G-Cloud 15

Technology Operations Assurance Services

January 2026

Contents

Transforming Business using the Cloud

Enabling business and enterprise transformation using cloud is a complex, strategic consideration facing many private and public sector organisations. We have worked with many Central and Local Government clients to support the implementation of their business objectives using cloud technology.

Cloud technology and services have the potential to reduce cost, remove technology bottlenecks, and facilitate rapid business innovation. As a result, for most organisations globally, adopting cloud technology has become a question of "when and how" rather than "if".

Opportunities for enterprises generally include a combination of one or more of the following:

- Implementing private and/or hybrid clouds for infrastructure and applications
- Smarter use of public cloud infrastructure for optimising existing business functions
- Using cloud for implementing new business services or digital operations
- Reducing cost by moving to consumption-based pricing models that only charge for the actual IT capacity and services used.

Migration or adoption of cloud must be properly choreographed for success. We understand the realities and the business and technical risks that should be fully considered, understood and mitigated before such a move. Critical considerations include:

- **Alignment of business and technology objectives**. This is essential to fully realise the targeted benefits of any cloud transformation or any refinement of existing cloud services. There can be a tendency to adopt cloud systems to fit current ways of working, rather than adopt and standardise processes where possible. The trade-offs between business, customer and technology requirements must be considered to make informed design decisions
- **Availability and reliability of services**. The avoidance of operational downtime to mitigate in lost revenue, unnecessary operational cost or reputational damage that can disrupt business
- **Decentralised support structures**. The need to tailor and revise the approach to operational security to cover the support structures employed by cloud service providers that will have a different risk profile for sensitive information
- **Data handling practices**. Data classification and data-handling practices that reflect the data flow within a cloud environment must be understood and tailored accordingly to protect customer data
- **Data privacy**. Compliance with GDPR to understand where and how information can be stored or processed. The cloud model enables data to bounce swiftly around the world by using available server capacity in various geographic locations, but this must be within the bounds of what is permissible. This is ever more of a concern as organisations review their front office, back office and out of office experiences

- **Future Technology Trends**. Cloud applications are the stated direction of travel for the major application vendors, but any upgrade path must also cater for the future technology needs of the organisation and seek to minimise technical debt where possible
- **Enabling AI.** How the cloud will support the rapid adoption of AI and GenAI in organisations.

A careful assessment of an organisation's needs and different cloud service provider's controls is required, enabling concerns to be addressed and the correct path to the cloud is selected.

As a trusted advisor PwC provides the framework, and the wealth of private and public sector experience, to consider the combination of Business, customer experience and Technology activities outlined above. There is no single answer that covers each and every client organisation; we tailor our frameworks to client circumstances to support them:

- As a partner through the complete lifecycle of strategy through to execution
- With point business issues encountered during implementation or running the business.

Technology Operations Assurance Services

This section describes the service features and benefits included in this service definition document in more detail.

Technology Operations Assurance Services

PwC's Technology Operations Assurance Service provides a multidimensional assessment of both traditional and emerging technology operations/ risks within the enterprise. We cover technology risk advisory, IT resilience, IT operations management, IT risk management services and technology maturity assessments including before, during and after cloud migration, and in support of your due diligence, implementation and management of GenAI.

Technology Operations Assurance Services Features	Technology Operations Assurance Services Benefits
• Maturity assessment and benchmarking, improve understanding of IT investment effectiveness	• Identification and articulation of risks and recommendations for operations risks
• Management effectiveness review, optimisation and assurance. Resilience and incident support	• Detailed analysis to support investment or to optimise technology spend
• Business Continuity / Disaster Recovery (BCDR / ITDR) risk assessment, implementation, planning	• Articulate the resilience capability and investment required to support business
• IT Service and Operations change impact assessment, change implementation assurance	• Better supplier performance improves value for money, UX and outcomes
• Migration and re-hosting assurance, supporting hosting change and technology introduction	• Increase business engagement and recognition of Technology as a partner
• Technology Governance, Cyber Resilience and Risk Function design and implementation	• Expedite identification and fix of failure following major IT incidents
• IT Service Management tools and technologies effectiveness review and remediation	• Increased confidence that BCDR / ITDR is appropriate, tested, capable
• ITDR design, implementation, review and assurance including post incident review	• Better asset management improves cost control over licences and assets
• IT Controls Maturity Assessment and Implementation, including for Cloud and AI	• IT risk & control processes that meet regulations and standards
• IT Asset Management effectiveness review, implementation, planning and assurance.	• Optimised technology investment and reduced risk of technology service delivery.

Our view on the service features and benefits in this service definition document are presented below.

1. Technology Risk Advisory

As technology increasingly defines the performance of local and central government entities, the CIO and wider technology team are closer to centre stage than ever before. The core responsibilities of the CIO/CTO remain unchanged in providing a secure, stable and cost-effective technology platform aligned to the organisation strategy.

In the world of Cloud, open APIs and Artificial Intelligence (AI), there is scope for driving unprecedented levels of change. An organisation's leadership expects technology divisions to enable rapid changes in direction without stress or delay, yet technology costs remain under pressure. In this context, CIOs are being challenged to lead the redesign of core processes, based on the emerging technology capabilities.

We have built a portfolio of risk and advisory solutions that are proven in action and deliver real-world practical benefits by:

- **Translating regulatory requirements into operational realities**, based on a business-led definition of technology risk appetite
- **Assessing resilience and capabilities** and building effective methods for mitigating and, where possible, eliminating risk across critical end-to-end processes
- **Supporting Board and executive team awareness and learning** relating to technology risk, good practice and emerging regulatory expectations
- **Designing and transforming technology risk management**, service management and resilience target operating models and capabilities
- **Building and operating managed services** for technology risk management, internal control and operational continuity processes
- **Critically evaluating and supporting complex change programmes** to help ensure the effective delivery of business benefits
- **We bring together the business, domain, cultural and expertise** needed to deliver the right outcomes for local and central government organisations.

2. IT Resilience, Continuity Planning, and IT Disaster Recovery

Information Technology is a key enabler for government organisations. It has provided an opportunity to offer new services, increase public engagement, and grow and drive efficiencies at an unprecedented rate. A large part of an organisation's success can be attributed to the effectiveness and availability of its technology.

Consequently, the importance of IT services and the impact they make to the success of an organisation has grown to a point where they are now essential, particularly as they enable critical service that can have a direct impact on the wellbeing of the public (e.g. health, social care, emergency services, welfare). Services that perform poorly or suffer outages impact the business far more than ever before.

Managing the risk of outages or sub-par performance is essential and challenging due to pressures of complexity and the speed of change demanded by stakeholders. It is therefore essential that an IT-enabled organisation understands the resilience risks within its IT estate and has either moved to mitigate them or knowingly accepted them. When doing so the organisation has to take any regulatory or statutory responsibilities into account, for example the need to have an IT Disaster Recovery capability in place for key services.

We can help in this area through:

- **Assessing the IT resilience and recovery risk:** We can help:
  - Qualify the resilience risks to your IT estate and your team's capability to anticipate, respond to and recover from incidents, and what that means for your business in terms of outages and/ or reduced performance. This can include detailed technical end-to-end assessments with heat maps illustrating where risks are
  - You understand why a major incident happened, how the risks within the control and technical environment contributed, and how to prevent it happening again.
- **Plan and Build:** We can:
  - Help you develop a comprehensive IT resilience road map, combining the process, governance, technology and people elements to help you address your gaps in a focused, pragmatic and sustainable journey
  - build specific programmes such as IT Disaster Recovery or wider resilience. For wider resilience we leverage our other offerings such as IT service management to provide a comprehensive solution.
- **Assure:** We can assure:
  - Your resilience programme helping you maintain its capability
  - Specific areas, such as the impact of major transformation on resilience, or how an outsourcer's performance contributes or undermines your overall position
  - We can help you technically test your resilience and/or recovery provisions.
- **Respond:** We provide services to review and identify the root cause of failure in the event of a major IT incident. Our services allow you to quickly understand the causes of failure and implement short, medium and long-term plans to prevent recurrence.

Benefits

Confidence that your IT capability can meet the business's requirements, whatever circumstance will allow your IT function to understand business drivers and takes informed decisions to put in place the appropriate protection across the in-house IT estate, co-sourced environments, the cloud, and critical suppliers to give you:

- **Greater value from your IT investments:** You can have confidence that the investments made in your IT environment will be directly linked to the business requirements and organisational risk appetite – and that once they are deployed, systems will be robust to ensure continuous delivery
- **Fewer system outages:** Understanding the end-to-end environment allows specific points of failure or weaknesses across the IT estate to be addressed, leading to improved service delivery performance and less downtime.

3. IT Service and Operations

Our IT Service and Operations Management assurance proposition will provide confidence that your technology will enable your organisation to run effectively. It includes all the activities required to plan, design, deliver, test, operate and control technology solutions while aligning them to your business outcomes.

Good IT service and operations management practices improve operational resilience and help to mitigate technology risk. Value is provided through successful partnership between IT and the business, helping to achieve and maintain high performance by:

- Optimising people, processes and information tools
- Understanding and implementing controls that manage technology risk to key business services
- **Ensuring that individual technology components are delivered in resilient end-to-end services**, aligned to the needs of the business.

In this context we can help to:

- **Assess the maturity of your Service Management** processes and work with you to optimise them to better service your organisation
- **Assess the maturity of your DevOps practices**, to help you deliver and deploy faster, without introducing additional risks
- **Help you broker services across multiple suppliers** through effective Service Integration and Management (SIAM)
- **Help you to transition IT solutions effectively** to the live operating environment

- **Optimise IT support costs** through effective support models, e.g. follow-the-sun, nearshoring, and offshoring
- **Help you develop an effective Service Desk** that has the right capabilities in place to deliver great customer service
- **Help you assure your major incident management processes**
- **Reduce the number of IT incidents through effective problem management**, knowledge management, self-service and automation of IT processes
- **Help you establish enterprise service management** for your organisation
- **Provide an independent perspective as to whether IT can deliver changes without business disruption** and validate sufficient testing and rollback processes exist so IT changes work, and support improvement of these processes.
- **Understand, improve and report on IT performance**, including customer satisfaction

4. IT Maturity and Effectiveness

As part of our IT Effectiveness proposition, we offer a diagnostic which holistically reviews from strategy through to operations. This will provide a clear view of key risks and issues, insights, and pragmatic next steps to maximise business benefit through the use of technology.

Our solution:

- Our IT Effectiveness services provide a structured assessment and control benchmark of IT capabilities. This gives management visibility of capabilities which need to be improved, and confidence that risks are being managed
- As part of this we focus on delivering a pragmatic roadmap of activities to enable tangible improvements.

Benefits:

- Identify whether technology capabilities can support achievement of business objectives and are aligned with the overall business strategy
- Confidence for business leaders that they understand key IT issues and know how they can be solved
- Validation of where key risks are and how well controlled they are
- Identify 'blind spots', support case for change / investment, and measure improvements
- Builds confidence that the organisation has the right technology skills, management structures and sustainable / resilient systems to support business changes and growth

- Translates IT risk exposures and complex IT issue symptoms so that they can be understood and resolved by business leaders – before they have an impact on business or personal reputations.

5. DevOps transformation support

PwC has an established technical capability that provides an opportunity for our clients to accelerate delivery timeframes. Our DevOps Practice assists in driving the adoption and maturity of this capability through a focus on culture, capability and agility.

We believe we are uniquely positioned to partner with you to deliver real and enduring change given our experience in

- Helping many clients enable organisational and technology change
- Developing and applying our mature, global Agile, DevOps and change frameworks, methodologies and practices within public and private sector used to advise our clients on DevOps, agile ways of working and change management
- Using Scaled Agile supported by DevOps to deliver outcomes for complex technology and organisational problems

We can help in this area through:

- **Measuring your DevOps maturity** including understanding risks, issues, constraints and opportunities with consideration of industry best practice for DevOps within a government context
- Assessing and advising you on your target operating model by means of:
  - Assessing and advising on the optimal organisation and cultural change needed to reinforce and embed new DevOps ways of working for your team
  - Assessing the existing Service Management processes such as Change, Release, Deployment, Configuration, Capacity and Incident Management to identify blockers, demonstrating how these could be enhanced to enable faster delivery by Agile and DevOps teams whilst giving confidence that IT operational risks are not ignored
  - Assessing how new requests are agreed, validated, tested and iterated with the business, in particular how this process can be standardised to ensure the best use of resources
  - Reviewing your tooling strategy and risk exposure so there is appropriate balance between the freedom for DevOps teams to innovate, whilst remaining compliant with centrally mandated controls and standards
  - Optimise the monitoring, measurement and performance reporting of teams following Agile and DevOps methodologies, establishing the design and operating effectiveness of management information through review of metrics such as key performance and risk indicators

  - Automating data quality and control metrics, providing alerts to upstream data providers Reviewing your strategy to manage code complexity, prevent/detect code defects and vulnerabilities
  - Providing advice, coaching and training to support your focus on increasing the understanding and maturity of DevOps and Agility

- **Defining a practical roadmap to transform** into a more agile, DevOps-enabled organisation.

Benefits:

- A collaborative and transparent environment
- A more specific and uniform goal of quality instilled in all team members
- Increased Release Velocity via automated deployment
- Increased Defect Detection via continuous inspection of various testing phases
- More efficient and faster correction of defects via immediate feedback
- Reduced Deployment Failures via predefined configuration management
- Stable/Reliable Operating Environments via monitoring.