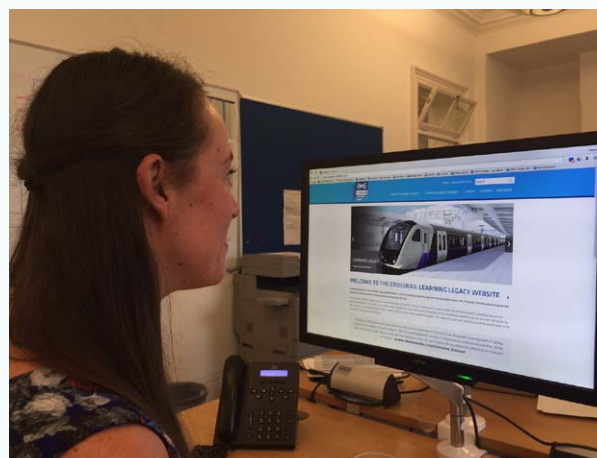
The Crossrail Learning Legacy opened in February 2016 with the project committed to sharing its learning throughout its life cycle, not just when the project has been finished. The Learning Legacy provides recent and ongoing examples of good practice in construction and other areas of project delivery through a website available to all project professionals both across government and externally. Crossrail's ambition is for its Learning Legacy approach to be recognised as leading edge in the industry.

The IPA fully supports Crossrail's approach to sharing learning with the construction sector, particularly with major UK PLC projects. We are actively engaged with the projects, departments, professional bodies and academia to promote this valuable and helpful resource outside government.



*“The IPA is wholly committed to ensuring that the UK delivers major infrastructure projects efficiently and effectively. The creation of a learning environment is vital to improving project performance, and we see Crossrail’s Learning Legacy as an impressive example of best practice. We encourage all project professionals both within government and outside to draw on this excellent resource; the more we can learn from the experience of others, the closer we will come to flawless project execution.”*

**Tony Meggs**, Chief Executive, IPA



*“With the construction of Crossrail, over 70% complete, on time and on budget, we are learning from their good practice and using their experience to inform the development of HS2.”*

**David Prout**, SRO, HS2

The Department for Transport's Crossrail Sponsor Team recently conducted a cross-programme governance review that demonstrated that other projects, such as HS2 and the Thames Tideway Tunnel, have already learnt from Crossrail. This best practice will continue to be shared to benefit future major investment programmes.

‘We set up the Crossrail Learning Legacy to help other projects benefit from our experience. Sharing knowledge and experience is an essential part of delivering a good project, and it’s gratifying to think that other major projects are already benefiting from our experience, just as we benefited from the experience of others.’ says Martin Buck, Director, Crossrail

‘For example, when Crossrail was established, the team refined the models of the Channel Tunnel Rail Link and Olympic Delivery Authority to set up a special purpose vehicle which separated sponsorship from delivery.

‘We established our learning legacy some three years before the completion of the project. This has ensured that the learnings from the completion of the early stages of our programme are available to the major projects that will follow.’

## Developing the project delivery profession

Continuing the MPA's agenda, the IPA is working with departments to develop the capability of our people so that the government excels in delivering projects for the public good.

To do this, we must attract and retain the best people, provide a rewarding career, support continuous professional development and shape a community people want to feel part of, and can be inspired by. We must also enable departments to develop their people so that they can deliver projects effectively and efficiently.

We are focusing on the following areas:

- **Leadership:** we have established and embedded the 'Project Delivery Head of Profession' role in departments. The Heads of Profession are working together to provide strong visible leadership to professionals across government. Developing future project leaders also requires bringing in the right new recruits. To do this, the IPA launched the Project Delivery Fast Stream in September 2015 which has identified 39 recruits for the Autumn 2016 intake. We launched Project Delivery Fast Track apprenticeships in March 2016 and we aim to identify 62 recruits to start in Autumn 2016.
- **Structure:** we are working with departments to create a 'Project Delivery Capability Framework' for the profession, that they can use from summer 2016. The Capability Framework consists

of a 'Career Ladder', a set of 'Professional Competencies' and related 'Development Options'.

- **Professional development:** departments are implementing the IPA's recently developed 'Profession Talent Management Strategy'. The CEO of the IPA chairs the Senior Talent Board, which for the first time has a view of the 200 top project leaders across departments (previously only individual departments had this information about their own staff). We can now directly support their professional development and, through our brokering service, ensure the right people are in the right jobs.
- **Brokering:** The IPA has established a brokering and recruitment 'on demand' service designed to map the right people to key vacancies. To do this we use insights gained from the talent management process described above, individual career conversations and MPLA assessments to connect internal people to posts. Where we cannot find the right internal candidates, we provide advice to departments who are using specialist external recruitment advisors.

The 'on demand' service has operated to date in response to individual requests from departments and individual projects, and has already resulted in people being appointed to new roles. We are monitoring the success of these appointments closely.

# Annexes

## Definitions

### Description of delivery confidence assessment (DCA) ratings

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.

### Key of department names

BIS	Department for Business, Innovation and Skills
CO	Cabinet Office
CPS	Crown Prosecution Service
DCLG	Department for Communities and Local Government
DCMS	Department for Culture, Media and Sport
DECC	Department of Energy and Climate Change
DEFRA	Department for Environment, Food and Rural Affairs
DFE	Department for Education
DFID	Department for International Development
DFT	Department for Transport
DOH	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
NS&I	National Savings and Investment
ONS	Office for National Statistics

### Key to years used in charts

<b>AR 2013</b>	2012-13 Report. Published in 2013 using data as at September 2012
<b>AR 2014</b>	2013-14 Report. Published in 2014 using data as at September 2013
<b>AR 2015</b>	2014-15 Report. Published in 2015 using data as at September 2014
<b>AR 2016</b>	2015-16 Report. Published in 2016 using data as at September 2015

## Annex A

# The data on the Government Major Projects Portfolio

Under the government's commitment to transparency, the project data which is used in this report is published by departments at the same time as the publication of the Annual Report.

This data comprises the IPA's DCA, financial data, schedule data and departmental commentary on each project in the portfolio. We publish the data annually at least six months in arrears and this year's report reflects the position as at 30 September 2015. This is the fourth year for which data has been published.

This annex provides analysis of the data in addition to that included in the main body of the report.

Exemptions from publishing this data are only agreed under exceptional circumstances and where they are in line with freedom of information requirements. This year, 12 projects requested an exemption for some of their data. Of these requests, the majority were based on commercial concerns, where publication could be detrimental to ongoing negotiations and harm the government's ability to secure value for money for the taxpayer. In a small number of the most sensitive projects, exemptions were made on the grounds of national security.

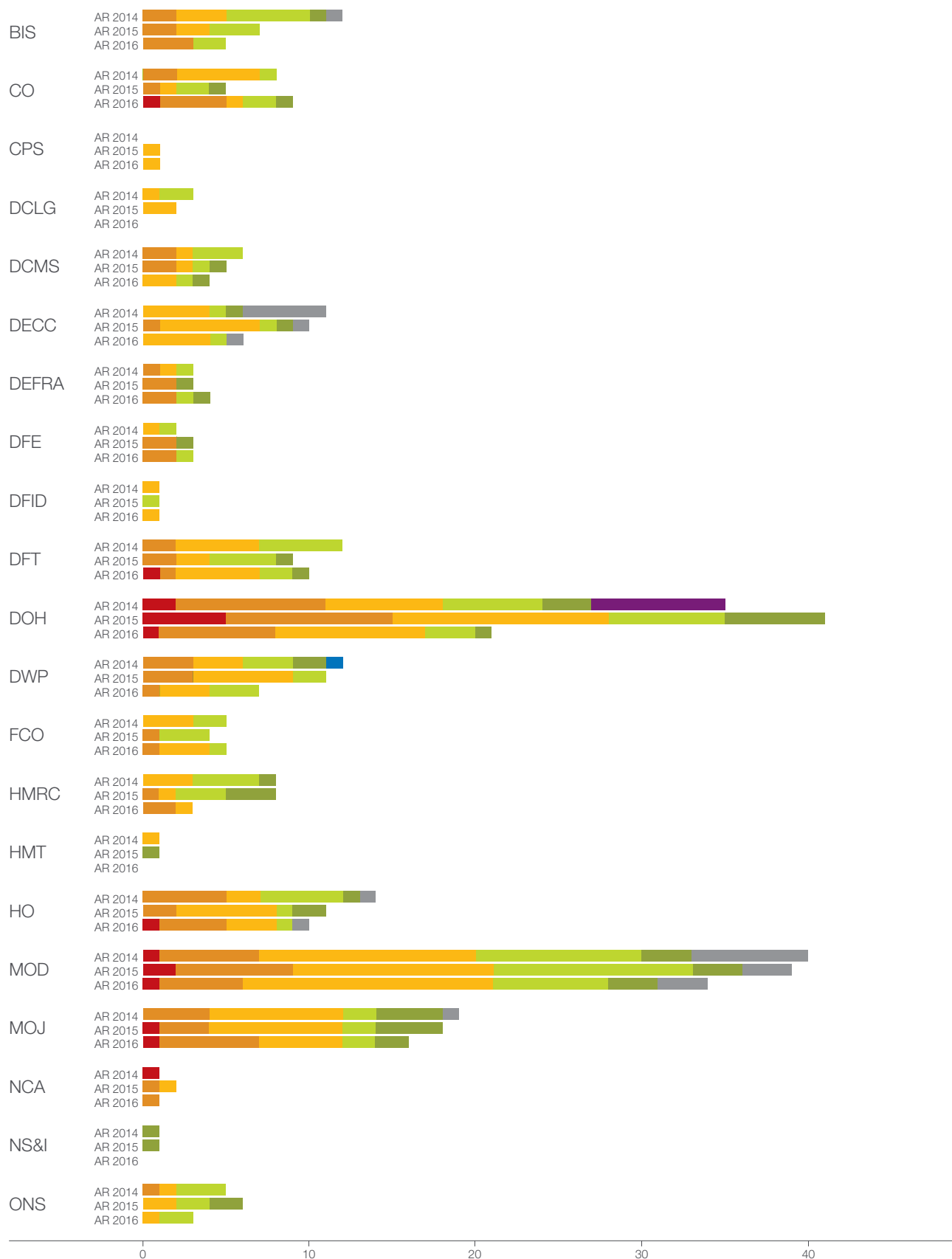
### Interpretation

Some care is required in making direct comparisons between the data we use and publish each year as part of our Annual Report, due to the nature of the portfolio as a variable grouping of projects which changes from year to year, rather than as a fixed portfolio with a determined lifetime. This is clearly visible in Figure 1 on page 5, where the number of projects within departments has changed year on year since the first Annual Report. Only 69 of the 191 projects reported on in the first annual report are still on the GMPP, and 76 projects have left since last year.

### Delivery confidence

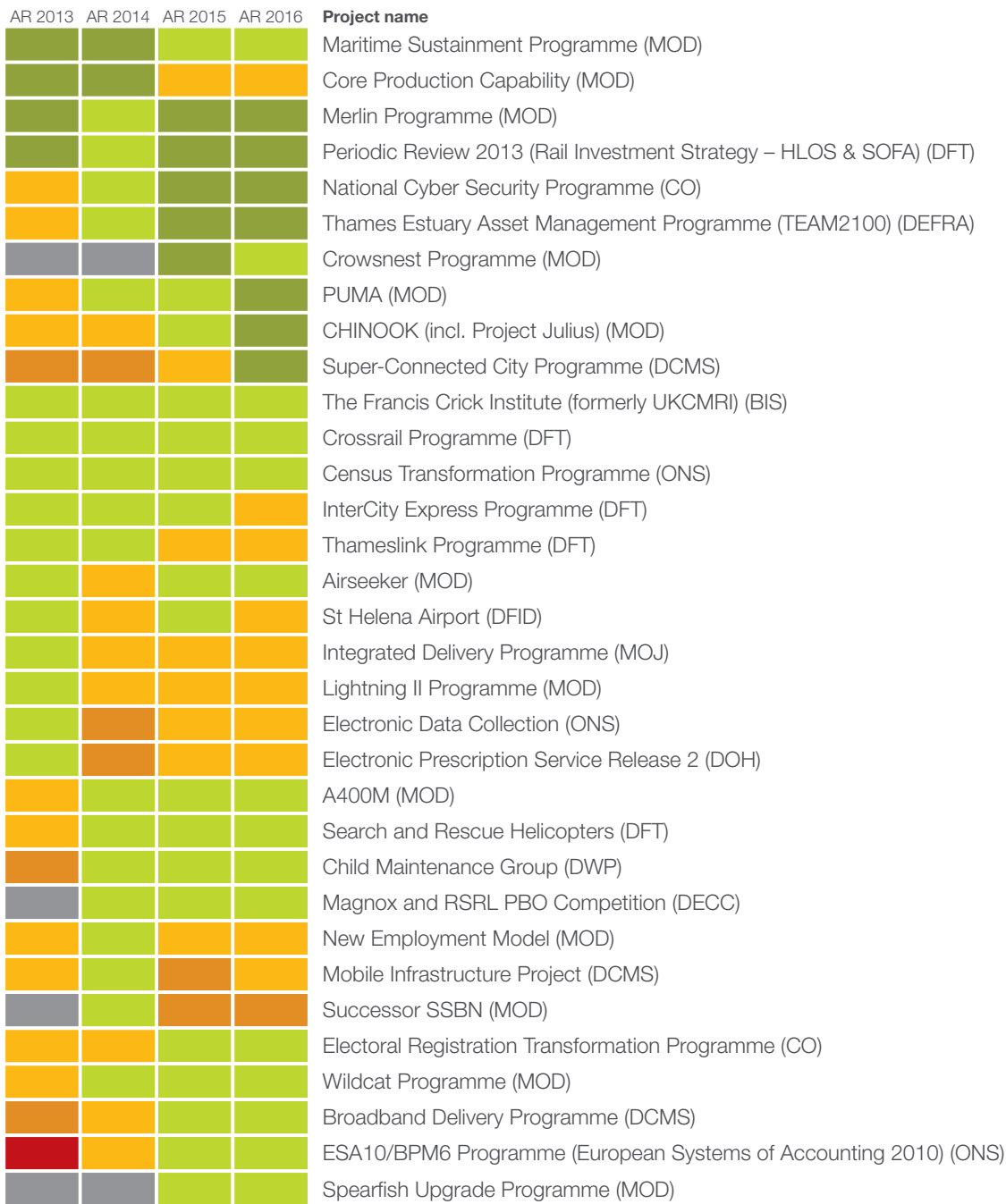
Figure 17 on page 27 shows the distribution of DCA ratings, per department, across successive Annual Reports for the past three years.

As discussed in the main body of the report, this year has seen a significant reduction in the overall number of projects on GMPP, with certain departments such as DECC, DOH and DWP successfully delivering or restructuring significant proportions of their portfolio since last year. The large reduction within DOH partly reflects the removal of nine capital projects where it was agreed that hospital trusts were responsible for organising their own assurance under the oversight of their normal governance structures. Another eight DOH projects were completed successfully.



**Figure 17 DCA of major projects by department for Annual Reports AR 2014 to AR 2016**

Red Amber/red Amber Amber/green Green Exempt Reset No DCA Left



**Figure 18** Progress of the 69 projects that have remained on the GMPP since AR 2013 and their DCAs<sup>7</sup>

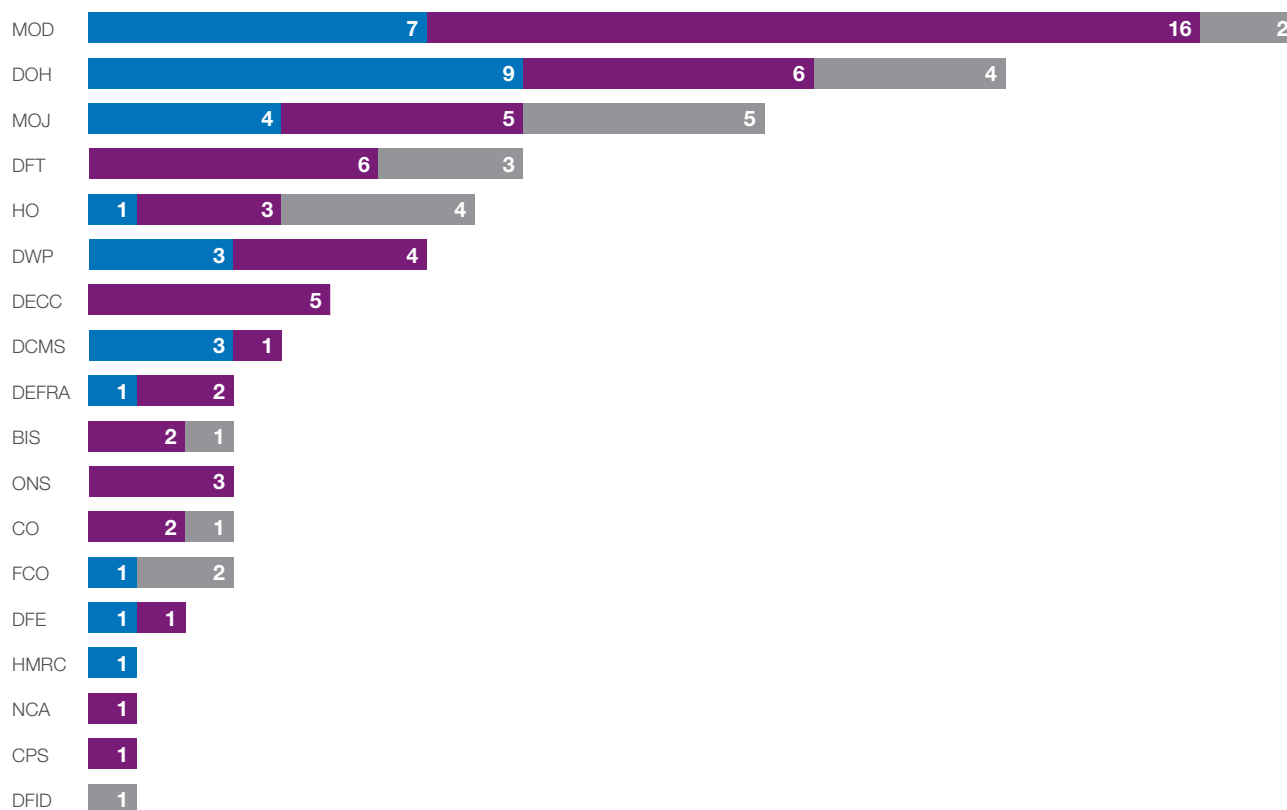
Figure 18 shows the movement in DCA ratings of the 69 projects which have remained on the GMPP since the 2012 Annual Report. This shows, as expected, that the DCA of individual projects varies over time. The number of projects where the DCA has improved, those where there is no overall change, and those

where the DCA has worsened, are roughly the same. The number of projects where the DCA has worsened to red or amber/red, however, is less than 16% and the rating of 26% of projects has improved from red or amber/red to amber or better. This reflects the general trend of improvement in DCA ratings as projects move through their life cycle towards completion.

<sup>7</sup> Project descriptions are in Annex B starting on page 34

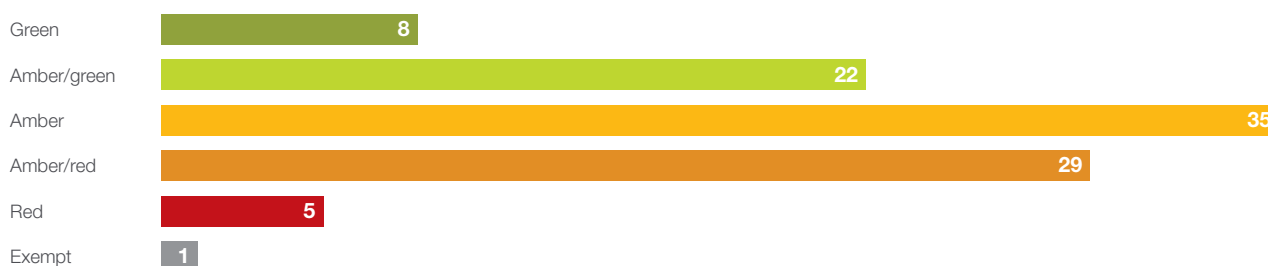
AR 2013	AR 2014	AR 2015	AR 2016	Project name
Amber	Amber	Amber/green	Amber	ABUJA New Office and Residence (FCO)
Amber	Amber	Amber/green	Amber/red	HMCTS Compliance and Enforcement Services Project (MOJ)
Amber	Amber	Amber/green	Amber/red	UKERP (FCO)
Red	Amber/red	Amber/green	Amber	WATCHKEEPER (MOD)
Amber	Amber	Amber/red	Amber/green	SIS II Programme (HO)
Amber	Amber	Amber/red	Amber/green	ICT Re-procurement (FCO)
Amber/red	Amber/red	Amber	Amber/green	Fraud, Error and Debt Programme (DWP)
Exempt	Exempt	Amber	Amber/green	MARSHALL (MOD)
Amber	Amber	Amber	Amber	Complex Weapons (MOD)
Amber	Amber	Amber	Amber	Automatic Enrolment Programme (DWP)
Amber	Amber	Amber	Amber/red	Future IT Sourcing Programme (MOJ)
Amber	Amber	Red	Amber	NOMS ICTS Services Programme (MOJ)
Amber	Amber	Amber/red	Amber/red	Astute Boats 1-7 (MOD)
Amber	Amber	Amber/red	Amber/red	CAP Delivery Programme (DEFRA)
Amber	Amber	Amber/red	Amber/red	CSC Local Service Provider Delivery Programme (DOH)
Amber	Amber/red	Amber	Amber	Communications Capabilities Development Programme (HO)
Amber	Amber/red	Amber	Amber	PHE Science Hub (DOH)
Amber	Exempt	Amber	Amber	Logistics Commodities Services Transformation (MOD)
Amber	Amber/red	Amber	Amber/red	Disclosure and Barring Service Programme (HO)
Amber	Amber/red	Amber	Red	Electronic Monitoring (MOJ)
Exempt	Amber	Amber	Amber	Geological Disposal Facility Programme (DECC)
Exempt	Amber	Amber	Amber	Smart Meters Implementation Programme (DECC)
Exempt	Amber	Amber	Amber	Carbon Capture and Storage Commercialisation Programme (DECC)
Amber/red	Amber	Amber/red	Red	Shared Services Implementation Programme (DFT)
Exempt	Amber/red	Amber	Amber	Emergency Services Mobile Communications Programme (ESMCP) (HO)
Amber/red	Amber/red	Amber	Amber/red	ICR Monetisation (BIS)
Red	Amber/red	Amber	Amber/red	MOJ Shared Services Evolve (SS Evolve) Programme (MOJ)
Amber/red	Reset	Amber/red	Amber	Universal Credit Programme (DWP)
Exempt	Amber/red	Amber/red	Amber	Tate Modern Project (DCMS)
Red	Red	Amber/red	Amber	Queen Elizabeth Programme (MOD)
Amber/red	Amber/red	Amber/red	Amber/red	High Speed 2 (DFT)
Amber/red	Amber/red	Amber/red	Amber/red	Personal Independence Payment (DWP)
Exempt	Exempt	Amber/red	Amber/red	Project Eagle (formerly Urenco Future Options) (BIS)

■ Red  
 ■ Amber/red  
 ■ Amber  
 ■ Amber/green  
 ■ Green  
 ■ Exempt  
 ■ Reset  
 ■ No DCA  
 ■ Left



**Figure 19** Major projects by change in DCA of the 112 projects that remained on the GMPP since last year

Improved No change Worsened



**Figure 20** DCA ratings of projects currently scheduled to finish by April 2020

Figure 19 provides the DCA change from last year of the 112 projects that have remained on the GMPP, by department. This shows that projects with worsening DCAs are in the minority at 21%, including projects where the DCA has dropped from green to amber/green or amber, and amber/green to amber.

For most departments, the DCA of the majority of their projects has improved or stayed the same.

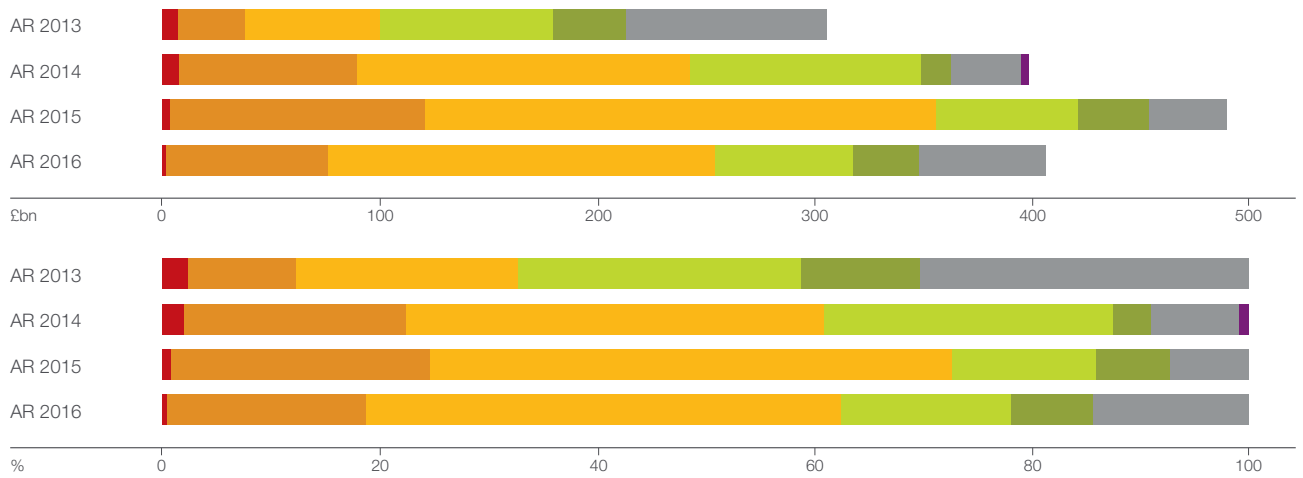
Figure 20 shows the DCA of projects scheduled to finish by April 2020. 67% of these projects are rated amber or better (also see Figure 4 on page 9). This is despite the entry onto GMPP of 13 projects rated

amber/red or red (Figure 11 on page 15).

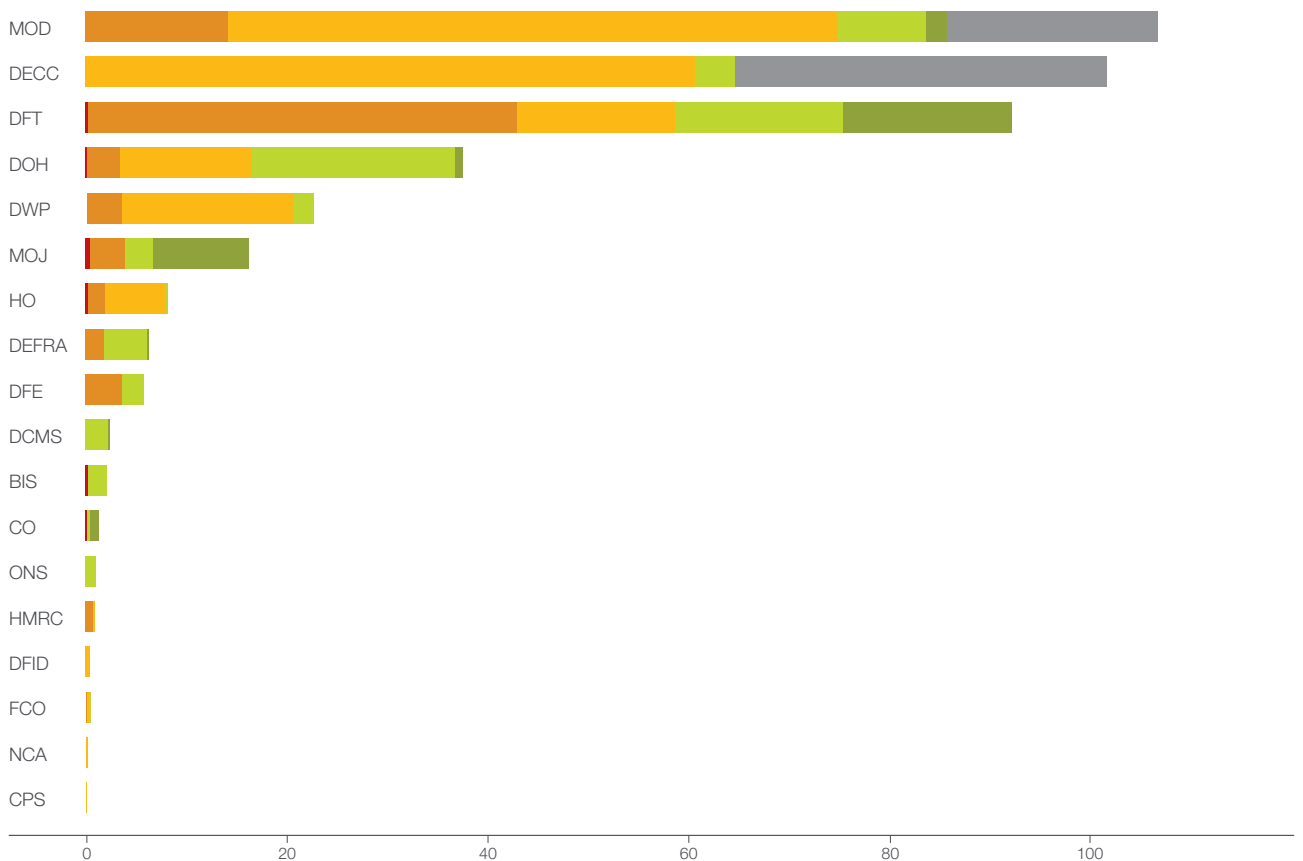
As noted in the main body of the report, the total whole life cost of projects on the GMPP reporting financial data has dropped to £405bn, a drop of £84bn since last year. Figure 21 on page 31 shows how the total whole life cost has varied at each Annual Report date and further breaks this out by DCA rating (absolute value and proportion).

Whilst the overall value of the GMPP has decreased significantly, the proportion of total whole life cost attributed to red and amber/red rated projects has remained minimal throughout. Although six projects were





**Figure 21** Total whole life cost by absolute value broken into the total budgeted whole life cost associated with each DCA rating



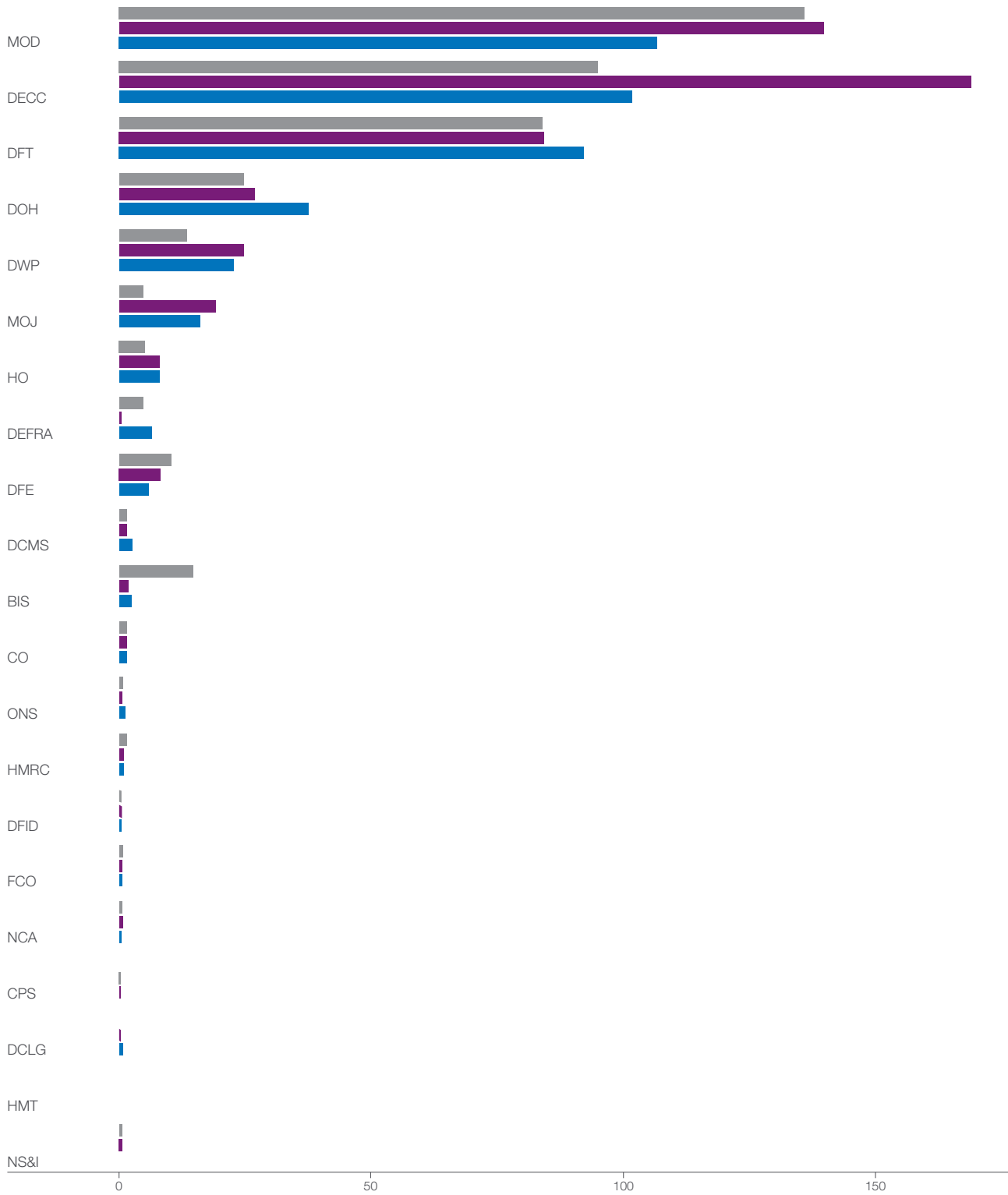
**Figure 22** Total whole life cost by absolute value for each department, broken into the total budget whole life cost associated with each DCA rating for AR 2016 (£bn)

Red Amber/red Amber Amber/green Green Exempt Reset No DCA Left

rated red at 30 September 2015, they make up only 0.3% of the total whole life cost of the GMPP at this date.

Figure 22 further breaks down the costs by DCA at departmental level. This shows that red and

amber/red rated projects generally represent a small proportion of overall departmental whole life costs. The DFT is an exception in that 46% of its total whole life cost is attributable to one project, HS2, which at 30 September 2015 was rated amber/red.



**Figure 23** Total whole life costs of major projects by department, AR 2014 to AR 2016  
 Ordered by total whole life cost in AR 2016 (£bn)

AR 2014 AR 2015 AR 2016

Department	Number of major projects		Whole life cost excluding exempt data (£m)	
	AR 2015	AR 2016	AR 2015	AR 2016
BIS	7	5	£1,770	£2,160
CO	5	9	£1,515	£1,286
CPS	1	1	£184	£144
DCLG	2	0	£273	£0
DCMS	5	4	£1,452	£2,364
DECC	10	6	£168,901	£101,453
DEFRA	3	4	£473	£6,360
DFE	3	3	£8,306	£5,690
DFID	1	1	£445	£445
DFT	9	10	£84,119	£92,146
DOH	41	21	£26,844	£37,472
DWP	11	7	£24,852	£22,683
FCO	4	5	£409	£429
HMRC	8	3	£835	£913
HMT	1	0	£0	£0
HO	11	10	£7,951	£8,012
MOD	39	34	£139,617	£106,645
MOJ	18	16	£18,923	£16,081
NCA	2	1	£695	£152
NS&I	1	0	£722	£0
ONS	6	3	£634	£1,063
<b>Total</b>	<b>188</b>	<b>143</b>	<b>£488,921</b>	<b>£405,497</b>

**Table 2** Departmental data showing how the GMPP has changed in both size and value<sup>8</sup>

Figure 23 on page 32 and Table 2 show the value of projects on the GMPP by department for annual reports 2015 and 2016. This shows which departments' projects represent the majority of GMPP investment and where there have been significant changes in whole life costs over the last year.

For instance, there has been a 40% decrease in the value of DECC's GMPP projects since last year. This is mostly attributable to the successful transition into 'business as usual' of the Electricity Market Reform project and the FID Enabling for Renewables

programme. Similarly, the MOD has seen a 23% reduction in its GMPP portfolio value. This is due to a mixture of projects being completed, projects being disaggregated or their projects passing back to the MOD to finalise transitions to business as usual within their own assurance processes.

Some departments have seen increases in their portfolio total whole life cost. For instance, DOH has seen an increase of 40% by value as project teams have clarified and firmed up their budgets, or where they have rescoped existing programmes.

<sup>8</sup> Individual lines do not add up to £405bn due to rounding.

## Annex B

# Projects within the Government Major Projects Portfolio

Annex B includes a brief summary of each of the projects within the Government Major Projects Portfolio as at 30 September 2015. More detailed descriptions of each of the projects are included with the transparency data published by departments at the same time as this Annual Report. This can be found on gov.uk.

Project	Department	Description
BIS	ICR Monetisation	To sell part of the pre-Browne Income Contingent Repayment (ICR) student loan book.
BIS	Local Land Charges (LLC) Programme	Land Registry will create a single, digital LLC service that will improve access, standardise fees and improve turnaround times for property professionals and citizens.
BIS	New Polar Research Vessel	A new polar research ship replacing two ageing vessels and putting UK scientists at the forefront of climate and ocean research in both Antarctica and the Arctic.
BIS	Project Eagle (formerly Urenco Future Options)	To sell the government's one-third shareholding in Urenco, a uranium enrichment company.
BIS	The Francis Crick Institute (formerly UKCMRI)	A new research Institution sustaining the UK's position as a leader in biomedical research.
CO	Commercial Capability Programme	The Commercial Capability Programme will deliver a step change in commercial capability by putting in place the key enablers that will lead to a function which is smaller, aligned with the new functional model for Government, and staffed with professionals who are more capable and confident. To do this we will recruit, retain, develop and grow our own best commercial talent, helping to drive commercial common sense.
CO	Electoral Registration Transformation Programme	To speed up implementation of the Individual Electoral Registration (IER), to tackle electoral fraud, and improve the integrity of the electoral register.
CO	FOXHOUND Programme	Design, development, build and deployment of the cross-government IT shared service to enable working at Secret.
CO	GOV.UK Verify	GOV.UK Verify is the new way to prove who you are online and for public service providers to be assured you are who you say you are.
CO	Government Office Hubs Programme	The Hubs programme will consolidate the office estate by creating a network of large, cross-government strategic hubs and supporting estate.
CO	ISSC1	The ISSC1 shared services programme will transform back office operations by consolidating transactional services and by sharing HR, procurement, finance and payroll functions which will deliver more efficient and cost-effective services.
CO	ISSC2	The ISSC2 shared services programme will transform back office operations by consolidating transactional services and by sharing HR, procurement, finance and payroll functions which will deliver more efficient and cost-effective services.
CO	National Cyber Security Programme	To give the UK a strategic advantage in cyber security and resilience.
CO	New Civil Service 2015 Pension Scheme Implementation	To manage the successful delivery of the new pension arrangements against published timetables.
CPS	ICT Restructure Programme	To provide, through the procurement and appropriate extension of contracts, continuity of operations for ICT services for the Crown Prosecution Service beyond Nov 15.
DCMS	Broadband Delivery Programme	To provide superfast broadband to 95 per cent of premises in the UK and to provide universal access to standard broadband with a speed of at least 2Mbps.
DCMS	Mobile Infrastructure Project	To provide economic growth through the extension of mobile voice coverage where existing mobile network coverage is poor or non-existent.

Project	Department	Description
DCMS	Super-Connected City Programme	To Invest £150m in 22 UK cities, with an extension to a further 28 cities, to provide them with the digital infrastructure capability they need to remain internationally competitive and attractive places to invest, visit and do business.
DCMS	The Tate Modern Project	To provide a unique public space for a rich collection of international art, combined with educational initiatives for diverse audience groups.
DECC	Carbon Capture & Storage Commercialisation Programme	To support practical experience in the design, construction and operation of commercial-scale CCS power generation.
DECC	FID Enabling for Hinkley Point C	To enable EDF to reach a Final Investment Decision to build a new nuclear power station at Hinkley Point
DECC	Geological Disposal Facility Programme (GDF)	To site and construct a permanent geological disposal facility (GDF) as the safe, secure and environmentally responsible solution to the long-term management of higher-activity radioactive waste in the UK, excluding Scotland.
DECC	Magnox & RSRL PBO Competition	The objective of the procurement is to secure a reduction in the cost and time to take multiple sites in the UK to their interim end state by securing a new Parent Body Organisation (PBO) for the Site Licence Company (SLC).
DECC	Sellafield Model Change (SMC)	Changing the model for engaging the private sector at the Sellafield Site from the current Parent Body Organisation model to a new Market Enhanced Site Licenced Company.
DECC	Smart Meters Implementation Programme	To provide every home in Great Britain with smart electricity and gas meters by 2020.
DEFRA	CAP Delivery Programme	To procure a solution for the processing, payment and accounting of claims for funding from all schemes as part of CAP2013.
DEFRA	DEFRA UNITY PROGRAMME	DEFRA UNITY programme has been established to exploit the opportunity presented from the expiry of its two largest ICT contracts within the next three years to develop a delivery mechanism leveraging good outcomes in a multi vendor environment. .
DEFRA	Thames Estuary Asset Management Programme (TEAM2100)	Provides a strategy for protecting London and the Thames Estuary from tidal flooding to the year 2100 and beyond.
DEFRA	Thames Tideway Tunnel	Thames Tideway Tunnel is the most cost effective, comprehensive and timely solution to address the problem of combined sewer overflows into the Thames in London, and is due for completion in 2023.
DFE	Priority School Building Programme 1 (PSBP1) – Capital	To rebuild or refurbish the 260 schools in the worst condition across England. 46 schools are being funded through private finance and 214 schools through capital grant funding.
DFE	Priority School Building Programme 2	To rebuild or refurbish individual school buildings (or blocks) in the worst condition across 278 schools in England.
DFE	Priority School Building Programme – Private Finance	To rebuild or refurbish the 260 schools in the worst condition across England. 46 schools are being funded through private finance and 214 schools through capital grant funding.
DFID	St Helena Airport	To Establish sustainable air services to St Helena to promote economic development and increased financial self-sufficiency, leading eventually to graduation from UK budgetary support.
DFT	A14 Cambridge to Huntingdon Improvement Scheme	To improve the A14, which is a major national and inter-urban regional transport artery, between Cambridge and Huntingdon to relieve congestion and support both national and regional economic growth.
DFT	Crossrail Programme	A new high-frequency rail service which will increase rail based capacity in London by 10% and cut journey times across London and the South East.
DFT	High Speed Rail Programme (HS2)	A new, fully integrated, high speed North-South railway.
DFT	InterCity Express Programme (IEP)	Intercity Express Programme serves London to Bristol, Cardiff, Swansea, Cheltenham and Worcester and London to Leeds, Edinburgh and Aberdeen. It offers through-trains from non-electrified lines without the need to change or attach a locomotive.
DFT	Lower Thames Crossing	The project shall examine the case for additional river crossing capacity in the Lower Thames area and the relative merits of viable options.

Project	Department	Description
DFT	Periodic Review 2013 (Rail Investment Strategy – HLOS & SOFA)	A High Level Output Specification (HLOS) setting out information about what the Secretary of State wants to be achieved by railway activities during Railway Control Period 5 (1 April 2014 to 31 March 2019); and a Statement of Funds available (SoFA), setting out the public funds that are or are likely to become available to secure delivery of the HLOS
DFT	Rail Franchising Programme	To secure the provision of passenger rail services as set out under the Railways Act 1993 (as amended) by letting Rail Franchises.
DFT	Search and Rescue Helicopters	To manage the delivery of a Search and Rescue Helicopter contract for the provision of search and rescue helicopter services for the UK.
DFT	Shared Services Implementation Programme	To centralise transactional functions for Finance, Human Resources, Payroll and Procurement into two Independent Shared Service Centres
DFT	Thameslink Programme	To provide faster and more reliable journeys for people and businesses and improved accessibility and capacity, from and through the heart of London.
DOH	100,000 Genomes Project	To deliver the Prime Minister's commitment to sequence 100,000 whole human genome samples by December 2017.
DOH	BT LSP	To support IT enabled transformation in the NHS in London and the South to create a more efficient, joined-up and patient-led health service.
DOH	care.data	Will ensure that there is more rounded information collected and made available to citizens, patients, clinicians, researchers and the people that plan health and care services.
DOH	Care and Support Implementation Programme	A major change programme across 152 local authorities to deliver the White Paper commitments and implementation of the Care Act.
DOH	Childhood Flu Immunisation Programme	To extend the current flu programme to children aged two to less than 17 years as part of DOH legal obligations, under the 2010 NHS Constitution
DOH	CSC Local Service Provider (LSP) Delivery Programme	To assure the investment cases of NHS trusts investing in CSC's electronic patient record system, Lorenzo, and to manage the exit and transition from the CSC contract for healthcare organisations across the North, Midlands and East of England.
DOH	Electronic Prescription Service (EPS) Release 2	The Electronic Prescription Service enables prescribers – such as GPs and practice nurses – to send prescriptions electronically to a dispenser (such as a pharmacy) of the patient's choice. This makes the prescribing and dispensing process more efficient and convenient for patients and staff.
DOH	General Practice System of Choice (GPSoC) Replacement	To establish commercial and management arrangements for General Practitioners IT; develop new IT functionality that responds to the evolving needs of patients, practices and commissioners and the wider NHS; and improve the security of patient data.
DOH	Health & Social Care Network	The Health & Social Care Network is the programme set up, on behalf of health and social care, to deliver a successor service when the current N3 service ends.
DOH	Health Visitor Programme	To expand the health visiting service which is intended to: improve health and wellbeing outcomes for under-fives; reduce health inequalities; improve access to services; improve the experience of children and families
DOH	Liaison and Diversion Programme	Investing in Liaison and Diversion services to screen, assess and refer offenders at the earliest possible point of the criminal justice system into relevant treatment and support, with information from assessments subsequently fed into the criminal justice process to be used to inform decisions about justice outcomes, charging, prosecution and sentencing.
DOH	National Pandemic Flu Service	To re-procure the National Pandemic Flu Service to ensure that a complementary service to primary care remains ready to be mobilised to enable the rapid distribution of antivirals to symptomatic patients
DOH	National Proton Beam Therapy (PBT) Service Development Programme	To develop a full Proton Beam Therapy service in England
DOH	NHS Choices	To improve the NHS Choices national digital service to deliver further savings through development of a replacement digital service using open source and commodity technologies, re-using and sharing code with GOV.UK and tightly focusing the new service on user needs.
DOH	NHS Electronic Staff Record Reprocurement Project	The NHS Electronic Staff Record (ESR) provides payroll and HR services to all NHS organisations in England and Wales, apart from two English NHS Trusts. The NHS ESR Re-procurement Project has been established to replace the expiring McKesson UK contract to provide this service

Project	Department	Description
DOH	NHS e-Referral Service	The provision, development and implementation of a new NHS e-Referral Service to succeed the existing Choose and Book service and enhance the use of paperless referrals
DOH	NHS Pension Re-let	To replace the NHS pension contract that is to expire, ensuring there is no break in the Secretary of State's ability to meet statutory requirements to offer the NHS Pension scheme.
DOH	NHS Procurement Efficiency Programme	Will support the NHS to harness its purchasing power, reduce variations in prices paid for products of the same quality, share best procurement practice, and improve its procurement capacity.
DOH	NHSmail 2	NHSmail 2 provides a successor email, calendar, directory, fax and SMS to the NHS in England and Scotland once the current NHS Mail contract ends. It will also provide a national relay service enabling NHS organisations in England, Scotland and Wales to communicate.
DOH	PHE Science Hub	The establishment of a new science hub including laboratories at Harlow as the national source of advice and expert science on protecting and improving the public's health.
DOH	Visitor and Migrant NHS Cost Recovery Programme	To improve cost recovery, from visitors and migrants from both EEA and non-EEA members states, in England to ensure that the NHS receives a fair contribution for the cost of the healthcare it provides.
DWP	Automatic Enrolment Programme (originally called Enabling Retirement Savings Programme)	This programme was set up to implement the government's workplace pension reforms. The overarching aim of the reforms is to get more people saving more for their retirement.
DWP	Child Maintenance Group	Delivers two critical changes to the policy and regulations which both simplify the approach to child maintenance calculations and provide a new IT platform on which to administer it.
DWP	Fit for Work (formally Health & Work Service) Programme	Will deliver a supportive Occupational Health assessment and general health and work advice to employers and General Practitioners whilst abolishing the Percentage Threshold Scheme and Statutory Sick Pay record keeping requirements.
DWP	Fraud, Error and Debt Programme	The programme aims to deliver the means to prevent fraud and error; detect and correct fraud and error; deliver tough punishments for those who defraud the system; and deter those who would try to abuse the system in future.
DWP	New State Pension Project	This project, working with HMRC, will introduce the new single state pension, and end both Savings Credit and the contracting-out from defined benefit pension schemes.
DWP	Personal Independence Payment	The programme introduces the Personal Independence Payment which replaces Disability Living Allowance for people aged 16-64. It is aimed at those disabled people who face the greatest challenge to remaining independent and participating in society.
DWP	Universal Credit Programme	The programme will merge six separate benefits and tax credits for working age people bringing together in and out of work systems into one system that attempts to make work pay for everyone.
FCO	ABUJA New Office and Residence	To provide fit for purpose and secure offices for the British High Commission in Abuja, Nigeria.
FCO	ICT Re-procurement	To maintain continuity of business critical ICT services as the existing contract expires by procuring new contract(s).
FCO	Movement of Personal Effects Contract	To provide the continuation of the movement of personal effects (e.g. Heavy Baggage, UAF, Car Freight) to HMG staff and their dependents posted overseas.
FCO	Technology Overhaul	Technology Overhaul looks to modernise the Foreign and Commonwealth Office's main IT system. It will provide flexibility and mobility across the FCO global network, using devices based on business needs that provide video-conferencing, WiFi and 3/4G connectivity.
FCO	UKERP	To maximise the efficiency of the FCO's London estate by consolidating its core activities into the main building on King Charles Street.
HMRC	Columbus (formerly Aspire Replacement Programme)	To manage the safe exit from the ASPIRE IT contract which expires in June 2017 and to transition to a new IT operating and sourcing model, enabling HMRC's digital and data transformation.
HMRC	CUSTOMS DECLARATION SERVICES (CDS) Programme	This project seeks to replace the current service delivery system for the Customs Handling of Import and Export Freight service (CHIEF).
HMRC	Tax-Free Childcare	Will provide 20 per cent of working families' childcare costs, subject to an annual limit of £2,000 contribution from the Government for each child.

Project	Department	Description
HO	Adelphi Modernisation Programme	To update the current Adelphi system and transactional processes, this is part of the Cabinet Office Shared Services Programme to improve transactional services to offer benefits in term of cash savings through economies of scale, whilst improving user experience.
HO	Communications Capabilities Development Programme	Ensure that the police, wider law enforcement, security and intelligence agencies can lawfully obtain, manage and use communications data and intercepted content to: detect, prevent and disrupt crime, protect the public and save lives.
HO	Cyclamen Project	Cyclamen equipment provides the capability to detect and intercept, and thereby deter the illicit movement of radiological materials into the United Kingdom.
HO	Disclosure and Barring Service (DBS) Programme	To deliver a phased deployment of a modernisation of Disclosure and Barring services for employment checks from April 2015 onwards.
HO	Digital Services at the Border	To deliver digital services that will provide systems capable of enabling Border Force to transform the way it operates.
HO	Emergency Services Mobile Communications Programme (ESMCP)	To replace the mobile communications service used by police, fire and ambulance emergency services in England, Scotland and Wales and other public safety users with an Emergency Services Network provided on a commercial mobile network enhanced to meet the public safety requirements for coverage, functionality, availability and security.
HO	Home Office Biometrics Programme	Home Office Biometrics aims to ensure the continuity of current biometric search and match capability as existing contract service agreements come to an end whilst reducing combined operating costs. The aim is also to create a future Biometric Gateway that allows all Biometric systems to be placed on a single platform that reduces cost, whilst improving efficiency and capability.
HO	Immigration Platform Technologies (IPT)	IPT is the primary response to the Home Secretary's commission for a plan to modernise immigration IT
HO	SIS II Programme	Schengen Information Systems 2 (SIS2) will exchange information on persons and objects wanted for law enforcement purposes
HO	Technology Platforms for Tomorrow	To replace the existing IT service provision for the core Home Office.
MOD	A400M	A versatile airlifter able to perform two types of duty: tactical missions directly to the point of need, and long range strategic/logistic missions.
MOD	Airseeker	To sustain the UK's airborne electronic surveillance capability previously provided by the Nimrod R1 aircraft
MOD	Armoured Cavalry 2025	To deliver an integrated multi-role capability that will include the delivery of AJAX and its training solution into service.
MOD	Armoured Infantry 2026	To deliver an integrated Armoured Infantry capability that will include the Warrior Capability Sustainment Programme and its training solution into service.
MOD	Army Basing Programme	To enable delivery of the Army 2020 force structure, including support to Service Personnel and their families and the provision of required accommodation and infrastructure in the UK, achieving the policy commitment to withdraw the Army from Germany by 2020.
MOD	Army Reserve Development Programme	The utilisation of Reservist Units by the Army as part of efficiencies in the Armed Forces laid out in the White Paper 'Reserves in the Future Force; Valuable and Valued'.
MOD	Astute Boats 1-7	The design, development and manufacture of up to seven Astute class submarines
MOD	Carrier Enabled Power Projection	The focus is the delivery of a Carrier Strike capability by the end of 2020 which is assessed to be the most technically challenging requirement. The other elements of fighting power (amphibious capability and the support shipping) will be managed as key dependencies.
MOD	CHINOOK (incl. Project Julius)	To enable Chinook aircraft to be generated, operated and sustained to at least 2040 within allocated resources. The programme includes projects JULIUS and NEW BUY which aim to upgrade the cockpit and deliver additional aircraft respectively.
MOD	Complex Weapons	To realise an improved, affordable and dynamically adaptable military complex weapons capability which protects sovereignty and assures Operational Advantage
MOD	Contracting, Purchasing and Finance	Contracting, Purchasing & Finance will provide a single online end to end procurement system for all MOD procurement activity. All other processes especially paper based systems will be either replaced or subsumed.



<b>Project</b>	<b>Department</b>	<b>Description</b>
MOD	Core Production Capability	The phased regeneration of the current nuclear core production facilities on the Rolls-Royce Site at Raynesway in Derby, the sustainment of the Core Production Capability and the production, development and manufacture of the nuclear reactor cores to meet Pressurised Water Reactor 2 and Successor technical specifications.
MOD	Crowsnest Programme	Equips 10 Merlin Mk2 helicopters with an advanced airborne surveillance system to meet the requirement for early threat warning and co-ordination of aircraft.
MOD	Cryptographic Enabling Services	To support the Department's information assurance capability.
MOD	EMPORIUM	To provide a suite of cost-effective enterprise-wide application hosting capabilities, covering all security domains, to support current and future applications needs.
MOD	Future Beyond Line Of Sight	To maintain the current satellite communications network and develop a successor capability.
MOD	GRAPEVINE 1	To deliver a cost effective and modern 'New Style of IT' across the Defence estate.
MOD	GRAPEVINE 2	To provide Defence's Global Connectivity and Integrated User Service requirements e.g. Wide Area Networks, Telephony and Video Teleconferencing.
MOD	Lightning II Programme	To deliver a multi-role, carrier-capable aircraft, to be operated jointly by the Royal Air Force and Royal Navy.
MOD	Logistics Commodities Services Transformation	The Logistics, Commodities and Services (LCS) Operating Centre in the MOD provides commodity procurement, storage and distribution services for the armed forces. This programme is designed to undertake a major reform of the LCS, developing a service of the right size for current military requirements and reducing cost through upgrades to both the inadequate current facilities, and the modernisation of the processes in operation.
MOD	Maritime Sustainment Programme	The Military Afloat Reach and Sustainability (MARS) Tankers will replace the current single hulled tankers operated by the Royal Fleet Auxiliary.
MOD	MARSHALL	To provide a Terminal Air Traffic Management capability for Defence that will ensure that core air traffic functions continue to be provided, obsolete equipment is replaced, and new regulatory conditions are met.
MOD	Merlin Programme	Updates 30 Merlin Mk1 aircraft to overcome existing and forecast obsolescence to ensure sustainment of the required capability until the planned out of service date
MOD	New Employment Model	To design and deliver a New Employment Model for Regular and Reserve Service Personnel that supports Operational Capability while being sufficiently attractive to recruit and retain personnel of the right quality and enables agility through improved organisational efficiency, flexibility and adaptability.
MOD	Nuclear Warhead Capability Sustainment Programme	To deliver and sustain the capability (skills, technology, science, personnel, production and support) to underwrite the UK nuclear warhead stockpile now and in the future, including transition to Mk4A and future possible warhead provision.
MOD	Operational Information Services	To provide a flexible and robust solution that will deliver operational information services to Land, Air, Maritime and Joint users in the deployed environment.
MOD	PUMA	To enable Puma to be generated, operated and sustained out to 2025
MOD	Queen Elizabeth Programme	To deliver two Queen Elizabeth Class aircraft carriers.
MOD	Spearfish Upgrade Programme	To update the UK's submarine heavyweight torpedo. Safety improvements are required to ensure residual risks remain as low as reasonably practicable and improved performance is required against increasingly capable threats.
MOD	Successor SSBN	The design, development and manufacture of four Successor SSBN Class submarines
MOD	The Materiel Strategy	To design, orchestrate and implement transformational change within Defence Equipment and Support, in order that it can operate more effectively and efficiently within a simplified and improved Acquisition System.
MOD	Type 26 Global Combat Ship Programme	To deliver an interoperable, survivable, available and adaptable capability that is operable globally within the maritime battle space to contribute to sea control for the Joint Force and contribute to maritime force protection with the flexibility to operate across and within the range and scale of operations

Project	Department	Description
MOD	WATCHKEEPER	WATCHKEEPER is an unmanned aerial vehicle (UAV) that will provide battlefield surveillance and reconnaissance capabilities to the land tactical commander within the Joint Operations environment.
MOD	Wildcat Programme	Wildcat has been developed to meet the twin requirements for a dedicated small helicopter for deployment in the Maritime (Surface Combatant Maritime Rotorcraft), and the Littoral and Land environments (Battlefield Reconnaissance Helicopter).
MOJ	CJS Common Platform	Aims to deliver a technology platform which supports business transformation across the Crown Prosecution Service and HMCTS
MOJ	CJS Efficiency Programme Phase 3	To introduce digital working throughout the Criminal Justice System, in particular to deliver the 'digital courtroom'.
MOJ	Crime Change Programme	Aims to process all criminal legal aid in a paperless and electronic environment.
MOJ	Electronic Monitoring	A contractual re-competition that will stimulate the market and increase competition in the provision of electronic tagging systems that exploit the latest technology
MOJ	Future IT Sourcing Programme (FITS)	Aims to deliver a c£95m pa reduction in MOJ ICT operating costs through the design and implementation of a new ICT Operating Model.
MOJ	HMCTS Compliance & Enforcement Services Project	Aims to fully deliver the Criminal Compliance & Enforcement Blueprint and reform the compliance and enforcement activity within HMCTS
MOJ	Integrated Delivery Programme	To improve financial control and replace an ageing case management system, plus improve service for providers and clients by increasing online working and support more efficient ways of working
MOJ	HMCTS Reform	Aims to modernise the infrastructure and transform courts and tribunal services to increase efficiency, improve service quality and reduce the cost to the taxpayer and deliver a better and more flexible service to court users.
MOJ	Legal Aid Transformation	Aims to reduce the cost of legal aid through providing a more efficient service, so as to improve public confidence in the system.
MOJ	NOMS ICTS Services (NIS) Programme (formally part of Quantum Re-compete Project)	To sustain the provision of ICT Services for the National Offender Management Service until the forthcoming Future IT Sourcing contracts are in place and are ready for applicable services to be transitioned.
MOJ	North Wales Prison	To build a new prison in Wrexham (N. Wales) that will be operational by 2017.
MOJ	Prison Unit Cost Programme	To maximise the delivery of savings from public sector prisons over the three years (2013-2016) by reducing operating costs within the agreed specifications.
MOJ	Rehabilitation Programme	To open up rehabilitation services to a more diverse market of private and voluntary sector providers, and introduce payment by results to reward providers for their success in reducing re-offending.
MOJ	Shared Services (ISSC2) Evolve	To deliver a transformation in the approach to the provision of back office services in MOJ.
MOJ	Secure Training Centre (STC) Retendering	The successful retendering and mobilising services for two Secure Training Centre (STC) contracts.
MOJ	Transforming Prisoner Telephony	The project's aims are to secure continuity of the current Telephony Service by negotiating a suitable extension, exit and transition arrangements with the current contract holder, to award a new Service Concession to providing in-cell prisoner telephony and to procure and implement a new Data and Cabling Network.
NCA	Novo (NCA Transformation) Programme	To enable the NCA to embrace and keep pace with rapidly evolving digital technologies, capabilities and methods and to exploit the increasing dependency of organised criminals on internet related information
ONS	Census Transformation Programme	The Census Transformation Programme will deliver 2021 Census and build the evidence to enable a decision about the future provision of population statistics after 2021.
ONS	Electronic Data Collection (EDC)	To develop systems, methods and processes to improve the collection, integration, processing and analysis of business survey data
ONS	ESA10/BPM6 Programme (European Systems of Accounting 2010)	To meet current and new international legal requirements for National Accounts through a series of stepped improvements.

## Annex C

### Assurance reviews and lessons learnt

A key priority for the IPA is to monitor and assure the progress of major projects on the GMPP. Building on the well established Office of Government Commerce (OGC) gateway review process, we have continued to develop a range of assurance reviews to suit the needs of individual projects at appropriate stages of their life cycle.

These are independent reviews undertaken by impartial practitioners who use their experience and expertise to examine the progress and likelihood of successful delivery of the programme or project. We develop and agree the terms of reference for the reviews with the Senior Responsible Owner (SRO) and put together the review teams from a pool of 600 'high-risk' reviewers who all have project delivery experience. We draw these reviewers from across government and from a pool of external experts. We ensure impartiality by choosing independent reviewers who have no vested interest in the outcome of the review or the project.

Reviews generally last three to five days and include a series of individual interviews and a documentation review. The process is designed to provide independent guidance to SROs, programme and project teams and to the departments who commission their work on how best to ensure that their programmes and projects are successful. Reviews are usually scheduled to coincide with key decision points that occur during the life cycles of projects to assist the decision-making process.

The Review Team is asked to assess the delivery confidence of a project based on the evidence gathered during a review, taking into account aims and scope, governance, skills and capability, key processes, external dependencies and capacity of the business to change.

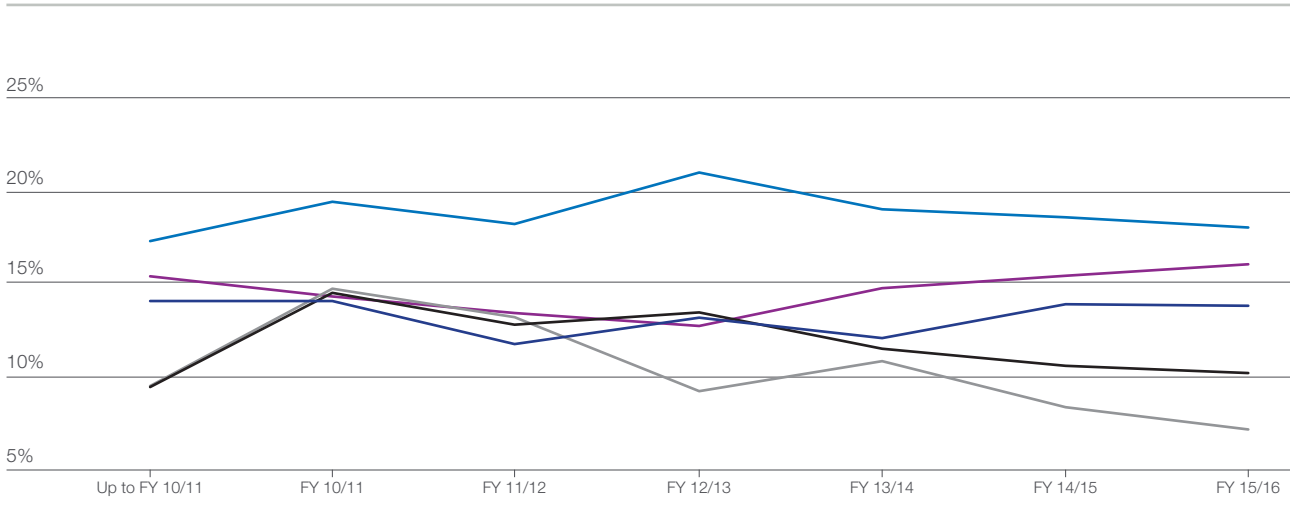
In the period since 2011, more than 1,000 reviews have been conducted on GMPP projects by trained assurance reviewers who make recommendations

to the project SRO about actions which are aimed at improving the project's chances of success. The recommendations are identified as urgent and/or critical and provide a very useful insight into the types of problems or issues encountered by major projects at different stages of their project life cycle. To learn from these, we have created a database with information from the assurance reviews, including the text of all of these recommendations (around 7,000 individual recommendations).

We worked with experienced reviewers to assign the recommendations to one of 12 primary categories to help us identify the most common issues raised by reviewers during their reviews. We then analysed the information in the database to identify the five categories most commonly used (see Figure 24 on page 42). 'Programme and Project Management' was consistently the most common category of issues identified.

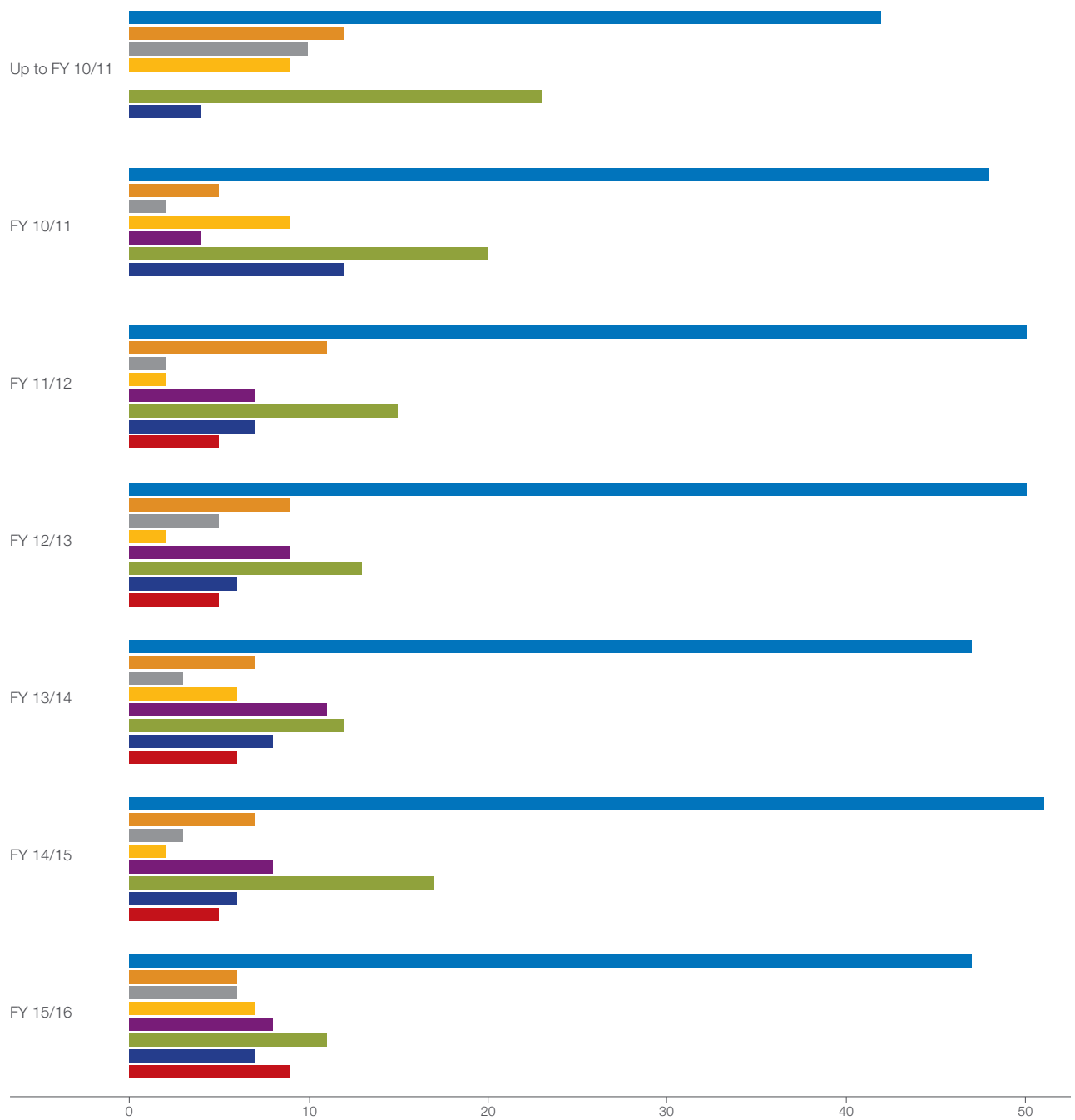
Each of the recommendation categories was also sub-categorised to provide further detail about the key issues being addressed in the recommendation. Analysis of the programme and project management sub-categories (see Figure 25 on page 43) shows that project planning is a key issue for reviewers. As a result, we carried out a review of the narrative text of the recommendations to identify the common themes within project planning.

This analysis is in its early stages, but we are already seeing some themes emerging which will help us focus training, guidance and standards to ensure that the lessons from these reviews are learnt and carried into future projects. We will be analysing these results further by working with academics, professional bodies and others with a view to producing concrete advice around good practice and the potential pitfalls of major project delivery. We will also use this knowledge in the ongoing development of course content for the MPLA and PLP.



**Figure 24 Analysis of primary recommendation categories over time**

— Governance — Programme and project management — Context, aim and scope  
— Risk, issues and dependency management — Resource and skills management



**Figure 25 Programme and project management recommendation sub-category analysis**

■ Planning   
 ■ Controls   
 ■ Change control   
 ■ Quality management   
 ■ Information management  
■ Communications   
 ■ Methodology and standards   
 ■ Requirements definition

Cabinet Office  
70 Whitehall  
London SW1A 2AS

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