

# Annual Report on Major Projects 2017-18

Reporting to HM Treasury and Cabinet Office

Cover image: Francis Crick Institute

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## Foreword

## Minister for Implementation, Oliver Dowden CBE MP and Exchequer Secretary to the Treasury, Robert Jenrick MP





Project delivery is at the heart of all government activity, whether it's building roads and rail, strengthening our armed forces, modernising IT or transforming the way government provides public services to citizens. Over the past year Government has invested in and delivered critical national infrastructure and major projects that are the foundation of our economy. Over the course of this Parliament public investment will reach the highest sustained level in over 40 years. We are building a Britain that is fit for the future and the Infrastructure and Project Authority's Annual Report on Major Projects is a chance to take stock and look at how much we have done so far.

We have successfully delivered 26 major government projects over the past year, all of which will help citizens and improve essential public services. They range from ICT and transformation programmes, which are modernising the civil service and fundamentally changing the way citizens interact with the state, to major infrastructure projects and military capability programmes – together these are vital for growing our economy and defending the nation.

All of these projects will have a real, long-lasting impact for the public. For example, the Childhood Flu Immunisation programme which was successfully completed this year, is currently being rolled out in all primary schools across the UK and is set to reduce the risk of flu in children by 66%.

Government played a crucial part in setting up the Thames Tideway Tunnel, a major new sewer that will protect the River Thames, which will create 4,000 new jobs. The Hinkley Point C enabling project secured private investment into a new nuclear plant, putting it on a firm footing so construction can begin. In many cases like these, government provides the enabling environment and conditions for the private sector to invest.

We are also beginning to see this government's new policy priorities translate into major projects on the ground. Through the East West Rail programme we are using our investment in infrastructure to unlock thousands of new homes. Together with the Expressway road development, this will deliver transformational economic growth and significant housing development opportunities across the Oxford Cambridge Corridor.

This is notwithstanding the significant amount of work underway to prepare for Britain's departure from the European Union. The Department for Exiting the European Union is coordinating more than 300 Brexitrelated work streams across government and implementation is being supported from the centre through the IPA and other cross-government functions.

Project delivery is at the heart of all government activity, whether it's building roads and rail, strengthening our armed forces, modernising IT or transforming the way government provides public services to citizens. Getting these projects right is essential if we are to ensure that we build a country that works for everyone.

**Oliver Dowden MP** Minister for Implementation **Robert Jenrick MP** Exchequer Secretary to the Treasury

## Introduction

Tony Meggs, Chief Executive, IPA



Successful projects are the foundation for delivering a range of essential services to citizens. This year, government has delivered 26 major projects representing a fifth of the overall portfolio. This is an impressive record of delivery. It takes years of concerted effort from the cadre of world class project delivery professionals currently working across departments.

A personal highlight this year has been the completion of the Francis Crick Institute – the biggest biomedical research facility under a single roof in Europe. It brings together over 1,500 scientists to develop treatments for illnesses such as cancer, heart disease and strokes. It has already become a powerhouse of scientific research and is recognised internationally for its leading architecture and engineering design.

The Government is delivering more than ever before. The Government Major Projects Portfolio (GMPP) currently comprises over 130 large, complex and innovative projects that sit at the heart of all government activity. But this is just the tip of the iceberg. It doesn't include the scores of projects that are of a smaller scale or in early development, let alone the 'mega-programme' that is EU Exit.

Right across government we have been responding to the delivery challenge of leaving the EU. It is the biggest, most challenging peacetime task the Civil Service has faced and as a result, we have adapted the way we organise ourselves in order to meet its demand.

We are collaborating with other government functions to provide central support to EU Exit related projects. The pace of this work is increasing so it is reasonable to expect that this will have an impact on the broader portfolio of government projects in future.

There is always room for improvement in government project delivery. We are seeing specific delivery challenges on a small number of very difficult projects. This is to be expected in a large portfolio of the most high risk projects. But more can be done.

The IPA is responding by continuing to pursue initiatives that improve delivery in government. Over the next year we will focus on improving portfolio management skills to make sure we match projects with the right resources and capabilities to deliver, and better understand and manage portfolio risk.

We will also continue to improve every single project assurance review to ensure they remain of the highest quality and have the maximum impact on a project's execution. By making these changes, we will be better placed to support the Government's evolving portfolio of major projects long into the future.

## **Tony Meggs**

Chief Executive, Infrastructure and Projects Authority

This year, government has delivered 26 major projects representing a fifth of the overall portfolio. This is an impressive record of delivery.

## **The Government Major Projects Portfolio**

The Government Major Projects Portfolio (GMPP) comprises the most complex and strategically significant projects and programmes across government. The Infrastructure and Projects Authority (IPA) supports the successful delivery of these projects through direct support, independent assurance reviews and by leading the project delivery profession across government.

This year's GMPP includes a broad and diverse range of projects - 133 projects delivered by 16 departments and arm's length bodies, with a Whole Life Cost (WLC) of £423bn1.

The GMPP is a constantly evolving group and over the course of the year 29 projects left - with 26 having been successfully delivered - and 18 joined.

Although the portfolio changes each quarter, the scope of the GMPP and the criteria for joining remain the same. GMPP projects are typically those where approval is required from HM Treasury, either because the budget exceeds a department's delegated authority level or because the project is novel, contentious or requires primary legislation.

Projects on the GMPP receive independent scrutiny, support and guidance from the IPA and are required to provide regular data returns on delivery progress. The IPA assesses the likelihood of a project delivering its objectives primarily through independent assurance reviews and its engagement with the project. This is reflected in its Delivery Confidence Assessment (DCA) rating assigned by the IPA.

Figure 1: Summary of the 2017-18 GMPP						
GMPP-0	Government Major Projects Portfolio	<b>133</b> projects	<b>£423bn</b> Whole Life Cost	<b>£27bn</b> budget 2017-18		
This comprises:						
Î	Transformation and Service Delivery	<b>41</b> projects	<b>£83bn</b> Whole Life Cost			
	Information and Communications Technology (ICT)	<b>29</b> projects	<b>£10bn</b> Whole Life Cost			
	Infrastructure and Construction	<b>31</b> projects	<b>£196bn</b> Whole Life Cost			
	Military Capability	<b>32</b> projects	<b>£134bn</b> Whole Life Cost			

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The number of projects on the GMPP has decreased, with a third fewer projects than when it peaked in 2014, although there has not been an equivalent drop in Whole Life Cost. The smaller portfolio is driven by projects graduating from the GMPP as they complete or move into business as usual, consolidation or a redefinition. It also reflects the current stage of the spending cycle.

In 2016, the IPA created an Early Development Pool (EDP) to provide projects with effective and tailored support at initiation stage. The EDP acts as a portfolio of projects which typically graduate on to the GMPP once sufficiently mature. It enables the IPA to support projects at very early stages of development, ensuring they are set up for success.

In this Annual Report snapshot period, over 50 projects were part of the EDP. The IPA also supports other projects outside of these portfolios, including a substantial number of projects related to EU exit.

GMPP projects fall into one of four categories, determined by the purpose and nature of their delivery:

- 1. Transformation and Service Delivery (Transformation)
- 2. Information and Communication Technology (ICT)
- 3. Infrastructure and Construction
- 4. Military Capability



## Figure 2: GMPP project movement over time

AR 2018 joiners and leavers do not take into account PSBP project, which has disaggregated into two GMPP projects.

### Figure 3: Projects illustrating the four categories



HM Courts & Tribunals Service Reform is an ambitious £1 billion programme that brings new technology and modern ways of working to the courts system, making access to justice easier for the public and legal professionals.



The **Columbus** Programme manages the exit from the Government's largest prime supplier IT contract, transforms HMRC's ICT Operating Model and saves taxpayers' money on the cost of IT delivery without disrupting the quality of service.



East West Rail will reinstate a rail connection between Oxford and Cambridge, via Milton Keynes. Together with the Expressway road development, it will deliver infrastructure to maximise growth and boost housing development.



The **Wildcat** programme provides 62 helicopters to the British Army and Royal Navy with enhanced reconnaissance, antisubmarine and counterpiracy capabilities, alongside transportation of troops and force protection capabilities.

#### Figure 4: Assurance reviews aligned with project stages

The IPA provides a range of different independent assurance reviews, from formal gateways to more bespoke critical friend reviews. This year the IPA arranged and managed more than 230 independent assurance reviews on GMPP projects, an increase from 210 in 2016/17.



## **GMPP** joiners and leavers

Projects usually join the GMPP at an early stage and with an uncertain delivery landscape, and this is reflected in their DCAs. This year, 7 out of the 18 new joiners had amber/ red ratings and none joined at green or amber/green. Of the 29 projects that left in the last year, around half had seen their DCA ratings improve since joining the GMPP. Half had a green or amber/green rating on departure, which is in line with previous years.



Projects leave the GMPP for a number of reasons, in most cases where a project has been successfully delivered or no longer needs regular GMPP support. Readiness to leave is judged by the IPA alongside departments. 29 projects left the GMPP this year, 26 of which have been delivered. Only three projects were replaced by another GMPP project, no longer met the GMPP criteria, or were stopped. This year's leavers span 10 departments and have achieved a number of successes.



DHSC's Childhood Flu Immunisation programme, is part of the

national flu immunisation programme and reduces the risk of flu in vaccinated children by 66%. It moved into 'business as usual' following successful roll-out over four years.



The Francis Crick Institute is an infrastructure and construction project that was delivered as a joint venture between the UK's largest biomedical research and academic and charitable institutions, with capital investment from the UK government, led by BEIS.



DWP's Hosting Services Refresh programme

entered 'business as usual' as it left the GMPP. The programme delivered a refresh of DWP's IT infrastructure, migrating all applications to a modern, flexible cloud hosting environment which increases security, efficiency and resilience.



MoD's Airseeker programme was delivered this year, a dedicated electronic surveillance aircraft that will be employed on strategic and tactical missions. It entailed the delivery of three aircraft, with the third produced ahead of schedule. It became fully operational earlier this year.

While the IPA supports projects to successfully deliver against their objectives, not all projects prove feasible. In 2017/18 the IPA agreed with BEIS to stop Project Eagle, the sale of the Government's shareholding in a uranium enrichment company. The project left the GMPP with a red DCA as, following a review of delivery options, it was jointly agreed that there was no viable option and project closure was recommended.

Project Eagle was the only project that was stopped this year compared to 5 projects which were stopped or brought to an early close in 2016/17.



## Breakdown by project categories

Transformation projects help improve the relationship between citizen and state, harness new technology to improve public services and make government more efficient. It is the single biggest category with 41 projects, representing almost a third of the GMPP, and has remained so since 2013. However, it is only the third largest category when measured by total Whole Life Cost, amounting to £83bn in 2017/18, up from £71bn in 2016/17. Transformation projects on the GMPP tend to have shorter project lifecycles than other GMPP categories, and in this year's cohort most have been on the GMPP for less than 3 years. They span a wide range of topics, with examples including MoJ's HM Courts & Tribunals Service Reform, DWP's Work and Health programme and the UK Research and Innovation Implementation Programme (BEIS). Further information about the nature of delivering transformation projects can be found in the IPA's 7 Lenses of Transformation.<sup>2</sup>

The **military capability** category comprises some of the most complex and strategically important projects government delivers. The portfolio includes delivery of military equipment, such as the Wildcat programme, and associated support programmes, as determined in MoD's 2017 Defence Equipment Plan. Military capability is the second largest category in terms of both Whole Life Cost and number of projects. These projects tend to be some of the longest standing on the GMPP. The category grew to 32 projects over the reporting period, reflecting Government's commitment to keeping the UK safe from intensifying threats and ensuring our armed services has the equipment and resources they need. Investment in the nation's economic and social infrastructure is crucial to improving growth and productivity. **Infrastructure and construction** is the largest category in terms of Whole Life Cost, and the current GMPP includes projects as diverse as road and rail networks, delivering superfast broadband and the Priority Schools Building Programme. Currently there are 31 infrastructure and construction projects on the GMPP, with a total Whole Life Cost of £196bn. Similar to military capability, these projects in other categories. Further information on the forward look of investment in this category is in the IPA's National Infrastructure and Construction Pipeline.<sup>3</sup>

**ICT** is the smallest category with 29 projects and a Whole Life Cost of £10bn, but includes high profile projects such as DHSC's NHSmail2 programme, a secure email service available for use across the health sector. This category of projects is very important for achieving cost savings and efficiency, and government will continue to apply innovation and technology to achieve its goals. Many of the ICT projects on the portfolio enable the transition from old, legacy contracts to new ICT provisions. Often through entering smaller, more manageable contracts with integration services delivered in-house, projects have enabled departments to become more flexible and efficient.



#### Figure 7: Summary by category – project number and Whole Life Cost

2 7 Lenses of Transformation - https://www.gov.uk/government/publications/7-lenses-of-transformation

3 National Infrastructure and Construction Pipeline - https://www.gov.uk/government/publications/national-infrastructure-and-construction-pipeline-2017

## CASE STUDY: Priority Schools Building Programme 1 (DfE)

The Department for Education's Priority School Building Programme (PSBP) is an exemplar government infrastructure programme being delivered by the Education and Skills Funding Agency (ESFA). The successor to the Building Schools for the Future programme, it will rebuild and refurbish those school buildings in the very worst condition across the country, faster and cheaper than before.

There are two distinct phases of the programme, covering a total of 537 schools. To date, the vast majority of the 260 first phase projects have been delivered to time and budget, completed for one third of the cost and 30% faster than the previous programme.

The second phase of the programme targets investment by replacing or refurbishing individual blocks at 277 schools. It is now well underway and is scheduled to run until the end of 2021. The IPA most recently reviewed the PSBP in March 2018, with results and recommendations now being used to help support more effective programme delivery.

"With first phase schemes now largely complete and that element of the programme being delivered successfully, our strategic focus has shifted to the second phase of the programme. The IPA's independent assurance review has proved a helpful point of focus as we grasp new challenges linked to block investment and has helped to ensure we are well-positioned to deliver apace."

### Victoria Baker

Joint Programme Director, PSBP (Commercial)



Hessle High School and Sixth Form College, DfE

## CASE STUDY: NHSmail2 (DHSC and NHS Digital)

The Department of Health and Social Care's technology infrastructure programme delivered through NHS Digital is a great example of how, even in the disaggregated world of health and social care, centrally-driven projects at a national scale can deliver significant benefits for the public.

NHSmail is the secure email service available for use across organisations commissioned to deliver health and social care. With more than 1.2 million mailboxes across England and Scotland, it is reputed to be one of the largest single tenancy email solutions in the world.

The programme navigated a challenging and multifaceted transition to achieve a seamless migration without downtime to service, at a time of increased user demand. The programme has since left the GMPP with a high delivery confidence

It has transformed communications across the health and care sector, enabling patients to have remote and digital consultations with their GPs among many other benefits. A further significant test of the project's resilience was the WannaCry cyber attack in 2017. The attack had no impact on the NHSmail service, which was a testament to the security and cyber capability developed into the solution.

"The IPA support and independent assurance throughout the lifecycle of the programme was critical to the success of the delivery, providing a critical friend and governance oversight, demonstrating partnership and collaboration across the programme community."

Cleveland Henry Programme Director, NHSmail2



## **Breakdown by department**

Four departments – MoD, DfT, DHSC and BEIS – lead the delivery of over half of the 2017/18 GMPP projects and account for over 80% of GMPP Whole Life Cost. A number of their largest and lengthiest projects are well known, with major transport investments such as High Speed 2 and Crossrail, and significant nuclear decommissioning projects such as Sellafield Model Change.

This year, there are 37 **MoD** projects on the GMPP, which account for over a quarter of the portfolio by number. MoD delivers all military capability projects, one of the largest categories in terms of Whole Life Cost. This is the largest proportion of projects on the GMPP delivered by any department since 2015/16.

**DfT** has the second largest portfolio and the second highest Whole Life Cost by department. While the number of DfT projects has remained relatively stable over the past year, Whole Life Cost has increased by around a third. DfT's portfolio includes some of the most important economic investment in government, such as the Airport Capacity Programme and High Speed 2, and projects which are critical for regional development and increasing capacity, such as East West Rail and the Midland Main Line. In total, 16 projects are led by DfT in this Annual Report, of which 15 are infrastructure and construction projects. **DHSC** has the third largest portfolio on the GMPP, with 14 projects. Since 2014/15, the number of DHSC projects on the portfolio has reduced. In 2015, the IPA and DHSC agreed to remove all NHS capital schemes from the GMPP as hospital trusts are governed through the NHS structure as independent organisations. As such, these projects no longer fall under the GMPP's jurisdiction. DHSC's current GMPP projects cover a range of objectives, from the 100,000 Genomes Project which develops the UK's genomics industry, to the Local Service Provider programme for IT services across health and social care organisations. The size and value of the DHSC portfolio has been relatively steady over the course of the year.

**BEIS** is a significant contributor to the Whole Life Cost value of the GMPP, accounting for 15% of the total, across 8 projects. Of these, 2 are nuclear energy or decommissioning projects, and most of the remaining BEIS portfolio relates to energy networks and systems. The number of BEIS projects has fallen over recent years, from a peak of 23 in the 2014 Annual Report. Machinery of government changes and project completions and closures both played a role in reducing the number of BEIS projects.





## CASE STUDY: Digital Services at the Border Programme (HO)

The Home Office's Digital Services at the Border (DSAB) will transform the way government manages its borders in the UK. The programme will replace a number of obsolete IT systems, maintain the security of the UK by gathering data from those people and goods crossing the border, and provide timely and accurate data to those who need to use it.

Increasing the automation of border processes and making earlier and better-informed decisions about the people and goods wanting to cross the border is a priority for the Government in order to improve effectiveness.

In March 2018, a significant milestone was achieved at Heathrow Terminal 4 with the roll-out of Border Crossing (BX), which enables the processing of both EU & non-EU passengers using Border Crossing instead of the Warnings Index (WI) system.

The IPA has supported the Home Office with this programme by conducting independent assurance reviews and critical friend reviews, and also providing a Non-Executive Director on its Board.

"I am proud of the progress that has been delivered over the last year through stronger programmatic control and governance of the programme. While progress is down to the hard work and dedication of the team, the introduction of a Non-Executive Director and outside review has certainly helped to provide a solid foundation for success."

### CASE STUDY: Carrier Enabled Power Projection (MoD)

The Ministry of Defence's Carrier Enabled Power Projection (CEPP) programme is an umbrella project that will deliver an enhanced aircraft carrier provision, combining three programmes – F-35 Lightning, Crowsnest and the Queen Elizabeth Class carrier – which was commissioned into the fleet in December 2017. The CEPP programme ensures that these highly complex programmes come together to deliver defence benefits that are far greater than the sum of their parts.

The IPA has supported CEPP and its sub-programmes by conducting several independent assurance reviews throughout the project's lifecycle, and by providing training for the project teams. The latest review of CEPP in February 2018 helped the project to focus on longer-term milestones and the importance of a clear set of strategic priorities. It also helped the project team ensure that its organisational design is fit for purpose as the project transitions from delivery into operating the capability.

"Independent assurance reviews throughout the lifecycle of the programme by the IPA are vital to shape the approach of the programme, maintain focus on delivering benefits and to drive down on risks."

RAdm Matt Briers Programme Director, CEPP

Andy Mackinder Senior Director, Border Force



Border Force Primary Control Point, HO



HMS Queen Elizabeth, MoD

## **Progress this year**

DCAs are the IPA's evaluation of a project's likelihood of delivering its objectives, to time and on budget. This report reflects a snapshot of this data at the end of September 2017. DCAs are not a comprehensive reflection of project performance. Instead they reflect a project's likelihood of success at a specific point in time, if issues and risks are left unaddressed.

DCAs are reviewed quarterly and change depending on the challenges projects are facing, outcomes of focused independent assurance reviews and actions taken by projects. By taking the right steps following reviews and managing delivery challenges effectively, DCAs are often improved.

Ratings are categorised into five groups, from red to green, with each providing an indication of likelihood of successful delivery and level of associated risks. Detailed definitions of each rating can be found in Annex A. Projects join and leave the GMPP throughout the year, and delivery challenges will arise for projects over the course of their lifecycle, meaning direct comparisons across years should be treated with caution, although some broad trends can be observed. Since last year's report, the number of green and amber/ green ratings has slightly reduced from 28 to 24 projects. The number and proportion of red and amber/red ratings has risen over the past year, from 38 in 2016/17 to 46 in 2017/18. The number of red rated projects has increased by four since the previous Annual Report, with eight projects now red rated.

Looking at a longer trend over time, the data shows a decline in green DCAs in recent years. This comes as many projects have been completed and the size of the GMPP has reduced and become more focused on a smaller number of the most difficult major projects. There remain some specific issues with individual projects and the delivery environment has also become more challenging and complex, with a stretching government agenda.

Publishing this data reinforces the commitment to transparency in government data. This honest reflection of where challenges lie focuses the IPA and departments on where resource and support is most needed.



## Progress over time by category

ICT projects have continued to see an improvement in DCA ratings, with an increase in green or amber/green ratings and a reduction in red or amber/red over the last two Annual Report periods. Transformation projects have also seen improvements in DCA ratings since the 2016 Annual Report, with the proportion of red and amber/red projects remaining steady in the last 12 months.

Military capability and infrastructure and construction projects are the drivers of the overall increase in red DCA ratings this year. Of the eight red rated projects, five projects are military and three are infrastructure and construction projects. The last two years have seen an increase in red and amber/red DCAs in these categories. Projects receive red DCA ratings for a number of reasons but due to their nature, the larger, more complex and novel projects will often attract red ratings that indicate the challenges of delivering them.

This year's red rated military capability projects reflect an over-programmed portfolio and red rated infrastructure and construction projects are facing specific technical and commercial issues as they enter challenging stages of delivery. Without mitigating action, these issues would put delivery at risk. The IPA is working with their sponsor departments to help address these risks and set these projects on a firmer footing for successful delivery.



## Improving the delivery of major projects

## **Project leadership**

Effective leadership is essential for achieving project success and the IPA plays an important role in equipping project leaders with the right skills, training and capabilities to deliver. Consistency of leadership within projects is important for smooth and successful delivery. The IPA collects regular data from projects on the number and movement of project leaders to monitor this.

There is a general downward trend in the churn of Senior Responsible Owners (SROs) and Project Directors (PDs). During the reporting period, SRO and PD churn were at 8% and 10% respectively, holding relatively steady since the same point last year.

Other than moving to new roles or departments, organisational change within departments is a common reason for churn. This can include portfolio restructures, where projects and roles move as part of organisational design.

Defining a clear structure for the Project Delivery Profession is critical to help departments shape project teams, set recruitment standards and promote development.

The Project Delivery Capability Framework (PDCF), developed by the IPA and the profession, was launched in 2017/18 and is now being used by all major departments to help drive up professionalism. It outlines a common language for the profession and defined career paths to help manage their careers.

The Government Online Skills Tool (GOST) supports the rollout of PDCF by allowing individuals to assess their skills and competencies against any project role, and to identify appropriate development. It is currently being used by over 4,000 project professionals across government, and this number will grow following full rollout.

"Having the right people, with the right skills and capabilities to lead and manage government projects is essential for successful delivery."

## Nick Borwell

Director of Government Project Delivery, IPA



#### Figure 13: SRO and PD churn

		Civil Service Grades							
		B1 B2		Α		SCS			
		EO	HEO	SEO	G7	G6	SCS 1	SCS 2	SCS 3
Leadership	Head of Profession								
	SRO / Sponsor								
	Portfolio Manager / Director								
	Programme Manager / Director								
	Project Manager / Director								
	PMO Manager / Director								
Project Delivery	Project Planner					•			
Specialists	Resource Manager								
	Business Case Manager								
	Assurance Manager								
	Configuration Manager								
	Project Support Officer								
	Governance & Reporting Manger								
	Risks & Issues Manager								
	Advisor								
Business Analysis &	Stakeholder Manager								
Change Specialist	Benefits Manager								
	Business Change Manager								
	Business Analyst								

#### Figure 14: Project delivery career pathways

As well as providing a strategic framework for the profession, the IPA has maintained its learning and development offer for project leaders and has extended the coverage of its leadership programmes to all levels of seniority.

Since its launch in 2012, the Major Projects Leadership Academy (MPLA) has enrolled over 500 Senior Civil Service leaders and the Project Leadership Programme (PLP) has engaged a further 750 project leaders. Both programmes are accredited with the Association for Project Management (APM) and provide bespoke training and guidance for delivery professionals, drawing on principles from the PDCF. A new leadership programme, the Orchestrating Major Projects (OMP) programme, has now been launched for Directors General and focuses on understanding the wider operating environment for major projects and their role within it.

Sustainable project delivery relies on getting a pipeline of skilled and capable people into the profession. Therefore the IPA has significantly expanded the Project Delivery Fast Stream and Fast Track Apprenticeship programmes in the last year. There are currently 105 graduates and 175 apprentices working in project delivery roles across government, with more bids coming in for Autumn 2018 starts. The IPA has also led the joint recruitment of project delivery professionals across government departments, matching over 150 project managers to departmental roles.

## **Project initiation**

The IPA is committed to continuously improving the way major projects are delivered in government. An ongoing priority is to ensure that government projects and programmes are set up for success. This, in part, led to the creation of the **Early Development Pool (EDP)**. The most common causes of failure are well rehearsed: lack of clear objectives, insufficient resources, and over-ambitious cost and schedule amongst others. All of these issues can be avoided if tackled early and effectively.

As part of the EDP offer, the IPA works with departments to identify and support emerging priorities and

programmes with appropriate support and assurance as early as possible. Currently there are over 50 projects in the EDP receiving support from the IPA.

Most projects in the EDP have the potential to join the GMPP in the future. EDP projects are reviewed at project level and progress on to the GMPP as judged by the IPA and the department. As a minimum criteria, EDP projects progressing on to the GMPP will have an agreed outline business case.

	Tailored Support Offer (TSO)	Critical Friend Review (CFR)	Project Initiation Routemap (PIR)	Project Validation Review (PVR)
Purpose	<b>Bespoke package</b> to help identify issues/areas of support	<b>Informal review</b> to help provide advice and guidance on specific areas	Apply cross-sector knowledge to strategic decisions and planning during early initiation	<b>Required</b> for GMPP consideration
Key features	Can include whiteboard sessions; risk workshops; specialist advice; access to transformation associates and experts	Tailored terms of reference; use of skills/experienced individual; confidential written output report with recommendations	Involves complexity and capability self- assessments; interviews and training sessions; benchmarking; written integrated action plan and report	Workshops (Strategic and Operational); interviews
Project stage	Any stage	Any stage	Any stage, ideally prior to Strategic Outline Case (SOC)	Ideally prior to SOC stage
Duration	Bespoke	1-2 days	Bespoke	1-3 days

#### Figure 15: Tailored support to meet project needs

The **Project Initiation Routemap** is a structured approach to setting up projects for success and is the IPA's primary tool in supporting the initiation of projects across government. The methodology is underpinned by a series of best practice guidance modules, which are applied through a collaborative process with the project team to develop a 'Routemap' for successful project initiation.

The Routemap approach has strong links to industry and continues to be supported by the Infrastructure Client Group – experts from leading public and private sector clients – and its industry framework partners. It is particularly useful for organisations that are delivering larger or more complex projects than they have previously delivered, or where capability gaps may exist.

Since its development in 2012, up to 40 projects have benefited from using the Routemap methodology in both the public and private sectors. In 2017/18 the Routemap team supported projects across transport, energy and regeneration, including three projects on the GMPP and one in the Early Development Pool.

The IPA is developing an international version of the Routemap as part of the Global Infrastructure Programme<sup>4</sup>, alongside an active forward programme of engagements planned this year.

# CASE STUDY: East Bank (London Legacy Development Corporation) – Routemap

Following the London 2012 Olympic Games, the East Bank vision is to create a brand new destination in the Queen Elizabeth Olympic Park with world class institutions in culture and education at its heart. It has a mission to delight, inspire and educate Londoners and visitors with the best art, museum collections, fashion, design, music, dance and technology.

The Routemap exercise reviewed lessons learned during the initial programme stages. Collective recommendations were developed with all East Bank institutions and were reflected in an action plan. The Routemap helped drive forward actions in key areas, including governance and collaboration. The process resulted in better ways of working within a complex multistakeholder environment. The Full Business Case was approved in May 2018.

"The IPA Routemap exercise was a useful process to facilitate a collective understanding of the challenges and opportunities that existed across the multi-stakeholder environment within the programme. It resulted in cross-party buy-in that helped ensure the programme is set up to achieve its expected benefits."

#### **Rosanna Lawes**

Executive Director of Development and East Bank SRO, London Legacy Development Corporation



Queen Elizabeth Olympic Park, DCMS

## CASE STUDY: Youth Justice Reform (MoJ) – EDP

In December 2016, MoJ set out plans to reform the approach to youth justice through the Youth Justice Reform programme. Its aim was to drive forward improved outcomes for young offenders, both in custody and in the community, and to reduce the reoffending rate. It was set up in response to the 2016 Taylor Report "Review of the Youth Justice System in England and Wales".

The programme's initial overarching objective was to reform the governance of youth custody, examining options for reforming sentencing, improving early intervention and prevention, addressing the safety issues in the secure estates and reforming youth custody by putting education and health at its core.

As part of being on the EDP, in early 2017 an IPA Project Validation Review (PVR) was undertaken, comprising two 3 hour workshops with 21 stakeholders, including the Youth Justice Board's Chief Executive, the programme SRO, policy makers, subject matter leads, finance and commercial experts.

The PVR's facilitated discussions highlighted a number of issues that helped the programme to:

- Redefine the vision and scope of the programme, building on the early work that the programme had achieved to establish a strong consensus among stakeholders around priorities
- Set out changes to be developed over time and their related critical success factors in a blueprint document
- Develop a "Target Operating Model" and delivery plan, broken down into manageable stages, with the critical path and key dependencies identified
- Use the business case to explore alternative costed options.

## Transforming Infrastructure Performance (TIP)

The IPA is working to improve the delivery of major infrastructure projects through Transforming Infrastructure Performance (TIP)<sup>5</sup> – the Government's plan to increase the effectiveness of investment in infrastructure by improving productivity and performance.

The ten-year plan will tackle systemic issues that limit the performance of UK infrastructure, by prioritising investment in the right projects, improving productivity in delivery and maximising the overall benefits of infrastructure investment.

The programme consists of four strands:

- **1. Benchmarking for better performance** considers benchmarking costs, schedule and performance to support project selection, budgeting and design.
- **2. Alignment and integration** across sectors and government to ensure projects are designed from the outset to support priority economic, social and environmental objectives.
- **3. Procurement for growth** to increase long-term value for taxpayers, through building smarter commercial relationships between clients and the supply chain.
- **4. Smarter infrastructure** covers interventions to increase the use of technology and innovation to drive more productive delivery and smarter operation of infrastructure.

## **Review of IPA assurance**

Given the growing volume and complexity of change across government, the IPA judged that it was the right time to take stock and ask to what extent the independent assurance of major project aligns with evolving best practice.

For assurance to have the greatest impact it must be applied to the right projects, at the right time, with a quality assured process. It also needs the right assurance team to be deployed, to make the best possible judgements and recommendations.

The IPA is now seeking to improve its impact on the performance of projects through three broad areas of change:

- 1. Portfolio role a stronger, more proactive role in supporting, assuring and advising at the portfolio level across government.
- Quality and professionalism a regime of performance reporting and ensuring quality, professionalism and consistency across its support and assurance functions.
- **3. Experience and expertise** enhancing its capacity as a centre of expertise and source of experienced professionals, working with other government functions.

By implementing the recommendations developed through the review of its assurance, the IPA will build on the existing strong foundations of the gateway review process and ensure that more government projects deliver their benefits to time, cost and quality, with a lower level of avoidable failure.



## **EU Exit**

Ensuring the UK is ready to exit the European Union has resulted in a significant increase in the number of projects and programmes that need to be delivered across government. While many of these projects are not of the same scale or duration as GMPP projects, EU exit related projects are, by their very nature, high priority and need to be delivered at pace and with confidence.

As such, EU exit has required an increase in government resources and, specifically for project delivery skills in government, a need to redeploy professionals and prioritise activity across departmental portfolios.

Project delivery support to meet EU exit challenges is being coordinated across the government functions from the Cabinet Office and the Department for Exiting the European Union (DExEU). This support includes project and programme management, digital services, commercial, and HR expertise, and is coordinated through the Cabinet Office's Functional Support Team (FST). This dedicated team will help accelerate the delivery of EU exit related initiatives and unblock areas which are dependent on functional expertise.

The IPA is providing a supporting role at the centre of government to help meet these requirements. In particular this includes its work in developing skilled project leaders and its wider training offer, securing resource for the most complex projects and increasing recruitment activity, and the provision of independent assurance.



Tate Modern Extension, DCMS

## Annexes

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

Under its 2012 mandate, the IPA is required to produce an Annual Report on the GMPP. This is the sixth Annual Report, with some previous reports having been published by the Major Projects Authority (MPA). In accordance with the Government's major projects transparency policy, the Annual Report is published at the same time as departments publish the data on their projects that are part of the GMPP. The data published this year was submitted to the IPA in September 2017. The Delivery Confidence Assessments (DCAs) within that data, and included in this report, are as assessed by the IPA at that time. The narratives from departments that accompany their published data online provide an update on progress since then.

#### Annex A: Explanation of DCA ratings

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

#### Green

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

#### Amber/Green

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

#### Amber

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

#### Amber/Red

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

#### Red

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

#### Reset

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

#### Exempt

Data can be exempt from publication under exceptional circumstances and in accordance with Freedom of Information requirements i.e national security.

### Annex B: List of department names for current GMPP projects

BEIS	Department for Business, Energy
~~	and Industrial Strategy
CO	Cabinet Office
DCMS	Department for Digital, Culture,
	Media and Sport
DEFRA	Department for Environment, Food
	and Rural Affairs
DFE	Department for Education
DFID	Department for International Development
DfT	Department for Transport
DHSC	Department of Health and Social Care
	(formerly DH)
DWP	Department for Work and Pensions
FCO	Foreign Commonwealth Office
HMRC	Her Majestey's Revenue and Customs
HO	Home Office
MOD	Ministry of Defence
MOJ	Ministry of Justice
NCA	National Crime Agency
ONS	Office for National Statistics

#### Annex C: Key to AR years

- **AR 2013** 2012-13 Report. Published in 2013 using data as at September 2012
- AR 2014 2013-14 Report. Published in 2014 using data as at September 2013
- **AR 2015** 2014-15 Report. Published in 2015 using data as at September 2014
- **AR 2016** 2015-16 Report. Published in 2016 using data as at September 2015
- AR 2017 2016-17 Report. Published in 2017 using data as at September 2016
- **AR 2018** 2017-18 Report. Published in 2018 using data as at September 2017

### Annex D: List of projects with DCA ratings

The table below reflects DCAs of the 133 projects used in the Annual Report analysis, alongside their historic DCAs where they appeared in previous Annual Reports. DCAs and the supplementary data online reflect the project status at the end of September in the relevant financial year (see Annex C).



#### Annexes continued





#### Annexes continued



AR AR AR AR AR <b>AR</b>			
2013 2014 2015 2016 2017 <b>2018</b>	Project Name	Dept	Description
	Lightning Programme	MOD	To deliver a multi-role, carrier-capable aircraft, to be operated jointly by the Royal Air Force and Royal Navy.
	Maritime Patrol Aircraft	MOD	To deliver a Maritime Patrol Aircraft (MPA) to provide persistent, responsive, effective and adaptive Military Capabilities in the Under Water, Above Water, Littoral and Land environments.
	Army Basing Programme	MOD	The ABP is an infastructure led transformation programme to enable the Army 2020 structure and withdraw of personnel from Germany.
	Spearfish Upgrade Programme	MOD	To update the UK's submarine weapon systems. This includes improvements to the safety system to minimise residual risks and deliver improved performance against increasingly capable threats.
	Contracting, Purchasing and Finance	MOD	CP&F to provide a single online end to end procurement system for all MOD procurement activity.
	Armed Forces People Programme	MOD	The Armed Forces People Programme (AFPP) aims to deliver and modernise the "Offer for the Armed Forces" and realise the agreed financial savings.
	Defence Estate Optimisation	MOD	The programme will help create a smaller, better and a more efficient estate to deliver the required Military Capability.
	Future Maritime Support	MOD	Commercial arrangements for the provision of Ship & Submarine Engineering and Naval Base Services.
	Astute Boats 1-7	MOD	The design, development and manufacture of Astute class submarines.
	MARSHALL	MOD	Marshall is a UK Ministry of Defence programme to deliver a sustainable Air Traffic Management capability
	Armoured Infantry 2026	MOD	Deliver an Armoured Infantry that is more capable, with enhanced lethality and upgraded situational awareness, better inetgration with dismounts and improved combined arms cooperation.
	Core Production Capability	MOD	The Core Production Capability project delivers safe nuclear reactor cores to meet the Royal Navy's submarine programme, now and for the long term.
	PROTECTOR	MOD	Delivery of a Remotely Piloted Air System
	Type 31e	MOD	The T31e programme aims to deliver a pipeline of credible, affordable and exportable warships enabling Defence to increase its global footprint.
	Joint Crypt Key Programme	MOD	To support the Departments Information Assurance Capability
	Nuclear Warhead Capability Sustainment Programme	MOD	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.
	Berwyn Programme	MoJ	To build a new prison in Wrexham (N. Wales) that will be operational by 2017.
	Shared Services (ISSC2) Evolve	MoJ	To deliver a transformation in the approach to the provision of back office services in MOJ
	Future IT Sourcing Programme (FITS)	MoJ	Aims to deliver a c $\pm$ 95m pa reduction in MOJ ICT operating costs through the design and implementation of a new ICT Operating Model.
	MoJ Future FM	MoJ	To re-procure the expiring facilities management contracts which provide services to the shared estates cluster.
	NOMS Digital Transformation Programme	MoJ	To deliver technology into prisons in England and Wales to make prisoners more self- responsible, offer increased opportunities to build skills and assist in rehabilitation.
	Criminal Justice System Exchange Re-provisioning	MoJ	To upgrade the automated data transfer service between the key IT systems across the criminal justice system.
	HMCTS Reform	MoJ	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.
	Electronic Monitoring	MoJ	A contractual re-competition that will stimulate the market and increase competition in the provision of electronic tagging systems that exploit the latest technology
	CJS Common Platform	MoJ	Aims to deliver a technology platform which supports business transformation across the Crown Prosecution Service and HMCTS
	Prison Estate Transformation Programme (PETP)	MoJ	To transform the prison estate to help prisoners turn their lives around, through the construction of new rehabilitative prisons; and reconfiguring the estate to ultimately hold prisoners in the right conditions which provide safer environments for both staff and those held in custody.
-	Transforming Compliance Enforcment Programme (TCEP)	MoJ	To improve the compliance and enforcement of criminal fines by improving automation and embedding intelligent led systems to reduce the resource required and consolidating the estate to reduce running costs.
	NCA Transformation Programme	NCA	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
	IT Transformation Programme	NCA	To create a cutting edge technology and information environment that connects, empowers and enhances our officer's crime fighting capabilities
	Census Transformation Programme	ONS	Delivery of the Census & Data Collection Transformation Programme is vital to the success of Better Statistics Better Decisions. We will deliver a successful 2021 Census, researching how to make it the last of its kind and transforming the work of ONS in how we collect, process and analyse data.

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