

# Artificial Intelligence Dynamic Purchasing System (DPS)

Use of AI in the public sector

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# Artificial Intelligence (AI) DPS summary

The services offered under this DPS will support public sector to understand how to solve problems using AI, to maximise value and increase efficiency of processes

Discovery and consultancy work related to the use of AI in public services to scope a problem or project

Licencing, customisation and support directly from suppliers

End-to-end partnerships

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# Benefits of Artificial Intelligence DPS

Customer guidance and ordering process aligns to government standards and guidelines, including the Data Ethics Framework and the Office for AI's Guidelines for AI Procurement.

This DPS promotes standards and criteria for artificial intelligence and data driven technology in healthcare.

The agreement addresses ethical considerations when innovating and buying artificial intelligence and was designed to help customers build in a strong ethics process.

Bespoke terms have been added to support Intellectual Property Rights in the AI market.

This agreement ensures the appropriate suppliers are accessible to provide the right service offerings, to reduce procurement timescales and ultimately to provide an easier route to market for the type of AI

# How government can use AI

Data analytics using artificial intelligence

The development and implementation of intelligent virtual assistants and intelligent personal assistants

AI applications, including AI technologies in health and care

# Different routes to market for AI

- AI DPS
- G-cloud
- Spark



# Future of AI

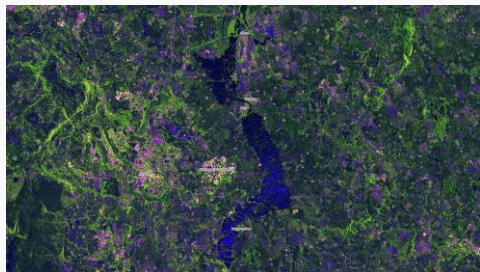
Covid-19 has accelerated the adoption of AI and automation in the public sector

Supporting organisations and businesses to manage and recover from Covid-19:

- new ways of working to deliver front line services
- boost productivity through AI and data analytics
- reducing the demand on health and care services

# What is happening so far and what does good look like?

## Example 1 – AI to understand and plan for flood risk



The Environment Agency bought it the skills of AI and geospatial expert John Murray (MurrayData) to predict flood risk earlier this year.

This is the Lower Dee Valley showing the floods on 22nd February 2020 using a Synthetic Aperture Radar module – essentially, data taken from Earth observation satellites that allows 3D models to be generated quickly.

# What is happening so far and what does good look like?

## Example 2 – The National Grid and Alan Turing Institute



The National Grid is using machine learning techniques to improve its solar forecasting accuracy which helps it run the grid more securely, and more economically.

Turing researchers and doctoral students contributed to a new solar forecasting system for National Grid, which is 33% more accurate at day-ahead forecasts, aiding in more efficient balancing of supply and demand and lowering consumer costs

This also helps to keep bills lower for electricity consumers too!



# What is happening so far and what does good look like?

## Example 3 – IBM and Wimbledon/All England Lawn Tennis



IBM's Watson captured all the best bits of each game and packaged them as highlights within two minutes of a game ending.

To do this, the AI analyses elements as players' gestures and reactions and listens to crowd noises, like gasps and cheers. For Wimbledon 2019 highlights, the AI was trained on more acoustics data, such as detecting each strike of the ball.

Looking to 2021 it could start making recommendations for editors – roll on next Summer!

# Social Value

This area is of high relevance to the AI industry due to the ethical implications of using AI to make decisions which could impact citizens and the need to mitigate bias in data.

We need to start by understanding our customer needs and how industry can support.

# Considerations

- Understanding your organisation's data structure
- Start with a problem statement and think about what benefits AI can bring
- Consider if AI is needed to solve a problem
- Use a benefits driven approach
- Learn to consider the whole lifecycle of procurement