

# Written evidence

## Public Administration Select Committee

### *Inquiry: 'Whitehall: capacity to address future challenges'*

## About the RSS

The Royal Statistical Society (RSS) is both a learned society for statistics and a professional body for statisticians. We are one of the world's leading organisations to promote the importance of statistics and data, and have done so since we were founded in 1834. We're a professional body for all statisticians and data analysts – wherever they may live. We have more than 6,000 members in the UK and across the world. They are at the core of what we do and make us who we are. As a charity, we advocate the key role of statistics and data in society, and we work to ensure that policy formulation and decision making are informed by evidence for the public good.

[www.rss.org.uk](http://www.rss.org.uk)

Our Data Manifesto contains 10 policies to help government deliver better policy making; strengthen democracy and trust; and drive prosperity. [www.rss.org.uk/manifesto](http://www.rss.org.uk/manifesto)

This submission focusses on championing statistics, evidence and data to unlock extra capacity in Whitehall. It also covers some aspects of horizon scanning and planning for future challenges.

## Summary

- **Capacity in Whitehall would be improved if civil servants, ministers and other policy makers were given basic training in data handling and statistics.** This would help them avoid making poor decisions that subsequently cost additional time and resources to rectify.
- **Decisions in government should be evidence led,** with official statistics at the heart of policy debate. When resources are tight, it is even more important to quantify the benefits and consequences of public policy and invest in what really works.
- **Data sharing between government departments must be increased** and improved to provide more opportunities in public policy.
- **Whitehall should continue to open up government data** to ensure greater access to good-quality national and local data sets. This would support local communities to get involved in finding targeted solutions to local issues.

- **The government should commit to a 10-year strategic framework for science and innovation**, including raising the UK's investment in R&D as a proportion of GDP from 1.7% towards the comparator country average of 2.9%.
- **The Office of National Statistics (ONS) and the wider Government Statistical Service must be given adequate resources** to develop new ways of making high-quality data easily accessible and ensure they are using the most cutting edge of technological tools.
- **The Government must prepare for the data economy we need by skilling up the nation.** School students must be encouraged to be statistically literate, with the confidence to handle and interpret data and numbers.

## Ensuring decisions are evidence-led

1. Whitehall's effectiveness and capacity would be greatly improved if decisions were made on the basis of what really works. Good outcomes can be encouraged by accurately weighing up the benefits and consequences of a particular problem, and, where appropriate, applying robust statistical methods to reach dependable conclusions.
2. Government should also publish the data and evidence that underpin any new policy announcements. Whilst the RSS understands that political ideology is a key ingredient of our democratic process (so benefits and costs will, to some extent, be subjective), opening up the decision-making process would allow greater scrutiny by the public and experts. This in turn will lead to better decisions being made – or, at the very least, Ministers being asked to explain why a strong evidence base has been overlooked when making a particular decision.
3. The Government should also commit to regular and long-term evaluation of policies, to ensure they remain effective and present ongoing value for money. Where there is a lack of data to inform choices between important policy areas, we should invest in getting it.
4. There should also be further investment in investigating what policy works, including through the successful 'What Works' network. Money invested in the short-term to support good policy will ensure unnecessary costs and mistakes are avoided at a later date.

## Increasing data sharing in government

5. Greater data sharing between government departments would provide significant opportunities for a range of public services and policy areas. Where quality data is available, it makes sense for it to be used to its maximum potential to help understand social and economic problems faced by communities, and to inform appropriate solutions. The RSS is concerned that too much useful data still remains under-used in Whitehall departments, either because of a lack of awareness about its existence, or anxiety about data protection rules.
6. We acknowledge the ongoing debate around privacy of shared data, and the concerns about misuse of personal data voiced by individuals and campaign groups. When personal information is used in ways people do not support (or feel powerless to manage), this can lead to a loss of trust and a negative perception of data sharing.



7. However, the positive case for data sharing – and the benefits it can bring to communities – needs to be made by government to ensure the potential rewards are realised. Privacy safeguards should be built into any sharing of personal data at the outset. Appropriate safeguards, well communicated, should give confidence to individuals and organisations and so limit opt-outs. Transparency over how data is used is also a crucial step to take.
8. We share the concerns of a number of health and research charities about the potential impact of the European Parliament's Data Protection Regulations<sup>1</sup>. Amendments to this legislation, currently being considered in Europe, would mean that specific and explicit consent would be needed before a person's data is used for scientific or health research purposes. This would severely limit or prohibit such research – despite strong ethical safeguards and confidentiality controls already being in place. This is a 'horizon scanning' risk the UK Government should use its influence to minimise.

## Basic training in data handling and statistics

9. The use of statistics in Whitehall must meet a level of quality and integrity that commands public confidence. More than this, it is important that civil servants, politicians and other policy makers have a solid understanding of the statistics they are using as a basis for decisions.
10. Deloitte's assessment of public information for the Shakespeare Review<sup>2</sup> (2013) noted concerns about a general "lack of skills and familiarity to work effectively with data" within the public sector.
11. The RSS believes all civil service staff who receive, handle or interpret statistical information should receive training and support for this. Key professions will include communications professionals, the policy profession, economists, operational researchers and social researchers. Press officers, speech writers and other communication professionals play a key part in the public communication of statistics and they should have an understanding of the necessary standards for doing this.
12. Training in data handling and statistics should also include politicians – particularly Government Ministers charged with making instrumental decisions about policy and public spending on a daily basis.
13. Current Government interest in low cost options to improve the skills base (such as MOOCs<sup>3</sup>) should be explored, but is not likely to go far enough in developing skills. Poor analytical skills and data mismanagement will lead to higher costs in the longer term, so access to the most effective training should be prioritised.
14. The RSS is working with the Government Statistical Service (GSS) to improve its qualifications programme. We run regular in-house courses for government departments including the Ministry of Defence, Home Office, and the Department for Communities and Local Government, tailoring content to the needs of individual. Whilst we welcome such

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<sup>1</sup> Data Save Lives EU briefing: <http://www.datasaveslives.eu/media/1111/dpr-ep-position-joint-statement-july-2014.pdf>

<sup>2</sup> Shakespeare Review (2013): <https://www.gov.uk/government/publications/public-sector-information-market-assessment>

<sup>3</sup> Massive Online Open Courses – internet-based learning that often includes additional web features such as online filmed lectures and interactive user forums.

opportunities, a more structured, rigorous and sustainable method of skills development should be found.

15. The civil service currently lacks a centralised offer of statistics modules or courses, which could be made available across all professions through Civil Service Learning. It is currently overly complex for the RSS and other external providers to list and offer these courses through Civil Service online and Capita.
16. Analytical research such as that produced by the What Works centres<sup>4</sup> should be valued as a source of professional development for statistics, social research, policy delivery, and other civil service professions. We would like to see their findings reflected in the specialist expertise deployed across departments.

## Investing in science and research

17. Investment in research, science and innovation is a key to long-term economic development, and all science (including social science) is underpinned by data. Our international competitors increasingly recognise the opportunities presented by research and innovation, and on average invest more highly in it than is the case here.
18. In the UK in 2012, overall R&D expenditure from government, business and charities declined from 1.8% of GDP in 2011 to 1.7% of GDP in 2012. This is out of step with the average for the European Union and in countries such as the USA and China (excluding Hong Kong), where investment is between 2% and 3% of GDP and increasing.
19. CaSE also notes that in 2011-12, half of the UK's government departments decreased their expenditure by more than 20%, and some by as much as 50%. This should trigger concern with regard to departments' ability to assess their activities and identify areas in which improvements need to be made, including for the delivery of effective services.
20. The government should commit to increased investment in research and innovation, including for the assessment of its own activities. This should be accompanied by a 10 year strategic framework for science and innovation. This would help secure Britain's place as a world leader in science and innovation and support the nation's long term economic development.

## Opening up government data

21. Progress should be made to more quickly open up government data. Opening up new data sources can support innovation at relatively little cost – particularly if it is effectively marked with standard codes for geography, time and other attributes.
22. However, when data sets are opened up, it is also important that the appropriate tools are made available to easily access and analyse them (including well-designed web interfaces). Opening up huge and complex data sets without supporting the means of analysing them will limit the public benefit.
23. Well-used websites such as [www.police.uk](http://www.police.uk), which publishes local crime data, suggest that local communities are interested and engaged when the data is relevant to them. Whitehall

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<sup>4</sup> More information on What Works centres: <https://www.gov.uk/what-works-network>



should encourage greater publication of local data sets in an easily accessible format and build on good practice such as [www.police.uk](http://www.police.uk).

24. The private sector also has an important role to play in both data sharing (with researchers) and open data (for everyone). Public services provided by private companies (such as private schools and hospitals) should adhere to the same data standards and transparency as those in the public sector. The evidence and results from clinical trials by pharmaceutical companies should be opened up for scrutiny and learning.

## Championing the statistical service

25. Government relies on high quality information to make the right decisions. Timely, accurate data is the bedrock of good policy making, supporting Ministers and other decision makers develop well targeted spending priorities.
26. The ONS needs to be able to access data from a wider range of sources, particularly within the government statistical service (GSS). Where quality data is available, it makes sense for it to be used to its maximum potential to help understand social and economic problems faced by communities, and to inform appropriate solutions. Work should go ahead to enable temporary access to data that is not currently shared, to establish the potential for new integrated research or statistical series. This would help access to integrated information from the wider government statistical service (GSS), based across government departments.

## Skilling up the nation

27. To prepare for the data economy, we need to skill up the nation to improve data literacy. This means ensuring young people are comfortable handling and interpreting statistics and data from an early age as part of the curriculum. It is also important that training in quantitative skills includes the use of new technology.
28. Teachers and lecturers also need to be trained in basic data literacy so they can in turn support and encourage students from primary school onwards.
29. A 2010 study<sup>5</sup> found the UK has the lowest participation rate in post-16 mathematics study of 24 countries surveyed. The Royal Statistical Society is concerned about the impact low participation rates have on higher education and employment. The Government should invest in skilling up the nation in data literacy and mathematics in order to take advantage of the significant opportunities this would bring to individuals and the UK as a whole.

*Submitted as written evidence to PASC, February 2015.*

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<sup>5</sup> Nuffield Foundation report (2010): *Is the UK an outlier?*  
[http://www.nuffieldfoundation.org/sites/default/files/files/Is%20the%20UK%20an%20Outlier\\_Nuffield%20Foundation\\_v\\_FINAL.pdf](http://www.nuffieldfoundation.org/sites/default/files/files/Is%20the%20UK%20an%20Outlier_Nuffield%20Foundation_v_FINAL.pdf)

