

Adopting Cloud Technology

Guidance for public sector organisations
in Ireland

May 2021

Table of contents

- 04 **Introduction**
- 05 **Why cloud?**
- 06 Security
- 07 Compliance
- 07 Data location
- 08 Innovation
- 08 Capability
- 09 Cost savings
- 09 Agility
- 10 **The evolution of procurement**
- 11 **Summary**
- 12 **Appendix A: Further reading**
- 12 **Appendix B: UK Ministry of Justice case study**
- 12 **Appendix C: Cambridge University Press case study**
- 13 **Appendix D: The Shared Responsibility Model**
- 14 **Appendix E: Recommended security structure**
- 15 **Appendix F: Public sector partners**
- 17 **Appendix G: Current procurement landscape**

Abstract

INTRODUCTION

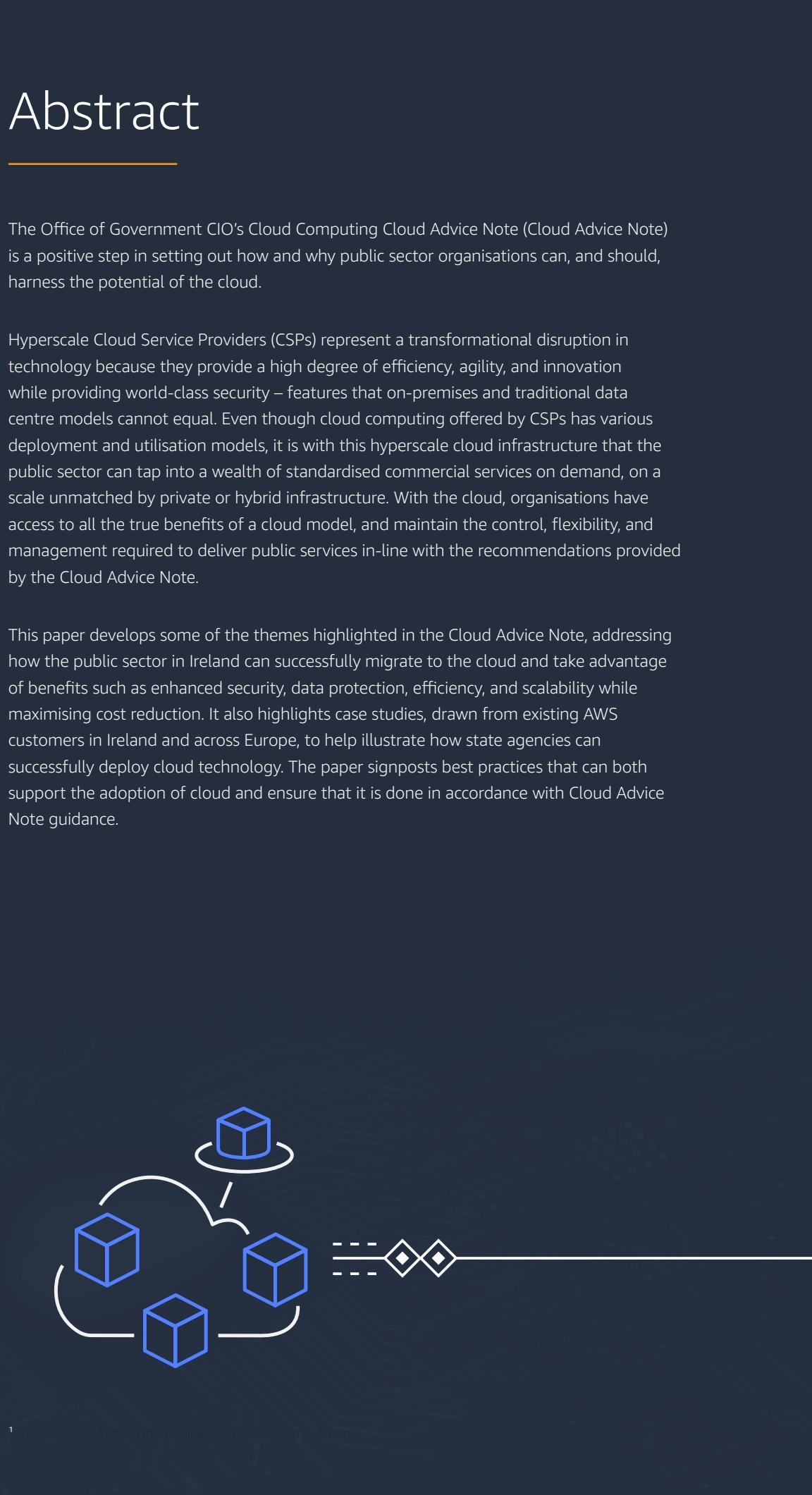
The Office of Government CIO's Cloud Computing Cloud Advice Note (Cloud Advice Note) is a positive step in setting out how and why public sector organisations can, and should, harness the potential of the cloud.

WHY CLOUD?

Hyperscale Cloud Service Providers (CSPs) represent a transformational disruption in technology because they provide a high degree of efficiency, agility, and innovation while providing world-class security – features that on-premises and traditional data centre models cannot equal. Even though cloud computing offered by CSPs has various deployment and utilisation models, it is with this hyperscale cloud infrastructure that the public sector can tap into a wealth of standardised commercial services on demand, on a scale unmatched by private or hybrid infrastructure. With the cloud, organisations have access to all the true benefits of a cloud model, and maintain the control, flexibility, and management required to deliver public services in-line with the recommendations provided by the Cloud Advice Note.

THE EVOLUTION OF PROCUREMENT

This paper develops some of the themes highlighted in the Cloud Advice Note, addressing how the public sector in Ireland can successfully migrate to the cloud and take advantage of benefits such as enhanced security, data protection, efficiency, and scalability while maximising cost reduction. It also highlights case studies, drawn from existing AWS customers in Ireland and across Europe, to help illustrate how state agencies can successfully deploy cloud technology. The paper signposts best practices that can both support the adoption of cloud and ensure that it is done in accordance with Cloud Advice Note guidance.



Introduction

INTRODUCTION

A new Cloud Computing Cloud Advice Note (Cloud Advice Note), published in October 2019 by the Office of Government CIO (OGCIO), replaced the previous 2015 document to offer a renewed perspective on the importance of cloud adoption. The original message of making informed, risk-based decisions is still very much prevalent. However, developments in the digital landscape require a new approach to deliver public services that are responsive to changing needs through scalability, flexibility, and innovation, which the agility of hyperscale CSPs provides. This document will provide further advice and set out how public sector organisations can adopt the cloud in line with the principles espoused in the Cloud Advice Note.

"Cloud computing is cheaper. It's faster to deploy and it's more scalable than running your own server room. It's the default in the commercial world and that's why it's already government policy that cloud computing should be the default option for new ICT investment. Existing systems should be reviewed to see if they can also be moved to the cloud."¹

Ossian Smyth, Minister of State Public Procurement and eGovernment



¹ <https://twitter.com/IRLDeptPER/status/1360172728708452352>

Why the cloud?

INTRODUCTION

WHY CLOUD?

THE EVOLUTION OF PROCUREMENT

SUMMARY

APPENDIX

The Cloud Advice Note recognises that more and more organisations are adopting cloud-first strategies as a better approach to delivering improved public services than using on-premises environments. A report published by [Flexera](#) that delves into the thinking of global cloud decision-makers shows that 96 percent of respondents already use 'the cloud', positioning it as the preferred location for most workloads.² The cloud operates at a massive scale, providing enhanced security, scalability, and ongoing cost-savings that are not readily available with on-premises environments, or private cloud models. A [Forrester study](#) commissioned by AWS found that European governments are highly engaged in modernising their infrastructure to meet citizen expectations and that cloud solutions will be critical in helping governments manage costs while achieving their goals.³ This is echoed around the world with 7,500 government agencies, more than 14,000 academic institutions, and more than 35,000 non-profit organisations, currently harnessing the AWS Cloud.

In Ireland today, many public sector agencies are already realising the potential of the cloud, including the Department of Expenditure and Reform, Kerry County Council, the Irish Society for the Prevention of Cruelty to Children (ISPCC), and the Irish Health Service Executive (HSE). To help reduce the spread of COVID-19 in Ireland, the HSE used cloud infrastructure for a scalable and reliable platform to build their COVID Tracker application. The agility provided by the cloud meant the app was developed, tested, and the first prototype version was available in just two days. Once the app was launched in July there were one million downloads in the first 36 hours and 1.54 million by week four, equivalent to 30 percent of Ireland's population. The COVID Tracker app is able to grow and shrink instantly to meet fluctuating demands for capacity as pandemic activity changes, proving what public sector applications backed with the agility and elasticity of cloud technology can do.

Other major government agencies are successfully moving their focus away from on-premises data centres that struggled to rapidly adapt to citizen and staff needs to a new culture centred on technology that enhances public service effectiveness and quality. To shape their cloud procurement process for a cloud first approach, the UK government implemented a digital market place, G-Cloud, which has seen over £7 billion of total sales since 2012. Through adopting cloud as default, ministerial departments such as the [UK Ministry of Justice](#) (MoJ) were able to deliver services securely, increasing the speed of feature enhancements and updates from more than six months in some cases to multiple times per day. The MoJ was able to adapt to user needs, and respond to service data use more effectively. Cloud technology became an enabler to focus on organisational aims, rather than the focus itself. (See **Appendix B** for full case study.)

² [Flexera 2020 State of the Cloud Report](#)

³ [Forrester: Build a Better Government in the Cloud, report](#)

INTRODUCTION

WHY CLOUD?

THE EVOLUTION OF PROCUREMENT

SUMMARY

APPENDIX

Many CSPs offer professional service support and a robust set of tools to plan, map, automate, and accelerate migrating existing workloads to the cloud. [Cambridge University Press](#) worked with AWS Professional Services to assist with migrating their workloads and mission-critical SAP application to the cloud in a single weekend and saw a 20 percent reduction in their overall hosting costs, along with increased security (see **Appendix C** for full case study). Organisations can migrate at their own pace, and existing on-premises systems can connect to the cloud by online/offline data transfer or through hybrid cloud solutions. A hybrid cloud environment can allow organisations to address immediate IT needs by leveraging cloud computing while also retaining on-premises infrastructure. A hybrid model can be a prudent approach to cloud adoption if organisations require the use of scalable cloud services but are not ready to fully migrate all applications and workloads to the cloud.

Security

Sean Roche, associate deputy director of digital innovation for the Central Intelligence Agency (CIA), speaking at the [2018 AWS Public Sector Summit](#), described the cloud, on its weakest day, as more secure than a client-server solution.⁴ With the cloud, organisations can build on secure global infrastructure but always own and control their data, including the ability to encrypt, move, and store it in a physical location.

As the Cloud Advice Note explains, adoption of cloud requires organisations to consider information security management processes and, in particular, a clear division of responsibilities between the organisation and the CSP. AWS recognises that security (and compliance) are shared responsibilities between the CSP and the organisation. This differentiation of responsibility is commonly referred to as security of the cloud, which is the CSP's responsibility, versus security in the cloud, which is the organisation's responsibility. (A diagram to illustrate this division is provided in **Appendix D**.) Under this shared responsibility model, CSPs such as AWS, are responsible for protecting the infrastructure that runs all of the services offered in the AWS Cloud. This infrastructure is composed of the hardware, software, networking, and facilities that run AWS Cloud services. The organisation's responsibility will be determined by the nature of services deployed. This determines the amount of configuration work the organisation must perform as part of their security responsibilities.

Public sector organisations should carefully consider the services they choose because their security responsibilities vary depending on the services used, the integration of those services into their IT environment, and applicable laws and regulations. It is possible for organisations to enhance their security and/or meet their more stringent compliance requirements by leveraging technology such as host-based firewalls, host-based intrusion detection and prevention, encryption, and key management.

Benefits of using the cloud include utilising application programming interface (API) calls that act as the front door for applications to access data, business logic, or functionality from backend resources. API endpoints allow organisations to interact with specific services, such as storage resources, computer infrastructure, user management, or monitoring tools. This API interaction provides powerful visibility from a security perspective since all users must use an API to interact with the platform.

CSPs offer robust services that enable governance, compliance, and operational and

4 [2018 Public Sector Summit Keynote - Central Intelligence Agency](#)

INTRODUCTION

WHY CLOUD?

THE EVOLUTION OF PROCUREMENT

SUMMARY

APPENDIX

risk auditing of an organisation's account. This makes it easy for organisations to enhance security practices as it simplifies security analysis, resource change tracking, and troubleshooting. Organisations can migrate data knowing that with the appropriate controls, the cloud can assist with data processing and managing retention, as the logging and continuous monitoring of API calls are key components in cloud security and operational best practices.

UK based company, uMotif, facilitates medical research through improving the quality of data captured during clinical studies by securely syncing to a cloud-based backend infrastructure running on the AWS Cloud. uMotif's secure and compliant platform scales from a few dozen patients to research with tens of thousands of participants, wide geographical coverage, and millions of data points. Through adopting cloud, uMotif are able to secure sensitive information and protect their API endpoints by leveraging services such as AWS WAF to block out viruses and malicious attacks. The cloud increases visibility into an organisation's account by providing tools to record and monitor API calls, authorise access, and deliver detailed log files, alleviating common challenges experienced with the infrastructure and maintenance of on-premises environments.

Compliance

The cloud makes it simple to align with the Cloud Advice Note's strategy of enhancing security practices and audit capabilities. By leveraging industry best practices on security and privacy, organisations can easily put physical and logical security controls in place, without an overly burdensome process, strengthening an organisation's security posture. Organisations can request and evaluate attestations, certifications, and audit reports held by CSPs. These certifications can help assure organisations of the design and operating effectiveness, as well as controls of the CSP, validated by a qualified, independent third party. (Further information on recommended security frameworks is provided in **Appendix E**). If required, organisations can perform audits and assessments on their security configuration to ensure they meet current organisational needs. CSPs provide online access to compliance reports and documentation, whitepapers, and reference architectures that address regulatory requirements.

Irish digital health software firm, Wellola, provides secure video and patient portal services to healthcare providers. During the COVID-19 pandemic, Wellola used AWS Cloud services to optimise its software as a service (SaaS) platform from a security and scalability perspective. Wellola was able to scale-up quickly and easily to meet the increased demand for services while delivering a reliable, secure platform that complies with regulatory standards and data protection legislation (like HIPAA and GDPR).

Data location

As highlighted in the Cloud Advice Note, having geographic control of your data – e.g., for business continuity – or keeping it within a country like Ireland is important. Organisations have the visibility needed to comply with regional and local data privacy laws, as well as maintain control of their data's location. Ireland is home to the first AWS Region outside of North America and boasts greater availability of services than any other European region. It frequently receives new services first. Organisations in Ireland can retain complete control over the Regions in which their data is physically located, helping them meet residency requirements. In keeping with the recommendations of the Cloud Advice Note, this ensures

the Irish public sector is well positioned to adopt cloud in adherence to local regulatory requirements, all while receiving services with high availability and low latency.

Innovation

Professionals can re-prioritise their work with the cloud. They can place focus on the types of services that support the needs of applications to drive innovation and reinvent how they deliver public sector services. The pace of digitalisation is rapidly increasing, and the Cloud Advice Note encourages organisations to adopt the modern and emerging technologies needed for modern public services. Embracing the cloud can enable technological advancements such as artificial intelligence (AI) through compute power that traditional on-premises data centres can no longer provide. With the cloud, organisations can share machine learning (ML) capabilities to easily build, train, and deploy smarter applications which, in turn, can facilitate better data-driven decisions, ensuring that all can benefit from the transformative effects of AI. The cloud enables organisations to connect to billions of devices around the world through Internet of Things (IoT). With the proliferation of IoT devices, it can provide solutions to collect, store, and analyse data, to continuously optimise and improve services.

Capability

The cloud can make jobs easier and more productive as organisation staff can concentrate on their core competencies, career progression, and upskilling. According to the world's largest professional network, [LinkedIn](#), cloud computing is one of the most in-demand skills.⁵ However, at AWS, we recognise the current skills gap identified in the Cloud Advice Note, which surrounds the migration and management of cloud-based systems. Adopting cloud technology can in fact bridge this gap. Most CSPs, including AWS, provide digital and classroom training in topics ranging from the technical aspects of their services through to general awareness for senior leaders. In keeping with the Department of Education and Skills' [Ireland's Third ICT Skills Action Plan](#), which promotes the development of high-level ICT skills.⁶ Leveraging training and certification programs offered by CSPs can allow public sector agencies to build and validate their staff's ability to get the most out of the cloud, and build confidence in the adoption of cloud services across the organisation.

The Cloud Advice Note advises organisations with little or no cloud experience familiarise themselves with the cloud and seek input from experts. CSPs have a wide range of partners in Ireland that can help navigate cloud adoption and provide best practice guidance. When the ISPCC needed to replace its existing digital platform and databases, Dublin-based AWS Partner Singlepoint helped it create a cost-effective, secure, and resilient solution. Using a broad range of cloud technologies, generous funding from the Vodafone Ireland Foundation, and Singlepoint's award-winning Digital Acceleration Platform (DAPx), ISPCC developed a Childline platform that enables volunteers to respond faster and more effectively when supporting and protecting children in Ireland. (A list of AWS Public Sector Partners with a presence in Ireland is provided in **Appendix F**.)

Cost savings

⁵ [The Most In-Demand Hard and Soft Skills of 2020](#)

⁶ [Technology Skills 2022. Ireland's Third ICT Skills Action Plan](#)

INTRODUCTION

WHY CLOUD?

THE EVOLUTION OF PROCUREMENT

SUMMARY

APPENDIX

As the Cloud Advice Note states, services provided to citizens and businesses should be run in the most cost-efficient manner possible. The cloud has the added advantage that organisations pay only for resources they use, as they use them. The UK's National Health Service Business Services Authority (NHSBSA) handles just under five billion calls every year. Through using AWS AI services to automate portions of their healthcare contact call centre, they experienced a reduction in calls to their representatives by more than 40 percent, equivalent to approximately €550,000 in savings annually. As services are provided over the internet, there is no need for heavy investment in physical resources or powering servers. Not only does this utility-style model negate the need to pay for expensive unused resources, research from [451 Research](#) estimates that moving from on-premises to the AWS Cloud can reduce an organisation's IT carbon emissions by 88 percent.⁷ CSPs achieve massive economies of scale, which translates into lower pay-as-you-go prices. For example, AWS has been able to reduce prices more than 80 times since it launched in 2006.

The Cloud Advice Note recognises that close analysis and management of costs is required. Organisations can leverage various CSP tools and services online to help assess potential savings – including the total cost of moving to the cloud, not just individual workloads. Organisations should consider what assets they have, including physical machines, labour, storage, software licenses, and data centres. They will assess how these can be reduced and managed by adopting the cloud utility-style model. To assist, transparent, up-to-date pricing, and cost management tools are available online. Organisations can also use cloud-billing services to monitor usage, analyse and control costs, and generate detailed billing reports to meet compliance needs.

With the cloud, organisations do not have to worry about peaks and troughs. The cloud fully supports auto scaling, and you only pay for what you use. Resources are provisioned on an as-needed basis and capacity can be scaled up or down instantly as organisational needs dictate, with no fixed long-term contracts and no termination fees.

Agility

Acknowledged in the Cloud Advice Note, cloud infrastructure provides the greatest access to new and enhanced functionality. Organisations can quickly deploy resources in a matter of minutes, rather than months, and have the ability to create completely new public services in a matter of days. When Caredoc, an out-of-hours family doctor service in Ireland, was tasked with supporting the HSE Live helpline during the COVID-19 pandemic, it experienced significant call volumes. With the help of Equal Experts, an advanced consulting member of the AWS Partner Network, Caredoc implemented this new service enabling call logging, allocating, tracking, and monitoring for HSE Live in just one week. Built on a range of AWS Cloud services, the solution eliminated manual administrative and reconciliation tasks, saving them two hours of work per day, and enabling them to resolve patient calls 30 percent faster. Using AWS, organisations have freedom to experiment as the cost and time it takes to test and develop is significantly lower than that of traditional technology infrastructure.

⁷ [The Carbon Reduction Opportunity of Moving to Amazon Web Services](#)

The evolution of procurement

INTRODUCTION

WHY CLOUD?

In February 2021, the Office of Government Procurement (OGP) published a Cloud Services Procurement Guidance Note (Guidance Note) for public sector bodies, which builds on the Cloud Advice Note. The Guidance Note provides information and guidance with regard to the contractual and commercial considerations to be taken into account when procuring cloud services and can be used to assist public bodies who wish to tender for cloud services. (Organisations can leverage existing ICT frameworks to procure cloud, with further information on OGP frameworks provided in **Appendix G**). Organisations can also conduct their own procurement exercise and in doing so, should take cognisance of the Guidance Note, and as recommended within, seek support and guidance from CSPs and CSP Partners.

THE EVOLUTION OF PROCUREMENT

SUMMARY

Cloud evaluation criteria should focus on system performance requirements. CSPs operate on a massive scale and offer standardised services in the same way to all customers. You can perform inquiry into contractual cover and regulatory obligations as advised by the Cloud Advice Note through accessing online CSP documentation. Service terms, conditions, and service-level agreements (SLAs) are publicly available and provide greater clarity on how service offerings operate. This includes service credits, which negate the need for specific damage provisions or performance guarantees.

APPENDIX

Although CSPs cannot provide customised service offerings, organisations can discuss their requirements with CSPs and see how this can be achieved through engaging an approved partner. In addition to the procurement team, we recommend involving other key stakeholders at an early stage to discuss how implementing cloud may influence existing practices. This will help set realistic expectations and establish timescales, recommended in the Cloud Advice Note. Helping those with organisational knowledge understand the benefits of cloud technology will help to accelerate buy in during the cloud adoption journey, and ensure a culture to sustain it.



Summary



INTRODUCTION

WHY CLOUD?

No longer a technology of the future, the cloud is already enhancing data security, reducing costs, and providing a platform to accelerate innovation. Public sector professionals can concentrate on work that is more productive, rather than being weighed down by infrastructure maintenance. Ireland can continue to build on cloud capabilities and safely join the thousands of other governments, agencies, and international institutions demonstrating that cloud is a proven way to ensure public services are developed and delivered in-line with the recommendations provided by the OGCIO Cloud Advice Note. This will not only improve operations and services but also empower the Irish workforce, possibly the most important investment.

If you would like to learn more about how AWS Cloud can help your organisation to innovate and digitally transform, please contact the Irish AWS Public Sector team via **aws-publicsector-ireland@amazon.com**.

THE EVOLUTION OF PROCUREMENT

SUMMARY

APPENDIX

Appendix A: Further Reading

For additional information, see:

- [AWS 10 Considerations for a Cloud Procurement whitepaper](#)
- [AWS Data Classification whitepaper](#)
- [AWS Data Residency whitepaper](#)
- [OGP Cloud Services Guidance Note \(2021\)](#)
- [OGP Current Frameworks and Contracts \(2020\)](#)
- [OGP Forthcoming Schedule of Frameworks and Contracts \(2020\)](#)
- [ETENDERS Contract notice - Directive 2014/24/EU](#)

Appendix B: UK Ministry of Justice case study

By moving to the AWS Cloud, the UK Ministry of Justice (MoJ) can use technology to enhance the effectiveness and fairness of the services it provides to British citizens. The MoJ is a ministerial UK government department that maintained an on-premises data centre, but lacked the ability to change and adapt rapidly to citizen needs. As it created more digital services, the MoJ turned to AWS to automate, consolidate, and deliver constituent services. Using AWS services – including Amazon Elastic Compute Cloud (Amazon EC2), Amazon Simple Storage Service (Amazon S3), and Amazon Route 53 – the MoJ has turned technology into an enabler for more fair and effective justice.

Learn more about how the AWS Cloud transformed the MoJ by reviewing the [UK Ministry of Justice Case Study](#) on our website.

Appendix C: Cambridge University Press case study

Cambridge University Press (CUP) has gone all-in on AWS. Using AWS and AWS Professional Services, CUP migrated its mission-critical SAP application to the cloud in a single weekend and in so doing, saw an overall 20 percent reduction in cost along with increased security. Cambridge University Press was founded in 1534 by the order of King Henry VIII with the singular goal of printing books. Today, its mission is to unlock people's potential by providing learning and research solutions for students, researchers, academics, and institutions worldwide.

Learn more about how AWS Professional Services reduce costs and enhances security for CUP by viewing the [Cambridge University Press Case Study](#) on our website.

Appendix D: The Shared Responsibility Model

INTRODUCTION

WHY CLOUD?

THE EVOLUTION OF PROCUREMENT

SUMMARY

APPENDIX

Security and compliance responsibilities are shared between AWS and the customer. This shared responsibility model can help relieve customers' operational burdens as AWS operates, manages, and controls the components from the host operating system and virtualization layer down to the physical security of the facilities in which the service operates.

Customers, and in some cases, our AWS Partner Network (APN) Partners who work with those customers, control how they architect and secure their applications and data in the AWS Cloud. AWS provides a wide array of security and compliance services; a customer's responsibilities will vary depending on the services used, the integration of those services into their IT environment, and applicable laws and regulations.

As shown in **Figure 1** below, this differentiation of responsibility is commonly referred to as security of the cloud versus security in the cloud.

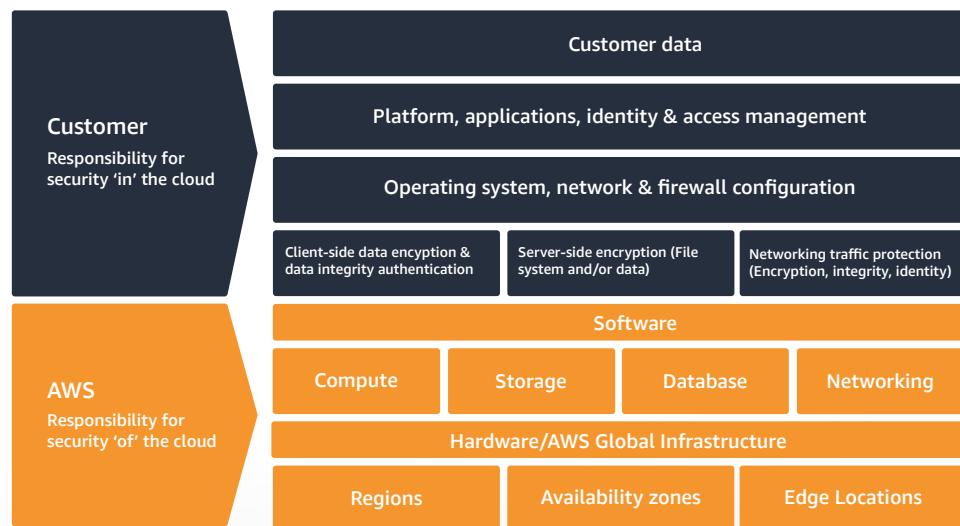


Figure 1 – AWS Shared Responsibility Model

Appendix E: Recommended security structure

INTRODUCTION

WHY CLOUD?

THE EVOLUTION OF PROCUREMENT

SUMMARY

APPENDIX

Cloud accreditations and evaluations provide customers with assurance that the effective physical and logical security controls are in place. When customers are protected by compliance standards, they avoid burdensome processes or approval workflows that may not be required for a cloud environment.

When selecting a CSP, customers should make sure that their cloud infrastructure is designed, managed, and in alignment with global and regional regulations, standards, and best practices. Below are some of the security frameworks, best practices, and audit standards that AWS adheres to and recommends:

European programs:

- General Data Protection Regulation (GDPR)
- Cloud Infrastructure Services Providers in Europe (CISPE)
- EU Data Protection Directive (Directive 95/46/EC) Model Clauses
- UK Cyber Essentials Plus
- UK Data Protection Act (2018)
- UK National Cyber Security Centre (NCSC) Cloud Security Principles
- Cloud Computing Compliance Controls Catalog (C5) (Germany)
- Data Processing Addendum (DPA) Authorisation (Spain)
- Esquema Nacional de Seguridad (ENS) (Spain)
- IT Grundschutz (Germany)

Global programs:

- International Organization for Standardization (ISO) 27001, 27017, 27018, 9001
- System and Organization Controls (SOC) 1, 2, and 3
- Cloud Security Alliance (CSA)
- Payment Card Industry Data Security Standard (PCI DSS) version 3.2
- International Computer Room Experts Association (ICREA)

View a more comprehensive list and further information on compliance programs by visiting the [AWS Compliance webpage](#).

Appendix F: AWS Public Sector Partners

INTRODUCTION

WHY CLOUD?

THE EVOLUTION OF PROCUREMENT

SUMMARY

APPENDIX

The [AWS Partner Network](#) (APN) is the global community of Partners who leverage AWS to build solutions and services for customers. There are tens of thousands of AWS Partners across the globe. More than 90 percent of Fortune 100 companies and the majority of Fortune 500 companies use AWS Partner solutions and services. Customers can use APN Partners to help design, migrate, manage, and optimise workloads on the AWS Cloud.

The [AWS Public Sector Partner](#) (PSP) Program recognises APN Partners with solutions and experience in delivering government, education, and non-profit customer missions around the world.

Table 1 - AWS Public Sector Partners in Ireland

AWS Public Sector Partner	Description
Accenture	Accenture is a global professional services company that provides an end-to-end solution to migrate to and manage operations on AWS.
Transact Technology Solutions Ltd	TransACT are an AWS Advance Consulting partner providing services on storage, cloud management, cost optimisation and data analytics.
Terraalto	TerraAlto are an AWS Advanced Consulting Partner who as a team of technical consultants have been working with AWS since 2011.
Deloitte	Deloitte are a Premier Consulting Partner are one of the largest professional services firms in the world, leading in digital transformation strategy.
SoftwareONE	SoftwareONE is a global leader in software and cloud portfolio management with over 6000 technology experts in 90+ countries.
Kainos Software Limited	Kainos is a thriving technology company with particular expertise in three core markets: healthcare, financial services and public sector.
PA Consulting	PA provides a broad range of cloud solutions including migration, solutions development, managed services and cloud optimisation.
DXC Technology	DXC Technology is the World's leading independent, comprehensive IT services company, helping clients harness the power of innovation.
Fujitsu	Fujitsu provides innovative IT services and products globally to over 180 countries and in 40 languages via Global Delivery Centres.
Sungard Availability Services	Sungard AS offers resilient, managed, SLA backed solutions leveraging AWS Cloud to recover, backup, and run mission critical workloads.
NNIT	NNIT is one of Denmark's leading consultancies in IT development, implementation and operations with focus on life sciences worldwide.

INTRODUCTION

WHY CLOUD?

THE EVOLUTION OF PROCUREMENT

SUMMARY

APPENDIX

<u>Version 1</u>	Version 1 specialises in the migration, optimisation, and running of complex enterprise workloads in AWS.
<u>New Relic</u>	New Relic is a leading cloud-based observability platform built to create more perfect software.
<u>EPAM Systems, Inc</u>	EPAM Systems simplifies your infrastructure and applications by moving them to the cloud eliminating technical debt so you can focus on your business.
<u>Datadog Inc</u>	Datadog is the essential monitoring service for modern cloud environments.
<u>Druva</u>	Druva delivers a SaaS-based platform to protect and manage enterprise data across endpoints, data centers and native cloud workloads.
<u>Dynatrace</u>	Dynatrace provides software intelligence to simplify cloud complexity and accelerate digital transformation.
<u>Tableau Software</u>	Tableau Software helps people see and understand data. Tableau helps anyone quickly analyze, visualize and share information.
<u>ElectroMech Corporation</u>	They work on open source and AWS Cloud development, solution, infrastructure support, training, IoT, and Echo Alexa development.
<u>MongoDB</u>	MongoDB is the leading modern, general-purpose database platform, designed to unleash the power of software and data.
<u>Forcepoint</u>	Forcepoint delivers modern cybersecurity by proactively safeguarding critical data and IP.
<u>FuseForward Cloud Services Ltd.</u>	FuseForward accelerates digital transformation for critical service providers including utilities, education and healthcare providers.
<u>Sycomp, A Technology Company, Inc.</u>	Global provider of innovative data center, cloud, and security solutions.
<u>TERMINALFOUR</u>	They offer an innovative digital engagement, marketing, web content management and hosting platform for higher education universities and colleges.
<u>SmartSimple Software Inc</u>	SmartSimple is an expert in process solutions. We can help you automate any process, no matter how unique your needs or requirements.
<u>Tech Data</u>	Tech Data TS helps customers move data and workloads to the cloud through collaboration with its global partner network.
<u>Cloud Titans</u>	Cloud Titans is a leading AWS Advanced Partner and Expert MSP provider.
<u>axial3D</u>	axial3D is a medical imaging and 3D printing company that provides software and services to help surgeons access 3D printing.
<u>56K.Cloud GmbH</u>	They offer cloud strategy, governance and transformation. They lead in a new way by adopting cloud technologies and building business on cloud.

Fathom	Fathom helps you discover the intersection between new technology and real world applications that are relevant to your business.
Trilogy Technologies	They are a cloud infrastructure partner, as well as a managed services and security provider for hybrid cloud.
FINEOS Corporation	FINEOS is a supplier of life, accident and health insurance core systems.
FuseForward Solutions Group Ltd	FuseForward accelerates digital transformation for critical service providers including utilities, education and healthcare providers.

Search, discover, and connect with other trusted APN Technology and Consulting Partners by visiting the [AWS Partner Solutions Finder](#).

Appendix G: Current procurement landscape

The [Office of Government Procurement](#) (OGP) has responsibility for sourcing goods and services on behalf of the public service in Ireland. This includes the portfolio of Information and Communications Technology (ICT).

The public sector in Ireland is bound by procurement legislations [SI 284-2016 European Union \(Award of Public Authority Contracts\) Regulations 2016](#). These regulations state that contracts greater than €144,000 must be let via Official Journal of the European Union (OJEU) tender.

The OGP have set-up a framework, [Multi Supplier Framework Agreement for the provision of Business Management and ICT Consultancy Service, Ref PAS097F](#), which includes the cloud in two lots: [lot 5 ICT](#) and [lot 11 ICT](#). There are two key differences between lots 5 and 11. Lot 5 covers anything under the OJEU threshold, (€25,000 - €144,000); lot 11 covers anything over €144,000. The other difference is that both lots have different organisations on the framework. This framework was awarded in August 2018 and is due to run until August 2022.

How to use the framework

Customers can contract for cloud by carrying out the following tasks:

- The department/end customer contacts OGP with a list of requirements/scope and budget
- OGP administers the input from the contracting authority and conducts a mini competition to every supplier on that lot
- OGP completes the evaluation and hands the decision back to the contracting authority for award and completion.

Notices

INTRODUCTION

WHY CLOUD?

THE EVOLUTION OF PROCUREMENT

SUMMARY

APPENDIX

Customers are responsible for making their own independent assessment of the information in this document. This document: (a) is for informational purposes only, (b) represents current AWS product offerings and practices, which are subject to change without notice, and (c) does not create any commitments or assurances from AWS and its affiliates, suppliers or licensors. AWS products or services are provided "as is" without warranties, representations, or conditions of any kind, whether express or implied. The responsibilities and liabilities of AWS to its customers are controlled by AWS agreements, and this document is not part of, nor does it modify, any agreement between AWS and its customers.

© 2021 Amazon Web Services, Inc. or its affiliates. All rights reserved

