

Data Sharing Policy Team
Cabinet Office
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By email: data-sharing@cabinetoffice.gov.uk

Dear Data Sharing Policy Team

Better use of data consultation paper

The Royal Academy of Engineering welcomes the Cabinet Office consultation on *Better use of data* and the opportunities that will arise for improved policymaking and service delivery as a result of greater powers to share data, along with the expansion of the application of data science techniques and the use of new technologies as platforms for sharing data.

We support the proposal to allow the Office for National Statistics to access detailed administrative data from across government and business in a transparent and secure way, and recognise the value of high quality and timely official statistics and statistical research. We also support access by researchers to data held by public authorities in a controlled way that minimises the risks to individuals or organisations of being identified.

The Academy welcomes the principles that the Cabinet Office is applying in the formulation of powers, namely that data sharing should be proportionate, secure and well-governed. Individuals in the public agencies involved will need good data management and stewardship skills to maintain privacy of public data and ensure that systems are secure.

While the specific questions in the *Better use of data* consultation paper go beyond the scope of our work on data, we would like to draw your attention to [Connecting data: driving productivity and innovation](#)¹, a joint report between the Royal Academy of Engineering and the IET. The report was published in November 2015 and explores how the UK can create a 'data-enabled economy'.

Connecting data: driving productivity and innovation illustrates how sharing data across sectors in innovative ways opens up new opportunities for improved products and services, leading to increased value generation. This applies to the sharing of administrative data between public agencies, proprietary data between private companies, and the sharing of data

¹ The Royal Academy of Engineering and the IET (2015), *Connecting data: driving productivity and innovation*, <http://www.raeng.org.uk/publications/reports/connecting-data-driving-productivity>

between public and private organisations. The latter has the potential to unlock value by improving both business and government practice². While the current powers cover data sharing by public authorities and researchers within and outside government, in future additional value could be generated by allowing private bodies to access public-sector data for commercial purposes with suitable security and privacy controls.

The report also emphasises that opening up datasets does not in itself create value, but that the ability to link datasets reliably generates value. For example, datasets may be particularly valuable if they enable correlation and validation (triangulation) of data. The value of sharing data can only be realised if the problems of data anonymity and data security are addressed by filtering data to preserve anonymity or sharing only the necessary parts of the data. The 'Trusted Third Party Model' recommended by the Administrative Data Taskforce is an example of this, and *Connecting Data: driving productivity and innovation* provides further examples of data sharing by means of Application Programming Interfaces³. Value also depends on the timeliness of data; thus the creation of legal gateways to speed up access to data by public bodies is critical.

The initial objectives proposed for data sharing, that include fuel poverty assistance, identification of families for the Troubled Families programme, and tackling fraud and debt, will allow the benefits of sharing data to be demonstrated, and further objectives to be added with greater confidence at a later date. We emphasise the importance of demonstrating the benefits to the public in order to win public trust, and providing transparency in how data is shared. The ethics around data sharing is an evolving area, including how it applies to the results of combining different datasets so that 'new' information about an individual is created. In future new ethical frameworks⁴ will emerge based on new information about how data is shared in practice and what the consequences are, whether positive or negative. This could require codes of practice to be revisited at a future date.

The Royal Academy of Engineering is currently following up recommendations from *Connecting Data*, including a roundtable discussion on **Data as an Asset** on Thursday 28 April, 10.00-12.30. This roundtable aims to explore how value can be generated from data, including through linking datasets. If you would like to join the roundtable, or to follow up on the points in this letter or the *Connecting Data* report, please do get in touch.

Yours sincerely



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² McKinsey and Company (2013), *Open data: unlocking innovation and performance with liquid information*. www.mckinsey.com/insights/business_technology/open_data_unlocking_innovation_and_performance_with_liquid_information

³ See Case studies on page 26 of *Connecting data: driving productivity and innovation*.

⁴ For example, *Connecting data: driving productivity and innovation* cites: Chessell, M. (2014), *Ethics for big data and analytics*, IBM – this paper describes an ethical framework for organisations that describes the different aspects of the implications of using big data.