

# How the statistical regulatory framework contributes to the use of big data for official statistics in the UK

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## UK Statistics Authority

- Independent body at arm's length from the Government.
- Promote and safeguard the production and publication of official statistics that 'serve the public good'. This includes:
  - informing the public about social and economic matters;
  - assisting in the development and evaluation of public policy; and
  - regulating quality and publicly challenging the misuse of statistics.



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# Strategy



**Our Mission**  
**High quality data and analysis to inform the UK, improve lives and build the future.**  
 UK STATISTICS AUTHORITY

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# Nudges



“The UK **significantly lags** many other advanced economies in its exploitation of administrative data ... This reflects both the **cumbersome nature of the present legal framework** governing the sharing of such data and a cultural reluctance on the part of some departments and officials to data sharing.”



“primary legislation should be sought to provide a **generic legal gateway** for research and statistical purposes that **enables efficient access to, and linkage between, administrative data** held by different government departments, agencies and other statutory bodies.”

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ELIZABETH II c. 30

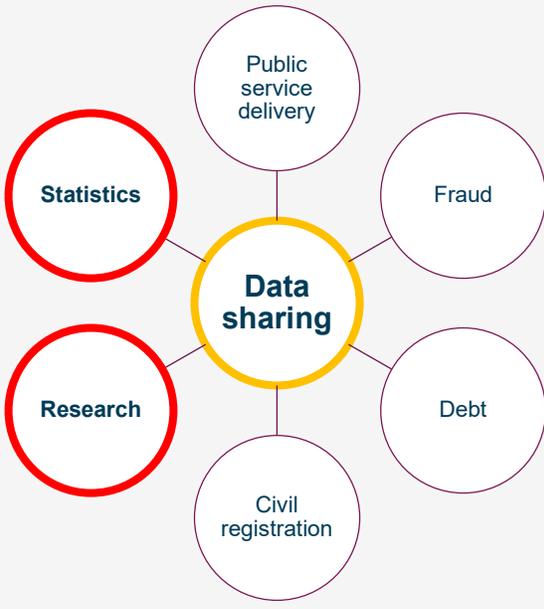


## Digital Economy Act 2017

2017 CHAPTER 30

An Act to make provision about electronic communications infrastructure and services; to provide for restricting access to online pornography; to make provision about protection of intellectual property in connection with electronic communications; to make provision about data-sharing; to make provision in connection with section 68 of the Telecommunications Act 1984; to make provision about functions of OFCOM in relation to the BBC; to provide for determination by the BBC of age-related TV licence fee concessions; to make provision about the regulation of direct marketing; to make other provision about OFCOM and its functions; to make provision about internet filters; to make provision about preventing or restricting the use of communication devices in connection with drug dealing offences; to confer power to create an offence of breaching limits on ticket sales; to make provision about the payment of charges to the Information Commissioner; to make provision about payment systems and securities settlement systems; to make provision about qualifications in information technology; and for connected purposes. [27th April 2017]

**B**E IT ENACTED by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—



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## Our role in the DEA

Policy leadership of **statistics** legislation

Accreditor for **research** legislation

- A right of access to data for statistical/research purposes.
- Duty to consult statisticians on changes to data systems.
- Enables public authorities to make deidentified data available to researchers for the purpose of accredited research in the public interest.
- The UKSA are the body responsible for overseeing the accreditation process.

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## Statement of Principles and Procedures

<b>Collaboration</b>	We will <b>consult</b> with data suppliers before requesting access to data. We will explore <b>collaborative solutions</b> in preference to issuing requests or notices	
<b>Confidentiality</b>	We will maintain <b>appropriate security controls</b> to ensure personal information remains protected and secure at all times	
<b>Transparency</b>	We are committed to <b>publishing information</b> on how we exercise our statutory responsibilities in respect of access to sources of data for statistical and statistical research purposes	
<b>Ethics and the Law</b>	We will ensure that data access arrangements observe the <b>highest ethical standards</b>	
<b>Public interest</b>	We will take decisions on the data sources we seek to access only on the basis of a <b>sound statistical rationale</b> and a <b>clear public interest</b>	
<b>Proportionality</b>	We will seek at all times to ensure that the costs of providing us with access to data are <b>proportionate to the benefits</b> accruing from the use of the statistics produced from these data	

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## The Centre for Applied Data Ethics



Continue to develop the **self-assessment tool and guidance** and provide **independent expert ethical advice** through **NSDEC**.



**Ethics training** for the research and statistical community across **Government, academia and the commercial sector**.



An **ethics user support service** for the research and statistics community to **provide ethics advice** at the **research design phase**.



Publish **new guidance on cross cutting ethical issues** in research and statistics.

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# Ethics Self-Assessment Form



**National Statistician's Data Ethics Advisory Committee**

Guidelines on using the ethics self-assessment process

**Introduction**

To help maintain public trust and confidence in the use of data for research and statistics it is important that researchers (in ONS, the wider Government Statistical Service, and beyond) whatever their particular discipline (statistics, economics, social research, operational research, other) who use data for statistical, analytical and wider research purposes do not just consider what can be done with the data, methods, expertise and technology available to them. It is equally important that researchers consider what should be done. This ethical self-assessment has been developed to provide a framework to help all researchers to think about the ethics of their research.

This guidance is designed to support researchers and statisticians to complete the National Statistician's Data Ethics Advisory Committee's (NSDEC) ethical self-assessment form. NSDEC's ethical self-assessment enables researchers to self-assess the ethics of their research by scoring their research against NSDEC's ethical principles.

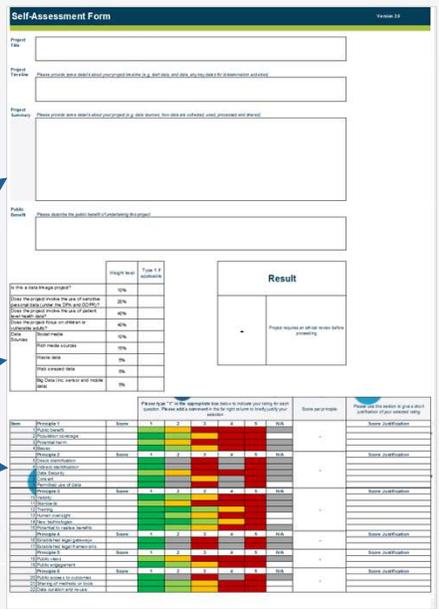
**The NSDEC's ethical principles are:**

1. The use of data has clear benefits for users and serves the public good
2. The data subject's identity (whether person or organisation) is protected, information is kept confidential and secure, and the issue of consent is considered appropriately
3. The risks and limits of new technologies are considered and there is sufficient human oversight so that methods employed are consistent with recognised standards of integrity and quality
4. Data used and methods employed are consistent with legal requirements such as Data Protection Legislation<sup>1</sup>, the Human Rights Act 1998, the Statistics and Registration Service Act 2007 and the common law duty of confidence
5. The views of the public are considered in light of the data used and the perceived benefits of the research
6. The access, use and sharing of data is transparent, and is communicated clearly and accessibly to the public

<sup>1</sup>Data Protection Legislation<sup>1</sup> means the full, applicable data protection framework as set out in the Data Protection Act 2018. This encompasses general processing (including the General Data Protection Regulation and the applied GDPR).

**The self-assessment consists of 3 main sections for the researcher to complete:**

- 1) Basic information
- 2) Weightings and sensitive research areas
- 3) Item scoring scales



**Self-Assessment Form**

Project Title: \_\_\_\_\_

Project Purpose: \_\_\_\_\_

Project Summary: \_\_\_\_\_

Public Benefit: \_\_\_\_\_

Item	Weighting	Table 1.1	Table 1.2	Table 1.3	Table 1.4	Table 1.5	Table 1.6	Table 1.7	Table 1.8	Table 1.9	Table 1.10	Table 1.11	Table 1.12	Table 1.13	Table 1.14	Table 1.15	Table 1.16	Table 1.17	Table 1.18	Table 1.19	Table 1.20
1. The use of data has clear benefits for users and serves the public good	10%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2. The data subject's identity (whether person or organisation) is protected, information is kept confidential and secure, and the issue of consent is considered appropriately	10%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3. The risks and limits of new technologies are considered and there is sufficient human oversight so that methods employed are consistent with recognised standards of integrity and quality	10%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
4. Data used and methods employed are consistent with legal requirements such as Data Protection Legislation <sup>1</sup> , the Human Rights Act 1998, the Statistics and Registration Service Act 2007 and the common law duty of confidence	10%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5. The views of the public are considered in light of the data used and the perceived benefits of the research	10%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
6. The access, use and sharing of data is transparent, and is communicated clearly and accessibly to the public	10%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

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# Impacts

ONS has accessed **125** new distinct data sources through the DEA.

Accredited **250** research projects enabling access to over **80** datasets from multiple public authorities through the DEA.

Over **450** users of the ethics framework.

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# National Data Strategy



- Drives the UK in building a world-leading data economy while ensuring public trust in data use.
- Commits to driving use of the Digital Economy Act (2017) powers as a way of removing barriers to data sharing.
- In collaboration with partners across government, ONS is leading on the delivery of the Integrated Data Service.

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## Developing shared learning in data ethics



Sharing learning and experiences at an international level to develop collaborative solutions to data ethics challenges



Three potential deep dive topic areas were identified at an initial meeting:

1. Data ethics **policies**
2. Ethically maximising the utility **of data for research and statistics**
3. Distinguishing between **statistical and operational uses of data**

Please get in touch if you would like to participate in further discussions

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Or visit our website:  
**<https://uksa.statisticsauthority.gov.uk/data-ethics/>**