

Artificial Intelligence: Selling to the UK Public Sector

With the benefits of Artificial Intelligence increasingly being realised by businesses, organisations in the public sector are also beginning to embrace its potential to provide financially, socially, and environmentally beneficial outcomes.

Public procurement is seen as a significant enabler in the adoption of AI because of the UK government's purchasing power—whether in agriculture, education, healthcare, national infrastructure, the natural or built environment, energy, or transport. In February 2020, the Committee on Standards in Public Life published its report on AI and its impact on public standards ("Committee Report"), and in May 2021 the government issued its response to that report ("Government Response"). The Committee Report and the Government Response each make a number of recommendations as to how the AI policy landscape should evolve to create a robust governance and regulatory framework for AI in the public sector.

A key theme of both the report and response is establishing clear processes and tools to facilitate public procurement of AI products and services. The latest item in the public sector's toolbox is the 'Artificial Intelligence Dynamic Purchasing System' ("DPS"), which provides a framework for public sector buyers to obtain AI products and services in a structured and efficient manner.

This article gives prospective suppliers to the UK public sector an overview of this tool, as well as the current Alspecific policies and guidance that they will need to comply with when offering products and services to the public sector. It also provides insight into what developments we might expect to see following the publication of the Government Response.

What is the DPS?

The DPS is a procurement framework managed by the Crown Commercial Service ("CCS") that allows public sector buyers to procure AI products and services through the government's Digital Marketplace.

The DPS is set up to allow suppliers to fulfil engagements within one of three categories:

- Al "Discovery": If a buyer is new to Al, they can procure services through a discovery phase to get an understanding of how Al can benefit their operations.
- Licensing, Customisation, and Support: If a buyer has experience in AI, they will be able to license AI technology
 and obtain customisation and support directly from suppliers.
- **End-to-end:** If a buyer would like to procure both of the above elements, they can establish end-to-end partnerships with suppliers.

The types of AI products and services that may be advertised through DPS are: (i) AI Applications; (ii) Augmented Decision Making; (iii) Data and Analytics; (iv) Virtual Assistants and Chatbots; and (v) Medical AI Technology (screening, diagnosis, etc.). These categories are not defined further, but can be used by buyers to filter their supplier searches. Therefore, suppliers should consider how best to describe their products and services at the DPS application stage.

The value of contracts to be awarded through DPS is estimated at £25 million in the first year, growing to £50 million in year two. Unlike other UK Government procurement frameworks, suppliers can apply to join DPS at any time.

AI-specific requirements under DPS

Those suppliers who are already familiar with other government frameworks such as Digital Outcomes & Specialists (DOS) or Software Design & Implementation Services (SDIS) will recognise the majority of the DPS framework—it

Selling AI to the UK Public Sector

follows the same structure. For those not already in the know, suppliers are required to apply to DPS with details of their available services and enter into a Framework Agreement with CCS. Once approved, buyers are able to run a mini-competition to select a supplier who will enter into an Order Form governed by the terms of the Framework Agreement.

The Framework Agreement includes a 'Specification', which requires suppliers to adhere to various identified standards and guidelines. Whilst there are some additional healthcare-specific standards applicable to medical AI technology, the general AI-specific standards and guidelines are as follows:

Guidelines for AI Procurement

The Office for AI developed the Guidelines for AI Procurement in collaboration with the World Economic Forum Centre for the Fourth Industrial Revolution, and other stakeholders. Whilst principally aimed at public bodies to help them assess the viability of an AI system, suppliers are also required to consider them to ensure their products and services align to the technical and ethical standards for AI procurement required by government.

Suppliers seeking to secure business from the public sector should be prepared to:

- justify the make-up of their development and delivery teams, with an eye towards diversity to ensure full
 understanding of the interdependent disciplines that AI technologies incorporate, as well as mitigate bias in the
 AI system;
- support the procuring body to consider the human and socio-economic impact and benefits of the AI system, discuss the benefits, capabilities, limitations, and potential risks of the use of the AI system in the relevant context, and to highlight potential sources of bias; and
- suggest mechanisms to allow human oversight of AI systems throughout their lifecycle, and maximise transparency in AI decision-making. The explainability and interpretability of AI systems will be high on the agenda.

Data Ethics Framework

The Data Ethics Framework provides guidance on the responsible use of data in the public sector. Buyers carrying out an assessment of an AI solution are required to assess the project against the overarching principles of transparency, accountability, and fairness. It also contains specific actions (effectively a list of questions) that a buyer must consider as part of any AI-related project. As such, suppliers will also need to consider how its products/services stack up against these considerations.

Guide to using Artificial Intelligence in the public sector

As with the Guidelines for AI Procurement and the Data Ethics Framework, the Guide is also aimed at buyers. However suppliers wanting to sell to the public sector will also need to keep it in mind when developing and marketing their products to satisfy public sector buyers that the solution is appropriate for use. It emphasises the need for buyers to understand the technology better, including in particular its advantages and limitations. It also provides additional guidance on assessing AI solutions, planning and preparing for implementation and managing ongoing AI projects, as well as using AI ethically and safely.

Data Ethics Letter of Understanding

Suppliers are also required to sign the 'Data Ethics Letter of Understanding' as part of their application to the DPS. The letter refers to the guidance listed above, and the need for suppliers to meet these standards. It also identifies a non-exhaustive list of requirements for all suppliers, including:

- **transparency:** suppliers must ensure the outputs of the AI technology are explainable, and that the explanation is widely available and understandable;
- data governance: suppliers should identify data limitations and implement strategies to address these, including their approach to eliminating bias and other safety risks;
- human oversight: suppliers should adopt legally sound consent processes and be able to describe the level of human decision-making at critical points; and

Selling AI to the UK Public Sector

privacy and cybersecurity: suppliers should be able to describe their privacy and cybersecurity approach and how
data will be protected.

Future Developments

The DPS Specification also makes clear that suppliers must comply with any new guidelines that may be published during the life of the DPS, and it is crucial for suppliers to remain abreast of developments to maintain their compliance. All is a fast-developing area, and already we anticipate a number of potential policy updates following the Government Response.

A more cohesive approach?

With an ever-growing body of guidance and commentary published by various domestic and international bodies, the Committee Report expressed concerns about how these work together and which principles the public sector must follow. Whilst the DPS goes some way to addressing this by expressly referencing certain guidance, it also makes clear that buyers will need to consider any other governmental guidance. Right now, this is not a trivial matter, but we're optimistic that a more cohesive approach will emerge.

The Government has published an online resource, the 'Data ethics and AI guidance landscape', which identifies relevant guidance and its intended audience. However, in this rapidly developing landscape there will be a constant need to update and refresh the guidance and standards.

In January 2021, the Central Digital and Data Office was established which will review the overall digital and data programme for government. The Office for AI is currently working on a National AI Strategy in consultation with the AI Council, an independent expert committee that advises the government, as well as various players from industry and academia—the strategy is to be published later this year.

A shift in responsibility?

Much of the policy to-date focuses on government and the wider public sector ensuring AI products and services are right for their use-cases. Suppliers could perhaps expect to see more supplier-focused obligations forming part of future policy (or of new regulatory requirements). Whilst some guidance, such as the Office for AI's 'Understanding artificial intelligence ethics and safety', is aimed at those who design, produce, and deploy AI projects, it is still largely limited to high-level principles. It's reasonable to expect to see more precise requirements imposed on providers as relevant standards emerge.

More regulation, and a new regulatory assurance body?

We may see further guidance from regulators in specific fields, or indeed more regulation.

The DPS Framework Agreement already includes general obligations on suppliers to ensure they comply with the Government's Supplier Code of Conduct and to support CCS and buyers to fulfil their equality and accessibility obligations. However, the Government Response indicates that additional Al-specific guidance is in the pipeline—the Equality and Human Rights Commission (EHRC) is currently developing guidance for public authorities on how to ensure Al complies with the public sector equality duties, for example.

In 2020 the ICO published draft guidance on the AI auditing framework which looked at data protection law in the context of AI, and made recommendations for organisational and technical measures to mitigate the risks AI poses to individuals, as well as a methodology for auditing AI applications.

In Europe, legislation has been proposed which prohibits certain practices using AI, places stringent controls around certain AI systems and use cases, and provides for national competent authorities for AI. At the time of writing there was no published plan to create a specific AI regulator for the UK, and it is not yet clear whether the UK will ultimately take a similar approach. However suppliers of AI products and services can expect to come under growing scrutiny—not just from the CCS (by virtue of providing services through DPS)—but also by the various regulators and governmental bodies.

The Committee Report recommended that the Centre for Data Ethics and Innovation (CDEI) take on the role of a regulatory assurance body for AI to identify gaps in the regulatory landscape and provide advice to other regulators. If this happens, we can expect the role to involve working in partnership with public and private sector bodies to

Selling AI to the UK Public Sector

address specific barriers to responsible innovation at an operational level. The CDEI has already begun work to develop a roadmap for AI assurance.

The Government Response also identifies that the Competition and Markets Authority (CMA), the Information Commissioner's Office (ICO) and Ofcom have jointly formed the Digital Regulation Cooperation Forum (DRCF) to support regulatory coordination in digital markets. The Office for AI, CDEI, ICO and other bodies will also sit on a larger "Regulators for AI" working group to take forward the recommendations made in the Government Response.

Transparency and disclosure?

The Committee Report proposed that government should establish guidelines for public bodies about the declaration and disclosure of their AI systems. The Government Response acknowledges the importance of ensuring fairness in how the public sector implements algorithms in decision-making. The government also made a commitment (in the 2020 National Data Strategy) to collaborate with leading organisations to scope and pilot methods to develop algorithmic transparency. The government is now working with the CDEI and leading organisations in the field to develop such measures. In the interests of compliance with the overarching principles of the Data Ethics Framework—transparency, accountability, and fairness—suppliers will likely have to ensure compliance with any such measures as well.

Ensuring that users can understand how AI systems reach the decisions they make is a complex challenge. In the context of data protection we have the concept of 'privacy by design', ensuring that privacy is considered at every stage of development to ensure the issues are addressed at the core of the solution. The measures to be adopted by the government in conjunction with the CDEI may promote a comparable concept—'transparency by design'. Whilst the specific requirements are not yet known, suppliers should keep transparency at the forefront of their minds. We've already seen some AI operators (such as social media companies) publishing transparency reports in an effort to develop user awareness, although so far these have often taken a very high-level view of transparency, i.e. they provide an overview of the statistics related to decisions made by the AI. We predict suppliers will ultimately need to go further, allowing individuals to understand the basis for individual decisions.

What's next?

We should all keep a watchful eye on the AI policy landscape as it develops in the wake of increased adoption. In the meantime, if you represent a supplier to the public sector looking to better understand the requirements of the Artificial Intelligence Dynamic Purchasing System or existing AI policy, or have ambitions to provide products and services to the public sector in the future, we'd be delighted to discuss it with you.

