

**Webpage:** <https://www.gov.uk/government/organisations/defence-science-and-technology-laboratory>

**Title:** What opportunities might exist to use data science in order to save Defence money?

**Case study description:** There is never enough money to do everything that Defence (or Government generally) aspires to. The last UK Strategic Defence and Security Review underlined the need for Defence to identify and realise significant efficiencies, and to reinvest the resulting savings in increased Defence outputs. Dstl have been tasked to support this approach by drawing together ideas for how science and technology could save money for Defence; one aspect of this is the use of data science and analytics.

The aim of this case study is to consider the question: “What opportunities might exist to use data science in order to save Defence money?” and generate a list of outline ideas. Suggested areas to consider might be:

* Optimising asset usage
  + Track usage to identify under/over use (vehicles, real estate…)
  + Understand existing equipment and availability to inform on efficient future equipment purchases
* Understanding spend
  + Exploit finance data to see where savings have been generated in the past
  + Analyse forecast data vs actual costs to identify trends and potential areas of efficiency
  + Exploit commercial data to better understand past / current contracts and identify opportunities for greater efficiency
* Logistics
  + Use data to identify ways to reduce the logistics need (spares / energy / maintenance).
* Personnel
  + Use personnel data to understand and improve retention and recruitment
  + Understand staff skills, avoid duplication of effort, reduce training

For each idea, what would the technical approach be? What changes might be made as a result? What risks or barriers might there be?

You should also consider which ideas are the most promising:

* Are any of them potential “quick wins”?
* Which might have the highest potential for generating savings?
* Could any deliver additional benefits beyond cost savings?

The deliverables are:

* Presentation which is no longer than 8 minutes at 2pm on Friday 8th March
* Report, which is a maximum of 4 pages, to be uploaded along with the presentation by 9am on 8th March.

Each group can email the client twice during the case study:

Carly Porrett

Systems Thinking and Consulting Group

Defence and Security Analysis Division

[CZPORRETT@mail.dstl.gov.uk](mailto:CZPORRETT@mail.dstl.gov.uk)

Please note that Carly is on annual leave the week beginning 18th February. She will therefore be unable to reply to any emails until her return on 25th February.

Please ensure that you include ‘Strathclyde Case Study’ and your group number in any emails and cc Susan into your email