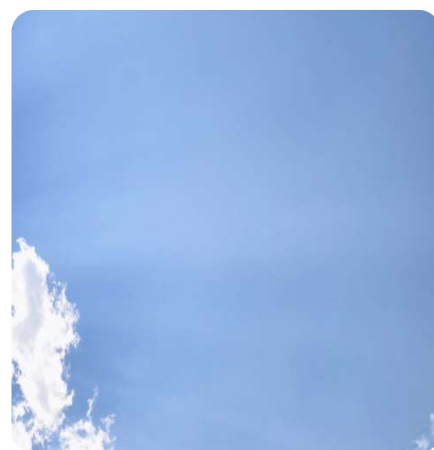
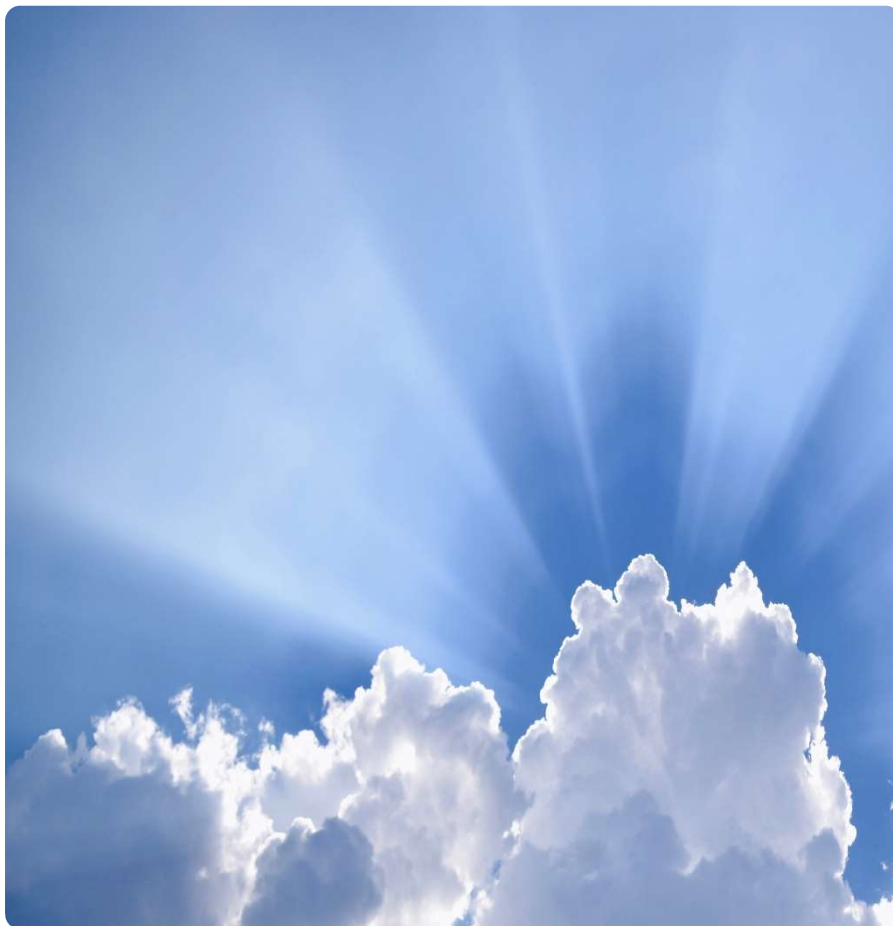




Crown  
Commercial  
Service



# Asset Management – Intelligent Asset Management

---

GCloud Service Description

**Bringing Ingenuity to Life.**  
[paconsulting.com](https://paconsulting.com)

**Corporate Headquarters**

10 Bressenden Place  
London  
SW1E 5DN  
+44 20 7730 9000  
[paconsulting.com](http://paconsulting.com)

**Prepared by: PA Consulting**

**Reference: PA RM1557.14**

**Version: 1.0**

# Contents

1	Asset Management: Intelligent Asset Management	4
1.1	Short Service Description	4
1.2	Key Service Features	4
1.3	Key Service Benefits	4
1.4	Service Definition	5
1.4.1	Our Approach to developing intelligent asset management, investment planning and optimisation within your organisation	5
1.4.2	Our enhanced decision support Track Record includes:	5
1.4.3	Our People   We deliver end-to-end innovation through ingenious collaboration.	6
1.5	Why PA?	7
1.5.1	Social Value	8
1.5.2	Security Clearance	8
1.5.3	Next Steps	8



# 1 Asset Management: Intelligent Asset Management

## 1.1 Short Service Description

We help asset intensive organisations balance strategic asset portfolio investments against conflicting drivers. We simplify a 'line of sight' creating value frameworks, across operate, maintain, renew, and enhance options. Where processes are restrictive, time consuming and inefficient we develop adaptable approaches applying the 'right' technology to drive and release change.

## 1.2 Key Service Features

1. Asset lifecycle decision support / value management tools.
2. Asset intelligence data analytics and predictive maintenance
3. Asset information and systems strategy for lifecycle planning and delivery
4. Appropriate technology driven data consolidation, cleansing, warehousing for cost.
5. Optimising integrated investment decisions for operations, maintenance, renewals, and enhancement
6. Systems thinking to understand sub-system interactions, and root-causes.
7. Estimation of total system cost, performance, and risk
8. Overlaying of conflicting drivers, opportunities and non-tangible drivers.
9. Analysis of alternative options and trade-offs over whole life
10. Align asset management system with ISO55001 requirements

## 1.3 Key Service Benefits

1. Improving Opex / capital planning aligned to achievement of objectives
2. Driving planned maintenance targeted at greatest risks or opportunities
3. Helping organisations identify issues that are not clearly visible
4. Helping drive a reduction in asset lifecycle costs
5. Making risks more visible to help their effective management
6. Enabling informed, evidence-based decisions based on broad business knowledge
7. Providing holistic advice, with cross-cutting expertise that maximises value
8. Creating transferred in-house capability rapidly sustainably.

9. Enabling rigorously evidence-based decisions across organisational boundaries
10. Shaping stakeholder alignment based on robust evidence.

## 1.4 Service Definition

### 1.4.1 Our Approach to developing intelligent asset management, investment planning and optimisation within your organisation

Asset intensive organisations must balance investment across a complex portfolio of assets and often conflicting drivers. Advances in the understanding and mapping of asset deterioration, the digitisation of assets and processes and the proliferation of data are fundamental drivers to the improvement in long term asset management investment planning. But our experience helping clients tackle their most difficult challenges has demonstrated time and again, that rarely is there a problem that technology alone can solve.

Many organisations are aware that data driven insights, derived from new datasets and more granular collection, can solve problems, and create value for them. However, it is often challenging to define specific cases that make it clear what types of data are available and how they help to solve current or future business problems – and knowing how to start once identified.

Indeed, many processes set up to support better asset management decision making can be restrictive, time consuming and inefficient in their drive for over complex data analysis. We work to understand, review and develop processes to become more adaptable to different requirements of work types.

PA helps clients to quickly identify the most pressing asset management challenges, how data insights can help to address those, and what a solution looks like.

**The world is tackling acute environmental challenges, a technology revolution and ageing infrastructure. It's vital for strategy to match this reality.**

**We can help you develop that strategy and keep your business operations in step with it. We make sure asset management systems, objectives, asset plans and business investment cases give your organisation the best outcomes in an increasingly uncertain world. Tomorrow's asset management strategy will be scenario driven.**

Traditional thinking can't answer today's questions

**Strategic thinking about heavy infrastructure will increasingly overlap as power, utility, transport and the infrastructure of large cities vie for the same resources.**

No longer will your asset management strategy be able to look at only one asset class, or even one network system. Portfolios of assets, system interactions and service trade-offs are all part of a new kind of strategic thinking.

The future will be about focusing more on sustainability obligations. And amid the increasing uncertainty of a post-COVID, post-Brexit environment, there are likely to be less predictable financial returns for investors and greater challenge within the funding of regulatory settlements.

You'll need a more holistic approach to asset management strategy. It must deal with customer experience, net zero and the six capitals of risk (financial, intellectual, human, natural, manufactured, and social). This means going beyond the norms of an engineering-based asset strategy to create qualitative scenarios alongside quantitative evidence of asset need. With more competing interests in strategic decision making, creating an investment case will be as much about stakeholder advocacy as mathematical prowess.

We work with our clients to solve their hardest problems, and we're at our best from a 'blank sheet of paper', where our clients don't know where to start. For us, complexity creates opportunity, and we thrive on providing ingenious solutions to ambiguous, ill-defined, and transformative challenges.

Each problem is different. So, we bring adaptable people with a broad set of experiences, tools and skills tailored to the task at hand. We also develop our clients' own systems capability as we work with them.

### 1.4.2 Our enhanced decision support Track Record includes:

**Developing an investment case for renewing the strategic road network.**

Highways England sought to build a “need” driven investment case rather than one based on historical spend. However, the lack of completeness of insight and consistency of formation was leading to significant concerns that the necessary acceptable funding ask.

We helped detail, evidence and narrative a multi-billion-pound renewals settlement.

We worked alongside them to create and evidence nine technical asset class narratives making up the renewals case. We wrote plain English asset cases that brought to life the challenges in a consistent way to other SBP publications.

### **We combined regulatory practitioners and asset management technical expertise to deliver an accepted post efficient strategic investment case.**

Improving understanding and releasing value in critical national Infrastructure

The DIO was looking to formalise and improve Asset Management practices for infrastructure assets on the Defence Estate. A benchmarking assessment against best practice was required.

Using the IAM Anatomy and ISO55000, PA conducted a full maturity assessment, identifying current maturity level and gaps. We categorised and prioritised nearly 200 recommendations to, not only improve maturity but, to provide tangible benefits in realising value from Assets.

The DIO now has a clearer view of what holistic Asset Management is and means, both in terms of the working environment and potential efficiency gains presented.

### **Identifying opportunities for intelligent investment within the water sector**

PA provided support as the strategic asset management partner for Bristol Water. We provided an independent view of our client’s business “as-is” level of maturity across their asset management capabilities and identified relevant gaps against best practice.

This was informed by a series of meetings with Senior Managers and documentation provided. We have advised on the appropriate “to-be”. We benchmarked our client against the Institute of Asset Management (IAM) Anatomy model and considered good practice within Water and other sectors, including Energy and Transport.

We developed the organisation’s Asset Management Strategy, which sets out their approach for ensuring line-of-sight between business strategy, asset strategies and asset investment plans.

### **Transforming capability within the Rail sector.**

We worked with the asset manager of Great Britain’s high speed rail line to help their transformation from an operator and maintainer to a renewing manager.

We described a programme of capability transformation for this step change in responsibility, and to bring confidence against the do-nothing cost of a 40-year renewals programme. We navigated change to the areas of their business where the greatest (cash) value could be realised.

Our work supported NR(HS) make their case for industry funding for capability change, and to move forward to their regulatory submission for 2025-30 funding with confidence in a programme approach.

## **1.4.3 Our People | We deliver end-to-end innovation through ingenious collaboration.**

Clients trust us to combine their experiences with our own ingenuity. Our offer is more complete than that of any other single consultancy:

We offer management consultancy to drive and release change, to shape bolder organisations and to develop the capabilities of talented people. We offer digital consultancy to get the most from a technology-driven world through data analytics, digital twin thinking and smarter system architecture.

We offer physical and technology engineering and innovation to lift our thinking off the page and into the real world. It enables us to literally bring our ingenuity to life, leaving our clients with working solutions, not reports. We are a cross-sector capability and are experienced both client and regulator side counsel.

We bring the best of PA's knowledge to every conversation and challenge, across strategy, digital, transformation and analytics.



## 1.5 Why PA?

A Consulting Group (PA) is a leading IT consultancy and one of the largest advisors to the UK government. We work as a trusted partner to help the UK Government apply an assured cloud delivery approach when developing their most complex information systems and cloud solutions.

PA is well placed to work with clients to help assess readiness, design, build, deliver, and test, to take advantage of cloud solutions. We will bring:

- Leading experience in identifying the costs and complexity drivers for moving existing or new IT services to cloud environments.
- Experience and knowledge to challenge the client organisation to ensure the key stakeholders are aligned ahead of the move to a Cloud solution.
- Access to the latest cloud vendor migration developments, ensuring a best-in-class approach, based on our work with major clients in both the public and private sector in the UK and overseas.
- Experience supporting cloud, in-house and hybrid systems side-by-side

More specifically we will bring:

### Ideation & Strategy:

- Cloud strategy and advisory services
- Assessment of cloud readiness
- Cost-benefit analysis and ROI modelling
- Security and compliance assessment

### Design & Architecture:

- Custom cloud architecture design
- Integration with existing IT infrastructure
- Multi-cloud and hybrid cloud solutions
- Disaster recovery and business continuity planning
- Robust solution delivery meeting GDS best practice and ISO27001

### Development & Deployment:

- Cloud-native application development
- Containerization and microservices & serverless architecture
- DevOps practices and CI/CD pipeline setup
- Automated testing and quality assurance

### Implementation & Migration:

- Data migration to the cloud
- Legacy application modernization
- Cloud service provider selection and management
- Implementation of Infrastructure as Code (IaC)

**Operations & Management:**

- Continuous monitoring and incident management
- Performance optimization and cost management
- Backup and restore operations.
- User training and change management.

**Innovation & Scaling:**

- Scalable infrastructure to support growth.
- Implementation of AI and machine learning capabilities
- Internet of Things (IoT) integration
- Ongoing innovation workshops and R&D

### 1.5.1 Social Value

Building a positive human future is at the core of PA's organisational purpose and we live this value as a key advisor and partner to the UK public sector and by delivering tangible benefits to communities and society.

We are passionate about the positive impact PA can have on wider society, making a significant contribution to efforts in tackling inequality, wellbeing, online safety and ensuring effective stewardship of the environment and fighting climate change.

We are committed to maximising Social Value by using our specialist knowledge and skills to develop firm-wide health, well-being and, diversity and inclusion initiatives for our own people, project-specific initiatives with our clients and wider community benefits. We can work with you to deliver measurable improvements across your key social value initiatives.

### 1.5.2 Security Clearance

PA are a government List X accredited company who have a dedicated Security Vetting team. This allows PA to achieve security vetting of its employees in a time effective manner ensuring the correct processes are always followed (In accordance with the Security Policy Framework). As a matter of standard process, PA puts all its eligible employees through the Baseline Personnel Security Standard (BPSS), set out by the Cabinet Office. Those employees working on, or planning to work on, government projects are automatically put forward for SC clearance which are processed via UK-SV (formally the Defence Business Services – National Security Vetting). PA also process DV vetting through the UK-SV and other agencies, these are generally client sponsored.

PA currently have a large pool of cleared individuals (80% of UK Staff). Should a resource be identified where clearance is needed, the PA Security Vetting team will then process the individual through the relevant clearance procedure. The team will also be able to validate all existing clearances held by PA employees when requested.

### 1.5.3 Next Steps

This service is intended to help customers develop and deliver successful outcomes regardless of the life cycle stage they are at. PA prides itself on working with clients and helping them to deliver outcomes whilst also providing them the ability to 'stand on their own' so that they can move their solutions forward without future involvement. Please contact us on [GCloudFramework@paconsulting.com](mailto:GCloudFramework@paconsulting.com) to discuss your needs further.



## About PA.

We believe in the power of ingenuity to build a positive human future.

As strategies, technologies, and innovation collide, we create opportunity from complexity.

Our diverse teams of experts combine innovative thinking and breakthrough technologies to progress further, faster. Our clients adapt and transform, and together we achieve enduring results.

We are over 4,000 strategists, innovators, designers, consultants, digital experts, scientists, engineers, and technologists. And we have deep expertise in consumer and manufacturing, defence and security, energy and utilities, financial services, government and public services, health and life sciences, and transport.

Our teams operate globally from offices across the UK, Ireland, US, Nordics, and Netherlands.

## PA. Bringing Ingenuity to Life.

---

Discover more at [paconsulting.com](https://paconsulting.com) and connect with PA on [LinkedIn](#) and [Twitter](#).

## Corporate Headquarters

10 Bressenden Place

London

SW1E 5DN

+44 20 7730 9000

This proposal has been prepared by PA Consulting Group on the basis of information supplied by the client, third parties (if appropriate) and that which is available in the public domain. No representation or warranty is given as to the achievability or reasonableness of future projections or the assumptions underlying them, targets, valuations, opinions, prospects or returns, if any, which have not been independently verified. Except where otherwise indicated, the proposal speaks as at the date indicated within the proposal.

[paconsulting.com](https://paconsulting.com)

**All rights reserved**

**© PA Knowledge Limited 2023**

This proposal is confidential to the organisation named herein and may not be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical or otherwise, without the prior written permission of PA Consulting Group. In the event that you receive this document in error, you should return it to PA Consulting Group, 10 Bressenden Place, London, SW1E 5DN. PA Consulting Group accepts no liability whatsoever should an unauthorised recipient of this proposal act on its contents.