Title: Digital Government: Public Service Delivery - Introduction of new powers for bodies to disclose identified data for the purpose of improving public service delivery. **IA No:** CO/2004 **RPC Reference No:** **Lead department or agency:** Cabinet Office **Other departments or agencies: MT, HO, FCO, MoJ, MoD, BIS, DWP, DCLG, DFE, DfID, DECC, DfT, SO, NIO, WO, DCMS, CO, HMRC**	**Impact Assessment (IA)** **Date:** 17/06/2016 **Stage:** Development/Options **Source of intervention:** Domestic **Type of measure:** Primary legislation **Contact for enquiries:** Firoze.Salim@cabinetoffice.gov.uk

Summary: Intervention and Options

RPC Opinion: Not Applicable

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANDCB in 2014 prices)	**One-In, Three-Out**	**Business Impact Target Status**
£m	£m	£m	Not in scope	Non qualifying provision

What is the problem under consideration? Why is government intervention necessary?

To ensure that services are tailored to citizens' needs and that public resources are used efficiently public authorities need access to accurate data, some of which is held by other parts of the public sector. Where there is no legal gateway to share this information public authorities can't deliver this. The impact on citizens includes services delivered retroactively, instead of proactively; the most vulnerable not being offered services because the public authority doesn't know who they are; and inefficient use of tax payers money to set up resource intensive new gateways. Over the last ten years multiple specific data sharing gateways have been developed through primary legislation in response to this.

What are the policy objectives and the intended effects?

The policy objective is to improve service delivery to citizens by ensuring that public authorities have the data they need to tailor public service delivery: to offer the right service to the right person, when they need it. The policy is intended to enable this by giving public authorities a constrained ability to share data, where there is a clear benefit to citizens, and thus enable them to respond quickly and efficiently to changing social needs.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

1) Option 1 - Do nothing: The status quo would be maintained allowing public authorities to create a number of specific statutory gateways, where there is a need for them.

2) Option 2 (preferred option) - Introduce new legislation which enables the sharing of data between public authorities for the purpose of improving public service delivery. This approach delivers improved services in a manner which balances the protection of personal privacy and flexibility to respond to policy needs in the future. It will create consistency in data sharing across the public sector over time, ensuring that consistent and transparent safeguards are adhered to - it will be transparent both to citizens and public sector staff - and be a step towards simplifying a very complex landscape.

Will the policy be reviewed? It will/will not be reviewed. **If applicable, set review date:** Month/Year

Does implementation go beyond minimum EU requirements?		N/A		
Are any of these organisations in scope?	**Micro** Yes	**Small** Yes	**Medium** Yes	**Large** Yes
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)		**Traded:**	**Non-traded:**	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:  Date: 21 June 2016

Summary: Analysis & Evidence

Policy Option 1

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year 2016	PV Base Year 2016	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	**High:** Optional	**Best Estimate:**

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate	0		0	**0**

Description and scale of key monetised costs by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Other key non-monetised costs by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate	0		0	**0**

Description and scale of key monetised benefits by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Other key non-monetised benefits by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Key assumptions/sensitivities/risks **Discount rate (%)**

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs:	**Benefits:**	**Net:**	

Evidence Base (for summary sheets)

Problem under consideration

Public services are under increasing pressure to deliver more with less. To meet the demands of 21st century Britain, public authorities are integrating service delivery and carefully prioritising use of resources. Furthermore, as responsibility is increasingly devolved to local areas that will create new data sharing challenges. To meet these challenges public authorities need access to accurate data, some of which is held by other parts of the public sector.

Traditional methods for sharing data, which involve establishing specific gateways for sharing specific data between specific parties through primary legislation are far too inflexible, slow and limited to keep up with the challenges of public service delivery, and to deliver the continually improving outcomes that citizen's demand. The cost is borne by citizens – without access to accurate data public authorities are hindered in their ability to deliver the right service to the right citizen at the right time and public resources that could be spent on front line service delivery are used in understanding the legislative landscape and establishing an appropriate gateway.

A substantial change- underpinned by clear new primary legislation- is required to provide public authorities with a clear legal framework that will ensure they have access to the required data to efficiently deliver high quality, timely services in response to changing social needs.

Rationale for intervention

A clear data sharing power could improve outcomes for citizens by:
a) enabling the right public service to be offered to citizens when they need it
b) saving taxpayers' money by streamlining processes; and
c) making the legislative landscape simpler and more transparent.

The policy objective is to improve outcomes for citizens by improving public service delivery. We intend to do this by making it easier for public authorities to share data for this purpose, with legislation which balances the ability to respond in a timely manner to changing policy needs of the future with the protection of personal privacy and democratic accountability. We will ensure that principles of necessity and proportionality are understood and upheld.

The gateway will be 'purposive' (one that is constrained by the purposes for which the data will be used). New powers will be permissive. The gateway will allow public authorities listed in a schedule to share data when it will support delivery of one of the policy objectives (listed in the schedule). Any data shared under this power will need to be in line with the Data Protection Act principles (e.g. adequate, relevant and not excessive to the purpose for which they are processed).

Who the policy is meant to apply to

All public authorities and non-public authorities who fulfil a function on behalf of a public authority. It is permissive, so it will be up to individual organisations to choose to use it.

Description of options considered

Option 1: Do Nothing: This option means maintaining the status quo and continuing to establish and use specific gateways for sharing data as required by existing legislation.

Option 2: (preferred option): Introduce new permissive legislation which enables the sharing of data between public authorities for the purposes of improving public service delivery by better tailoring it to citizens.

The scope of this option would be controlled by a prescribed list of organisations which would only be amended following an Order by a Minister. Details of the proposed solution are:

- To create a permissive legislative vehicle that allows a specific group of organisations to share any data for the purposes of improving outcomes for citizens by better tailoring of public services;

- To ensure that this facility is constrained:

    i. ensuring that organisations are only on the list if they can prove their need to be on it;

    ii. creating a Code of Practice that prescribed organisations must comply with in order to be able to maintain their prescribed status, this includes the publication of privacy impact assessments and auditing by the Information Commissioner and operating data sharing arrangements in alignment with DPA and HRA principles;

    iii. constraining the categories of information shared, in particular exempting non-relevant data classed as sensitive personal data for the DPA (race/ethnic origin, political opinions, religious beliefs or other similar beliefs, Trade Union membership, physical or mental state or condition) and “patient information” as per the NHS Act s251(10);

    iv. maintaining the level of unlawful disclosure sanctions of those organisations that have them - DWP and HMRC; and

    v. Ensuring that data can only be shared for purposes in objectives identified in a schedule, which have to be in the area of social policy; have to result in an offer of a service to a citizen and cannot be detrimental to citizens.

Other options considered during consultation included non-legislative work to change the culture around data sharing in the public sector.

The do nothing and non-legislative work options were not taken forward on the basis that they would not support the policy objectives of (a) providing the legal clarity required where the current legislation around data access is complex and causes uncertainty about what data can be shared; and (b) providing powers to share data for specific purposes where those powers do not currently exist for public authorities. Our assessment is that without addressing these issues we cannot achieve the overarching objective of supporting better access and use of data to improve the efficiency and delivery of public services.

Analysis of options

Option 1: Do Nothing

In line with IA guidance the 'do nothing' option has zero costs and benefits. The costs and benefits of maintaining the status quo are described below to enable easier understanding of the costs and benefits associated with proposed option for change.

Costs

Whilst such an option can meet an identifiable need it is a time consuming and resource heavy process. It does not provide public authorities with a flexible and constrained solution to the problem, to enable them to respond quickly to social needs, and the resources required to establish specific gateways to share data within the public sector will continue to be used inefficiently. The main costs of this option are:

Administrative cost – public sector bodies (ongoing)
The public sector will continue to face administrative burdens associated with data sharing, especially in establishing specific gateways prior to sharing data. This process involves mainly public sector officials' time in researching the legal framework and negotiating the terms of data sharing, and involves officials in both the sharing and the recipient body. Where a new data sharing gateway needs to be established, this also requires new legislation. The precise process for sharing data or establishing a gateway will vary depending on the dataset in question. Anecdotal evidence from civil service bodies suggests that a new data sharing gateway may take several years to negotiate and establish. This is an ongoing cost and its total value will depend on the number and type of future data sharing requests and gateways established.

Policy delivery cost – public sector bodies and the wider public (ongoing). A further cost of the current system is associated with the impact of the time delay in negotiating a data sharing gateway. This may result in delays in launching policy interventions, and therefore delay the benefits policy interventions may bring. Where gateways are not established due to administrative cost reasons (although data sharing is within the bounds of the Data Protection Act and the Human Rights Act), this will result in failure to launch a policy, and benefits associated with the policy will not be realised at all. Policymakers may also fail to tailor policy to target cohorts appropriately and in a timely manner if data is only available with a delay. This represents a cost to the public sector in further staff time, as well as to the wider public in lost policy benefits.

Benefits:

The benefits associated with the option stem mainly from preventing data sharing where this would be outside the bounds of the Data Protection Act or the Human Rights Act, and in preventing possible data loss. Data protection issues are discussed in the risks section. Policy delivery benefits in terms of using data for effective design and targeting of policy will be realized under the status quo where data can be shared between public sector bodies. However, these benefits may often be delayed by data sharing delays or not be realized at all where a new gateway cannot be established within the time frame required, as discussed above.

Option 2: (preferred option) - Introduce new permissive legislation which enables the sharing of data between public authorities for the purposes of improving public service delivery by better tailoring it to citizens.

Costs:

Administrative costs – familiarisation and training in public sector bodies (one-off)
Public authorities who decide to participate in a data sharing arrangement under the scope of this power, will face one-off costs relating to staff time for familiarising and training regarding the new legislation. This is likely to include officials' time in reading and understanding the new legislation, disseminating the information and training staff to understand the new rules.

It is not known how many individuals would be affected in each organisation- as a result quantifying the estimated staff time is difficult. Below we present a number of scenarios, which set out the estimated cost for central government under differing assumptions. As demonstrated, whilst not insignificant, the cost is not expected to be considerable. These one-off transitional numbers are not included in the headline monetised costs, due to uncertainty in the number of individuals affected.

The assumptions used to calculate the estimated costs of these scenarios are:

- Staff time- We estimate the value of an employee's time to the public sector organisation as being their wage and additional non-wage costs. We assume the median gross hourly pay in the public sector will apply, £14.47 (ASHE 2015 data), uprating for inflation gives £14.63 and we add a further 30% to this to cover overheads and further costs to the employing organisation, resulting in a cost to the organisation of £19.02 per hour.
- Government organisations affected- We assume central government organisations affected by this legislative change are HMRC, CLG, DfE, DECC, DWP, HO, FCO, MoJ, MOD, BIS, DfID, DfT, DCMS, DEFRA. The estimates are calculated on the number of permanent FTE staff in March 2016 (Public sector employment data, 15th June 2016). Other public sector bodies may also be affected, which would increase the associated cost, but given the permissive nature of this power, and the fact that some would need to carry out training and familiarisation under the do nothing option, they are excluded from the analysis below.
- On the basis of a return from one Government department, we calculated that the number of staff affected was approximately 1% of their workforce. We used this assumption for all central government organisations identified above, along with their estimate that training and familiarisation would take approximately 1 hour, to calculate the figure highlighted in grey below. We then assumed, to recognise that there may be differences in other departments that the percentage of staff affected was half and double, and the time spent on familiarisation was half and double, to produce the range of costs set out below.

Illustrative cost scenario

	Total time spent on familiarisation and training (hrs), £		
Percentage of staff affected	0.5	1	2
0.5%	15,700	31,400	62,700
1%	31,400	62,700	125,500
2%	62,700	125,500	251,000

*Note- estimates rounded to nearest £100 and are the total for the Departments listed above. Further detail is contained in Annex A.

There may be some costs for departments to revise guidance and develop the training material- these costs are expected to be minimal.

Administrative costs – data sharing in public sector bodies (ongoing)
Data sharing legislation would result in an increase in the number of requests from public sector bodies for data to be shared from other public sector bodies. However, this would now be limited to data from the prescribed bodies, and only where the purpose is improving public service delivery. This would bring about administrative costs in terms of processing requests and sharing data securely.

Individual privacy costs (ongoing)
Individual costs could accrue in terms of the possible impact on privacy, due to the greater volume of data which may be shared. The constraints and safeguards may serve to reassure individuals that such a data-share would be done in a necessary and proportionate manner and that action would be taken should this not happen.

Benefits:

Administrative benefit – public sector bodies (ongoing)
The administrative burden to public sector bodies will be reduced. Costs associated with researching existing data sharing gateways or establishing new ones (mainly staff time) will be

eliminated. Public sector bodies will still need to ensure that any data sharing complies with the DPA and HRA. This is an ongoing benefit and its total value will depend on the number and type of future data sharing requests.

Simplifying the legislative framework

The Law Commission scoping report, Data Sharing between Public Bodies, describes how the law surrounding data sharing is complex, with powers to share data scattered across a very large number of statutes. They may be set out expressly or implied. The report indicated that there are problems in practice and that there are differing interpretations of the law governing the sharing of data. In addition to the complex legal landscape, other issues include a reported lack of flexibility (the difficulty in adapting to changing circumstances in a timely fashion given legislative processes) and the time taken to create new data sharing relationships.

This option would simplify the legislative landscape and reduce the time taken to create new data sharing relationships. As legislation need not set out fully all categories of data being shared, it allows a greater agility when seeking to share changing categories of data.

Policy delivery benefit – public sector bodies and the wider public (ongoing)

Faster data sharing will result in eliminating delays in policy delivery, and enabling policy to be tailored based on the latest data available. This means that policy benefits will be brought forward and can be increased by better availability of data. As the number of data sharing requests may rise (see cost section above), further benefits will stem from more policies making better use of data.

Targeting of public services

Public services are under increasing pressure to deliver more with less. To meet the demands of 21st century Britain, public authorities are integrating service delivery and carefully prioritising use of resources. Furthermore, as responsibility is increasingly devolved to local areas that will create new data sharing challenges. To meet these challenges and continue to lead the world in public service delivery, public authorities need access to accurate data, some of which is held by other parts of the public sector.

To ensure that public services are accurately targeted and delivered to those who most need them when they need them, public authorities need access to relevant and accurate data. Government needs to intervene to ensure that data can move between public authorities in a manner which enables improved outcomes for citizens, makes best use of public resources and protects personal privacy. This will lead to improvements in public service delivery through offering the right citizen the right service at the right time:

- *The right citizen*- Those in need of the service are identified accurately and therefore the citizens most in need are offered the service, and public resources are used to the maximum benefit (an improvement in targeting of service delivery).
- *The right time*- Those in need of the service are identified more quickly and therefore offered the service more quickly (improvement in ability of public sector to respond to changing social needs). For example this could lead to reduced pressure on emergency services by an increased ability to deliver preventative services.
- *The right service*- Ability to provide support holistically and ensure that individuals are offered the service most helpful to them (sustainable improvement in quality of life)

Traditional methods for sharing data, which involve establishing specific gateways for sharing specific data between specific parties through primary legislation are far too inflexible, slow and limited to keep up with the challenges of public service delivery, and to deliver the continually improving outcomes that citizen's demand. The cost is borne by citizens – without access to accurate data public authorities are hindered in their ability to deliver the right service to the right citizen at the right time and public resources that could be spent on front line service delivery are used in understanding the legislative landscape and establishing an appropriate gateway.

Impact on business

This legislation does not have a direct impact on business and is not in scope of One-in-Three-Out.

Risk and Assumptions

The proposed changes are intended to improve public sector bodies' ability to share data within the public sector with the intention to improve outcomes for citizens. The risks that these changes will bring about are common to any data sharing process, namely:

a) Loss of data;

b) Incorrect use of data – with biased or incorrect conclusions being drawn and policy ineffectively designed as a result;

c) Challenge from individuals whose data has been shared.

The use of data sharing has increased substantially in recent years and it is encouraged within Government to make better use of existing information. This has meant a better understanding of the risks associated with it. As a result, a number of measures have been developed to mitigate these risks. These mitigation measures are either required by law or considered as good practice and include among others:

- Organisations sharing data have the appropriate organisational measures in place as established by the Data Protection Act. It is good practice to:
  - design and organise security to fit the type of personal data disclosed or received and the harm that may result from a security breach
  - be clear about which staff members in the organisations involved in the sharing are responsible for ensuring information security
  - have an appropriate monitoring and auditing procedure in place
  - be ready to respond to any failure to adhere to a data sharing agreement swiftly and effectively
- Organisations sharing data have the appropriate technical measures in place as established by the Data Protection Act. It is good practice to:
  - make sure that the format of the data you share is compatible with the systems used by both organisations
  - check that the information that is shared is accurate before sharing it
  - establish ways for making sure inaccurate data is corrected by all the organisations holding it
  - agree common retention periods and deletion arrangements for the shared data
  - train staff so that they know who has the authority to share personal data, and in what circumstances this can take place.
- The various organisations involved in data sharing will each have their own responsibilities and liabilities in respect of the data they disclose or have received. It is therefore good practice:
  - for a senior, experienced person in each of the organisations involved in the sharing to take on overall responsibility for information governance, ensuring compliance with the law, and providing advice to staff faced with making decisions about data sharing
  - to have a data sharing agreement in place that includes:
    - The purpose of the sharing
    - The potential recipients or types of recipient and the circumstances in which they will have access

- The data to be shared
- Data quality – accuracy, relevance, usability, etc
- Data security
- Retention of shared data
- Individual's rights – procedures for dealing with access requests, queries and complaints
- Review of effectiveness/termination of the sharing agreement, and
- Sanctions for failure to comply with the agreement or breaches by individual staff.

Overall, the appropriate mitigating measures depend on the type of information that is shared and the organisations that are sharing them. Therefore, any future policy that requires the use of data sharing should specify what mitigating measures are more appropriate to reduce risks.

Annex A

Familiarisation and training costs

Department	Permanent FTE employees	1% of employees	Cost of familiarisation (central scenario)
Business, Innovation and Skills	14,680	147	£ 2,792
Communities and Local Government	2,000	24	£ 449
Culture, Media and Sport	1,160	12	£ 221
Defence	51,520	515	£ 9,799
Education	3,320	33	£ 631
Energy and Climate Change	1,560	16	£ 297
Environment, Food and Rural Affairs	6,420	64	£ 1,221
Foreign and Commonwealth Office	5,380	54	£ 1,023
HM Revenue and Customs	63,160	632	£ 12,013
Home Office	25,530	255	£ 4,856
International Development	1,890	19	£ 359
Justice	63,590	636	£ 12,095
Transport	12,860	129	£ 2,446
Work and Pensions	76,470	765	£ 14,545
TOTAL	**329,540**	**3,299**	**£ 62,747**

Sources:

[1] http://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/publicsectorpersonnel/datasets/publicsectoremploymentreferencetable

[2] Based on a return from one Government department, we calculated that the number of staff affected was approximately 1% of their workforce.

[3] Based on one hour of staff time (£19.02 per hour, including both wage and additional non-wage costs) multiplied by the number of employees.

Title: Digital Government: Civil Registration - Introduction of new powers to allow for the sharing of registration data with specified public authorities **IA No:** **RPC Reference No: N/A** **Lead department or agency:** GRO **Other departments or agencies: HO, CO, ONS**	**Impact Assessment (IA)** **Date:** 01/06/2016 **Stage:** Development/Options **Source of intervention:** Domestic **Type of measure:** Primary legislation **Contact for enquiries:** linda.edwards@gro.gsi.gov.uk

Summary: Intervention and Options

RPC Opinion: Not Applicable

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANDCB in 2014 prices)	**One-In, Three-Out**	**Business Impact Target Status**
£10.1m	£m	£m	Not in scope	Non qualifying provision

What is the problem under consideration? Why is government intervention necessary?

Current legislation which governs sharing of registration data, e.g. records of births and deaths, is restrictive and information from those records can only be shared where there is a specific legal gateway. Data sharing can only take place with those specifically named in legislation and the scope of any data sharing cannot be widened without an appropriate legislative gateway. It is necessary to amend current legislation to provide wider data sharing powers which provide more flexibility and modernise how government services are delivered.

What are the policy objectives and the intended effects?

The policy objectives are to introduce enhanced data sharing provisions which will benefit other government departments and members of the public in accessing services from departments for which evidence of a birth, marriage, civil partnership or death record is required. Removing the requirement for paper certificates to be produced when accessing services reduces the potential for identity fraud. This will allow for the development of secure government digital services that require robust identity verification.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Option 1: Do nothing

Option 2: To introduce new data sharing powers removing the current restricions and allow for registration data to be verified or shared, on a case by case basis or in bulk with other government departments to confirm the information in a birth, marriage, civil partnership or death entry and the fact that the event took place. This will support the government agenda of fraud prevention, digital delivery, efficiency and public service reform.

Option 2 is the preferred option

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 12/2018

Does implementation go beyond minimum EU requirements?		No		
Are any of these organisations in scope?	**Micro** No	**Small** No	**Medium** No	**Large** No
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)		**Traded:** N/A	**Non-traded:** N/A	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister: ..... Date: 11.06.16

Summary: Analysis & Evidence

Policy Option 1

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year 2016	PV Base Year 2016	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: £8m	**High:** £12m	**Best Estimate:** £10.1m

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low			£0.9m	**£8.3m**
High			£1.1m	**£9.7m**
Best Estimate	£0.3m		£1m	**£9m**

Description and scale of key monetised costs by 'main affected groups'

Home Office - Training, familiarisation and guidance (£0.3m (PV)) in year one only
Home Office - loss of income from certificate sales (£1.3m (PV))
Local Registration Service - loss of income from certificate sales (£5.5 m (PV))
IT resource costs to administer the scheme (£1.9m (PV))

Other key non-monetised costs by 'main affected groups'

The Home Office considers that there are minimal internal non-monetarised costs associated with the introduction of the new powers.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			£2m	**£16.2m**
High			£2.3m	**£21.7m**
Best Estimate			£2.1m	**£19.1m**

Description and scale of key monetised benefits by 'main affected groups'

Home Office - savings in resource and costs as a result of reduced certificate sales (£0.7m (PV))
Local registration service - savings in resource and postage costs as a result of reduced certificate sales (£4.5m (PV)). Loss of certificate income is mirrored by an increase in benefits (£5.6m (PV))
Local authorities - reduction in blue badge fraud in relation to using the identity of a deceased person as a result of being able to receive death data (£8.3m (PV))

Other key non-monetised benefits by 'main affected groups'

Removes the administrative burden on government departments to request paper certificates from members of the public accessing their services.
Improving the customer experience by removing the requirement for paper certificates to be provided.
Removes the risk of paper certificates getting lost in transit.

Key assumptions/sensitivities/risks — **Discount rate (%)** 3.5

Statistics around the number of births, marriages, civil partnerships and deaths in 2012 obtained from ONS
Assumes the training and familiarisation costs will be similar to the cost of implementing the Immigration Act 2014
Statistics around Blue Badge fraud obtained from the National Fraud Authority published statistics for 2014/2015

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs:	**Benefits:**	**Net:**	

Evidence Base (for summary sheets)

A. Strategic Overview

A.1. Background

Civil Registration in the UK is a devolved function. The registration of births, still-births and deaths is primarily governed by the Registration Service Act 1953 and the Births and Deaths Registration Act 1953. Other than what is provided for in legislation, no information may be disclosed other than in the form of a certified copy of an entry of birth, marriage or death which are held in registers at the Register Office in the district in which the event occurred, or by the Registrar General (RG), upon payment of the statutory fee. The registration of marriages is governed by the Marriage Act 1949 and the registration of civil partnerships is governed by the Civil Partnership Act 2004.

Registration officers are only allowed to share information from the records of births, marriages, civil partnerships and deaths where there is a specific statutory gateway. These have been built up over time, in a piecemeal manner, in response to requests for registration information. Where no such gateway exists, registration officers cannot share the information they hold; they have no common law powers to rely on. This means that they are unable to share some valuable registration information across the Home Office and wider government.

There is demand for registration information from within Government and beyond for a number of purposes. However, at the moment, information may only be provided in the form of a birth, marriage, civil partnership or death certificate, which is then used to access such services or other products.

Anyone can obtain a certified copy of any record (for example, a birth certificate) if they are able to provide sufficient information to identify the record from a relevant index of records that are held in the public domain and pay the appropriate fee.

Stolen and forged certificates circulate with limited opportunity for checks or validation. Verification procedures, on a case by case basis or by providing bulk data, could provide other government departments with the ability to run checks against civil registration records to fulfil their statutory functions.

Other government departments are not able to verify birth, marriage, civil partnership or death registration information except in certain circumstances where a provision exists in legislation.

Existing provisions include the Identity Documents Act 2010[1] which allows HM Passport Office to verify birth and death information with the RG at the General Register Office, (who holds a record of all births and deaths which have occurred in England and Wales since 1837) when processing passport applications.

The Immigration Act 2014[2] (IA 2014) introduced new data sharing powers which allows registration officers and the RG to share or verify registration information for immigration purposes. The Act also allows for registration information to be verified or shared with other government departments in certain circumstances on a case by case basis, e.g. the registration officer has reasonable grounds for suspecting that a criminal offence has been, is being, or is going to be committed. The provisions in the Act do not fully meet the needs of other

[1] Section 10 of the Identity Documents Act 2010

[2] Schedule 6 of the Immigration Act 2014

government departments who require access to registration data for other purposes and it does not allow for the sharing of bulk data.

Each request under the IA 2014 to verify or share information contained in a birth, marriage, civil partnership or death entry is considered on a case by case basis and that the information is not available from any other source. The requesting body has to show they have sufficient evidence to demonstrate that a crime has been, is being or will be committed and the data provided is limited to that which is necessary to assist the requesting body.

The Police and Justice Act 2006[3] makes provision for the sharing of death information from the England and Wales records. The disclosure of death registration information (DDRI) scheme allows the RG for England and Wales (Scotland and Northern Ireland have similar provisions) to disclose death registration information to assist in the prevention, detection, investigation or prosecution of offences. Applicants can apply to receive the death data, providing they meet specific criteria, for which a fee is charged. The DDRI scheme is administered on behalf of the three jurisdictions by the RG (England and Wales) and this data is provided mainly to credit reference agencies and pension providers for fraud prevention purposes.

A.2 Groups Affected

Those affected by the policy include:

The RG and registration officers will be able to share or verify information from registration records, either on a case by case basis or bulk data to specified public authorities to assist with their statutory functions.

Customers would not have to produce a birth, marriage, civil partnership or death certificate to access services from a public authority, e.g. child benefit.

Specified public authorities will be able to verify registration information instead of obtaining a certificate or requesting a certificate from an individual

A.3 Consultation

Aside from the Home Office (including HM Passport Office) the government departments consulted or involved in the formulation of policy include: Cabinet Office, HMRC, DWP, DCLG, DfT, HM Passport Office, the Ministry of Justice and HM Treasury. We will continue to engage with HM Treasury on charging models.

Detailed discussions have also been held with registration officers around the benefits of being able to share registration data with local authorities or other public authorities relating to individuals accessing their services and support counter fraud activities.

HM Passport Office has successfully trialled the benefits of replacing hard copy birth certificates from the passport application process with a direct check against birth records held on the Registration Online (RON) system.

Whilst we have consulted with government departments on the proposals a public consultation was also completed. The 'Better Use of Data' consultation began on the 29 February 2016 and concluded on the 22 April 2016. Two questions were asked in the consultation document as part of a wider public consultation into data sharing proposals. The first question asked whether public authorities should be able to access information from a birth entry for the purpose of

[3] Section 13 of the Police and Justice Act

providing a public service, e.g. child benefit. 81% of those who responded to this question were in favour of the proposals with only 5% not in favour.

The second question focussed on providing bulk registration data to public authorities in order to ensure that their records are kept up to date, e.g. to prevent mail being sent to a deceased person. 45% of those who responded to this question were in favour of the proposals however, 48% were against the sharing of bulk data. Consideration has been given to the concerns raised and additional safeguards will be included in the Code of Practice which registration officials must have regard when disclosing information.

B. Rationale

Being able to share information directly with others either on a case-by-case basis, or on a bulk basis, if appropriate, removes the need for paper certificates to be produced and therefore reduces the risk of fraud in relation to forged or altered certificates, or someone producing a document which is not theirs. HM Passport Office has already successfully trialled the benefits of replacing hard copy birth certificates from the passport application process with a direct check against civil registration birth records. Searching the electronic records for passport applications enabled the examiners to reduce the potential for fraud in relation to birth certificates, being able to confirm directly against the original record that a birth has taken place.

Being able to share or verify registration data electronically could increase the security and efficiency of wider government services that rely on paper certificates.

Consultation with other government departments and the local registration service has identified areas for which no data sharing provisions exist, e.g. in respect of obtaining information on life events (marriage) to support the development of wider counter fraud capabilities in identifying 'living together' fraud – e.g. people claiming benefit as single individuals when in reality they are living together.

The registration service is currently unable to share registration data (other than for health and further education, where there are existing gateways for sharing information) more widely within the local authority or across local authority boundaries about the births of children and perhaps more significantly, unregistered births.

B. 2 Supporting wider Government modernisation

As registration data, in particular digital birth data, is increasingly recognised as an enabler to designing digital services (in view that digital records can remove a requirement to obtain hard copy certificates), registration officers have come under increasing pressure to provide access to civil registration records for verification and wider service delivery purposes.

HM Passport Office has trialled the benefits of replacing hard copy birth certificates from the passport application process with a direct check against birth records held on the electronic registration system at the General Register Office. Examiners were able to pick up on births that had been re-registered and not disclosed. The information provided from the search results provided the necessary assurance check at the time of application the examiners could make the same decision from the digital information as they could from the birth certificate if this was the only evidence provided.

B.3 Increasing efficiencies across Government, both central and local

Providing other parts of government with secure and controlled access to digital civil registration data supports efficiency objectives contained in the civil service reform plans, HM Passport

Office business plans and wider public sector modernisation agendas. Provision of electronic data to support the delivery of digital public services could therefore contribute to realising the Government's Digital Strategy savings that are estimated to be in the region of £1.7 to £1.8 billion a year.

C. Options

The following options were considered –

Option 1: To do nothing

Option 2 (preferred): Implement enhanced data sharing powers removing current restrictions and allow for registration data to be verified or shared electronically with other government departments to confirm information in a birth, marriage, civil partnership or death entry or that an event took place.

D. Appraisal (Costs and Benefits)

Any key uncertainties are highlighted and key assumptions are tested in the sensitivity analysis section to show the range of potential impacts.

Baseline volumes

The IA covers a 10-year period from 2017 – 2027 in line with guidance from the Regulatory Policy Committee and Better Regulation Executive. The Digital Economy Bill is expected to obtain Royal Assent during 2017. The IA aims to set out the best estimates of the policy impacts at the final stage of policy development using the evidence available

The data used on the volume of births and deaths in the UK is from 2012[4] when 729674 births and 499331 deaths took place in England and Wales.
The volumes of birth, marriage, civil partnership and death certificates issued relating to events which have taken place within the last 50 years have been obtained from Certificate Production at the General Register Office.

In addition to the statistics above, the additional data sources below have been used in the calculations in this Impact Assessment -

The data used to calculate the costs of tasks relating to the time taken by a superintendent registrar, registrar and administrative worker are taken from the calculations used in the Registration of Births, Deaths and Marriages (Fees) Order 2010.

A case study undertaken by Sussex County Council of Blue Badge fraud established that 2.1% of Blue Badge fraud relating to the use of a Blue Badge following the death of the individual to whom it belonged. For the purpose of assessing the benefits of being able to share death data with local authorities the assumption has been made that the level of fraud would be similar across all 174 local authorities.

Statistics published for 2014 - 2015 by the National Fraud Authority (NFA) confirmed that housing tenancy fraud costs local authorities £845m each year.

The Audit Commission's publication *'Protecting the Public Purse 2012' (PPP 2012)* suggested a methodology to estimate more precisely the number of council, housing association and arms' length management organisation properties that are subject to tenancy fraud in England. Using this

[4] Statistics obtained from the Office for National Statistics

approach it is estimated that approximately 98,000 social homes in England are subject to tenancy fraud. In PPP 2012 the Audit Commission identified an average annual notional cost of £18,000 to house a family or individual in temporary accommodation. Multiplying this average cost of temporary accommodation with the Audit Commission estimate of the number of social homes subject to tenancy fraud (which would otherwise be available for occupation), it is estimated that housing tenancy fraud costs the public purse almost £1.8 billion a year. With 47.9 per cent of the loss being borne by local authorities, this equates to a tenancy fraud loss estimate of approximately £845 million.

The Home Office makes no official forecast of future statistics but for the purpose of this IA we assume that the volumes used above will have remained broadly constant at those levels in the absence of any other changes. It is from these baselines that the impacts of policy proposals are calculated.

Option 1 – no change to policy

Costs
There will be no additional cost of option 1. However there will be risks and costs that will continue including:

Harms associated with instances of identity fraud – fraudsters will continue to seek access to forged documents which could be used to commit identity fraud.

Negative public perception – public accessing government services will continue to have to produce paper certificates as evidence of identity.

Burdens on the taxpayer – those participating in identity fraud may unjustly access public services and claim benefits using a false identity.

Benefits - There will be no additional benefits with option 1. Failure to implement wider electronic data sharing with other government departments impacts on the ability to drive forward the government's digital agenda.

Option 2 (preferred): Implement enhanced data sharing powers to allow for registration data to be verified or shared electronically with specified public authorities (Table 1)

The estimated volume impacts of the policy framework are translated into monetary values for inclusion in the cost benefit analysis.

The **direct** costs and benefits are those that could occur as a result of the direct impacts of using the data sharing service. Currently, the electronic records only go back to 2009, therefore initially the data would mainly be used to check against recent events, e.g. death entries to combat Blue badge fraud. There is also the potential for public authorities to use the death information to check whether the identity of a deceased person is being used to secure services, e.g. housing tenancy fraud or list cleaning for mail suppression.

Even if there is no further digitisation of the birth, marriage and death records the amount of electronic records will continue to grow with around 1.5 million records added each year. As the volume of digitised records increases the benefits will grow with the potential for more public authorities to request data for more purposes.

There will be other wider costs and benefits which relate to the impact on the government departments accessing the data sharing service and the impact it would have in reducing benefit and identity fraud.

The fee for sharing information on a case by case basis or in bulk would be included in a fees order to cover the cost of providing the service. Any fees would be on a full cost recovery basis of providing that service.

Current policy

Currently the RG and registration officers are only allowed to share information from the records of births, marriages, civil partnerships and deaths where there is a specific statutory gateway. Where no such gateway exists, registration officers cannot share the information they hold; they have no common law powers to rely on.

Members of the public accessing government services currently produce evidence of identity to show the event took place, e.g. producing a birth certificate.

Proposal

Data sharing by registration officials

To introduce new data sharing powers which allows registration officials to verify birth, marriage, civil partnership and death information to public authorities on a case by case basis in respect of an individual applying for a service or benefits.

To allow registration officials to share data in bulk or on a case by case basis which will enable public authorities to update their lists and potentially identify fraudulent activity, e.g. Blue Badge fraud. Societal benefits include preventing mail being sent to a deceased person causing unnecessary distress to relatives.

Members of the public accessing government services will no longer have to produce a certificate to access their services as the department will be able to verify the details electronically.

The provision to allow for birth, marriage, civil partnership or death information to be verified electronically meets the government's digital agenda.

Safeguards

A number of safeguards will be in place to ensure the integrity of registration data is maintained, this it is only used for the purpose in which it has been provided and retained only as long as is necessary.

Registration officials will only be able to share data with public authorities specified in the primary legislation. The legislation contains an enabling power for regulations to be made to add, modify or remove a public authority. The regulations may also set out the scope and specific arrangements for data sharing and would be made using the affirmative procedure thus ensuring parliamentary oversight of the data sharing regime, including the ability to reject government proposals for data sharing between public authorities

Sharing of data by registration officials will be underpinned by a statutory code of practice which will be approved by the Secretary of State and laid before parliament. Registration officials will be required to have regard to the code of practice when considering requests to share information with public authorities and follow the procedures outlined in it. This will ensure that data is shared in a way that is consistent, fair, proportionate and transparent.

Requirements in the code of practice includes the following -

- adherence to the requirements of the Data Protection Act 2006 (DPA) and the Human Rights Act 1998 (HRA) when considering a request to release data
- consider whether the recipient needs to complete a Privacy Impact Assessment in respect of each request for data
- ensure a Data Sharing Agreement (DSA) and Security Plan is put in place with all recipients of data.
- to agree with recipients how long data would need to be held for the purpose which it had been provided in accordance with Data Protection principles. This period of retention would be recorded in the DSA.

Restrictions on sharing data

The proposals do not allow for disclosure where there are current statutory restrictions on sharing information. Where there are restrictions on the sharing of particular data relating to adoptions[5], or gender recognition[6], for example, those will continue to apply and the personal data may only be disclosed subject to those restrictions.

Costs

Set up costs

Training and familiarisation – public sector

There are likely to be some training costs for GRO caseworkers and registration officers. This would also include updating the handbooks for registration officers. The Home Office estimate these costs to be around £0.3m and fall in year 1 alone.

IT set up costs

The Home Office has already developed interface architecture which allows for public authorities to request a verification of a birth, marriage or death entry. It is not envisaged that additional IT set up costs will be required to introduce these new data sharing provisions.

Direct ongoing costs

Operational costs to the public sector

It is estimated that IT resource required to maintain the IT systems which will facilitate the data sharing service will cost £1.9m (PV) over ten years.

There will be ongoing costs to the Home Office in processing requests for the sharing of data to ensure compliance with the Code of Practice, e.g. consider whether the request meets the requirements of the Data Protection Act 1998 and drafting Data Sharing Agreements. The RG will be able to charge for sharing data with public authorities on a cost recovery basis, therefore, this will be cost neutral and no direct ongoing costs have been applied to this Impact Assessment.

[5] See section 79(3) and 81(3) Adoption and Children Act 2002.

[6] See section 22 Gender Recognition Act 2004, although presumably sharing protected information under this new power would not be an offence by virtue of section 22(4)(j). Paragraph 3(4) of Schedule 3 to the 2004 Act provides that certain information is 'not to be open to public inspection or search' but this does not seem to prohibit disclosure to specified public bodies. The same provision (about public inspection or search) is made in regulations 5(3) and 15(3) of SI 2015/50 (concerning the Gender Recognition (Marriage and Civil Partnership) Registers)

Although additional staff resource may be required to deal with any queries following a data sharing service being implemented we do not anticipate any additional costs as staff currently working in the Data Unit at GRO will receive less of the cases they currently receive and be able to deal with any queries as a result of the data sharing.

As less people will buy a certificate, as government departments are able to verify information without having to request a paper certificate, it is estimated that the Home Office may see a loss of revenue of £1.3m (PV) over ten years.

Operational costs to the local registration service

The local registration service may see a loss in revenue over the next ten years as less people will buy a certificate as government departments are able to verify information without having to request a paper certificate from an individual seeking access to their services at a cost of £5.5m (PV) over ten years.

However, whilst there will be a loss of certificate income into the public purse, this will be mirrored by an identical increase in benefits to the public of not having to pay for a service that was previously subject to charge.

Benefits

Home Office

The Home Office will save £0.7m (PV) in resource and postage costs in respect of producing certificates.

Local registration service

The registration service will save £4.5m (PV) in resource and postage costs in respect of producing certificates at the time of registration and applications for historic records.

The local registration service will be able to charge for registration data they share with specified public authorities on a cost recovery basis which should offset the revenue they lose from certificate sales.

Public

The sharing of civil registration records would provide benefits for citizens in a number of different ways including the removal of barriers when accessing government/public services, safeguarding of vulnerable children and adults, creating greater efficiencies and therefore enhancing public access to services.

There will also be a benefit to the public in that they will be able to access services without having to purchase a certificate if they have lost it.

Local authorities

Mail suppression: The sharing of bulk data could be used to prevent unwanted mail being sent to a deceased person causing unnecessary distress to a bereaved family.

Local authorities could check death information against holders of specialist medical equipment to ensure items are returned

Having access to registration data would assist Social Services with safeguarding issues as they may require information relating to the father of a child to enable them to engage with him.

Blue Badges are provided under a national scheme and offer parking concessions for people who have certain disabilities. The scheme can be a considerable help to people who would otherwise find it difficult to get access to community facilities because of the distance they might have to travel once leaving their vehicle. The National Fraud Authority estimates that around half a million Blue Badges are misused every year at a cost to local authorities of around £46m each year – around £96 for each badge issued.

A study undertaken in 2013 across Sussex identified 140 people illegally using blue badges. 3 people were using badges that belonged to individuals who were deceased which equates to 2.1% of Blue Badge fraud. Being able to share death data with local authorities will help reduce the level of fraud by preventing someone using the identity of a deceased person to obtain a Blue Badge and generate savings of c. £8.3m (PV) over ten years.

The National Fraud Authority estimates housing tenancy fraud costs local authorities £845m each year. Housing tenancy fraud is the use of social housing by someone who is not entitled to occupy that home. It includes, but is not limited to, unlawful subletting, wrongful tenancy assignment and succession, failure to use a property as the principal home and use of false information in a housing application to gain a tenancy. One area of fraud is when, following the death of the tenant, someone continues to live in the property even when they have no right to. For example, they might not tell the local authority of the death of the tenant, but continue to live in the property. Being able to provide death data to local authorities will assist in reducing this level of fraud.

Across local authorities

There are real benefits in being able to share data with other local authorities. In particular in relation to births which have occurred outside of the district but the family are resident in a neighbouring district. There is currently no legal gateway which allows the local authority in which the birth occurred to advise the local authority in which they usually reside of the birth. This information is needed for the purpose of health care and to assist with planning of schools and other local authority functions.

There are also benefits from being able to share death data with other local authorities in relation to deaths which have occurred outside of the district but the deceased is resident in a different district. This will help prevent unwanted mail being sent to a deceased person, to reconcile against council rental properties and the ability to contact next of kin.

Information supplied could also benefit wider society in terms of providing data to deal with ad-hoc situations such as flu pandemics where there is currently no gateway in place to provide the information.

Other Benefits

It is expected that there will be many benefits across public authorities which have not been monetised for the purpose of this Impact Assessment. Sharing information such as death data could assist public authorities from making overpayments in relation to individuals in receipt of benefits.

Providing public authorities with secure and controlled access to digital civil registration data supports efficiency objectives. Provision of electronic data to support the delivery of digital

public services could contribute to realising the Government's Digital Strategy savings that are estimated to be in the region of £1.7 to £1.8 billion a year.

Assisting public authorities in meeting their policy objectives in shorter timeframes, given that establishing or putting in place gateways for sharing information would no longer hold up delivery, will lead to resource savings and an improved public service.

Summary of costs and benefits

A summary of the key monetised costs and benefits is set out in the table below.

Summary of Costs and Benefits	**10 year impact (£m) (PV Low)**	**10 year impact (£m) (PV)**	**10 year impact (£m) (PV High)**
Costs			
Set Up Costs			
1. Training, familiarisation and guidance	0.3	0.3	0.3
Total Set Up Costs	**0.3**	**0.3**	**0.3**
Ongoing Costs			
2. IT resource to administer data sharing service	1.9	1.9	1.9
3. Resource to administer data sharing service GRO	0	0	0
4. Loss of GRO certificate income – recent events ie least 50 years	1.1	1.3	1.4
5. Loss of LRS certificate income – recent events ie last 50 years	1.2	1.3	1.5
6. Loss of LRS certificate income – at time of registration births	2.3	2.5	2.8
7. Loss of LRS certificate income – at time of registration deaths	1.5	1.7	1.9
16. Annual Value of fraud enforcement (reduced to nil as directed by accountant)	0	0	0
Total ongoing Costs	8	8.7	9.4
Total costs	**8.3**	**9**	**9.7**
Benefits			
17. Increase in customer surplus	5.0	5.6	6.1
8. Resource savings to LRS of issuing certificates - recent	0.4	0.5	0.5

events ie last 50 years			
9. Resource savings for GRO certificate production – recent events ie last 50 years	0.5	0.6	0.7
10. GRO - Reduced postage costs for GRO in despatching certificates for recent events ie last 50 years	0.1	0.1	0.1
11. LRS - Reduced postage costs for LRS in despatching certificates for recent events ie last 50 years	0.1	0.1	0.1
12. Reduction Blue Badge Fraud for local authorities	6.7	8.3	10
13. Resource savings to LRS of issuing certificates - at time of registering a birth.	2	2.3	2.5
14. Resource savings to LRS of issuing certificates - at time of registering a death	1.4	1.6	1.7
15. Reduction in lost revenue to local authorities as a result of housing tenancy fraud (reduced to nil as directed by accountant)	0	0	0
Total benefits	**16.2**	**19.1**	**21.7**
Net Benefits *nb: there are roundings up and down in some values (ie a value 5 and over is rounded up and value 4 and under is rounded down) but total net benefits ranges are £8m; £10.1m; £12.0m*	**8.0**	**10.1**	**12.0**

E. Key Assumptions

Around 400 certificates relating to recent events (within the last 50 years) are issued by GRO each week and it is assumed these are purchased for official purposes. If customers did not need to purchase a certificate to access government services it has been assumed that would equate to a loss of 75% of sales

Although the Local Registration Service issue more certificates in general than GRO, it has been assumed that for recent events (the last 50 years) the volumes would be the same at around 400 each week (not including certificate sales at the time of registering an event). If customers did not need to purchase a certificate to access government services it has been assumed that would equate to a loss of 75% of sales

It is assumed that the majority of those registering a birth will continue to purchase a certificate at the time of registering the event for commemorative purposes even though services could be obtained electronically. We have assumed, for the purpose of this IA, that 10% of people registering an event would not purchase a certificate if they are able to access services electronically.

F. Review and Evaluation

A pilot exercise was conducted with HM Passport Office to test the processes of electronic verification of birth information without the need for the checking of a paper birth certificate. This

was to test the approach for using an electronic method of data matching. The outcome showed that it was possible to develop a generic technical solution which could be used for identity verification allowing digital access to a wider range of services.

The sharing of data will be underpinned by a Code of Practice and associated data sharing agreements. It is envisaged that the Code of Practice will be reviewed annually to ensure it is still fit for purpose and adequate safeguards are in place. If appropriate, amendments will be made. It not envisaged additional resource will be required to undertake this review and no ongoing costs have been applied to this Impact Assessment.

Title:
Digital Government: Debt owed to the public sector - Introduction of new permissive powers for public authorities to disclose identified data for the purpose of taking action in connection with debt owed to a specified public authority.
IA No: CO/2004

Lead department or agency:
Cabinet Office

Other departments or agencies:
HMRC, DWP, HO, BIS/SLC, CLG, DfT/DVLA and MoJ and private bodies who fulfil a public function on behalf of a public authority

Impact Assessment (IA)

Date: 15/06/2016

Stage: Development/Options

Source of intervention: Domestic

Type of measure: Primary legislation

Contact for enquiries:
Naomi Hunter
(naomi.hunter@cabinetoffice.gov.uk)

Summary: Intervention and Options

RPC Opinion: Not Applicable

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB on 2009 prices)	**In scope of One-In, Two-Out?**	**Measure qualifies as**
£-0.6m	£N/K	£N/A	No	Zero Net Cost

What is the problem under consideration? Why is government intervention necessary?

In the 2014 report 'Managing Debt Owed to Central Government' the NAO estimated that c£22bn of debt was owed to Central Government. Cabinet Office estimates that this rose to c£24bn by March 2015. It is understood that 10% of this debt (approx. £2.4bn) is owed by customers who owe multiple debts to more than one public authority. Current data sharing arrangements significantly limit the ability of public authorities to share debt data, creating an information failure. This reduces Government's ability to recover debt, and understand if a vulnerable customer is receiving the appropriate advice and support, and whether their payment plans are affordable. The Government needs to intervene to remove these barriers.

What are the policy objectives and the intended effects?

The policy objective is to improve the management of debt in the public sector by reducing the time and complexity involved in establishing data sharing agreements, and ensuring we provide the right support and advice to vulnerable customers. We intend to confer a permissive power that enables specified public authorities, and private bodies working on behalf of a public authority, to share identified debt data, to enable better debt management, including debt recovery. Creating a clear purposive gateway will provide public authorities with assurance as to what is legally permissible and in turn allow greater flexibility for Government to act more quickly to recover debt, and provide targeted support vulnerable customers.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

1) Option 1 – Do nothing: The status quo would be maintained, whereby specific statutory gateways are created when there is a need for them.
2) Option 2 (preferred option) - Introduce new legislation which enables the sharing of data between public authorities within clearly set constraints (who can share, what they can share, and for what purpose). This option reduces data sharing complexity and cost as public sector organisations use the purposive gateway rather than individual gateways. It also balances this benefit with the protection afforded to the individual. Option 2 is the preferred option as it best meets the specified policy objectives.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** Month/2019

Does implementation go beyond minimum EU requirements?			No		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	**Micro** No	**< 20** No	**Small** No	**Medium** No	**Large** No
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** N/A	**Non-traded:** N/A	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister: ..... Date: 21 June 2016

Summary: Analysis & Evidence

Policy Option 1

Description: Do nothing

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	**High:** Optional	**Best Estimate:** -

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate				**N/A**

Description and scale of key monetised costs by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Other key non-monetised costs by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate				**N/A**

Description and scale of key monetised benefits by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Other key non-monetised benefits by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Key assumptions/sensitivities/risks **Discount rate (%)**

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: 0	**Benefits:** 0	**Net:** 0	No	NA

Summary: Analysis & Evidence

Policy Option 2

Description: Constrained powers to share data for specific purposes within specified but flexible groups

FULL ECONOMIC ASSESSMENT

Price Base Year 2016	PV Base Year 2016	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -0.5	**High:** -0.7	**Best Estimate:** -0.6

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	**N/K**		**0.06**	0.5
High	**N/K**	**1**	**0.07**	0.7
Best Estimate	**N/K**		**0.08**	0.6

Description and scale of key monetised costs by 'main affected groups'

- There will be associated costs to the Cabinet Office, who will need to recruit 3 full time equivalent members of staff at Band B2 level to form part of a new team that will manage the fraud and debt data sharing legislation power. This would mean 1.5 FTEs would have direct costs linked to the debt strand.

Other key non-monetised costs by 'main affected groups'

- Familiarisation and training costs for organisations affected by the change in legislation. Given the uncertainty in estimating these familiarisation costs, we have carried out scenario analysis to present an illustration of possible costs.
- Public authorities may also incur administrative costs associated with production of a business case, and an increased volume of data sharing requests.
- Individual costs could accrue in terms of the possible impact on privacy, due to the greater volume of data which may be shared.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	**Optional**		**Optional**	Optional
High	**Optional**		**Optional**	Optional
Best Estimate	**N/K**		**N/K**	N/K

Description and scale of key monetised benefits by 'main affected groups' Not known

Other key non-monetised benefits by 'main affected groups'

- Public authorities may benefit from a decrease in the average administrative costs of sharing data (i.e. staff time in researching or establishing legal data sharing gateways).
- Public authorities may be better able to improve its recovery of debt, which will be enabled through public authorities' ability to share data more quickly.
- Simplification of the legislative framework
- Support vulnerable customers and those in hardship

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5%

The key risk of a legislative change lies in the possibility of future legal challenge with respect to the Data Protection Act or the Human Rights Act. Related to this, there is a risk in data loss and associated personal costs to citizens as well as reduced trust in government. A further risk is in incorrect use of data in policy-making.

BUSINESS ASSESSMENT (Option 4)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: N/A	**Benefits:** N/A	**Net:** N/A	No	NA

Evidence Base (for summary sheets)

Problem under consideration

Debt owed to the Government is due by individuals and businesses, and comes from a wide range of sources including overdue tax liabilities, benefit or tax credit overpayments, outstanding fines, penalties and court confiscation orders, but is not limited to these areas.

In the 2014 report 'Managing Debt Owed to Central Government [1] the NAO estimated that around £22bn of overdue debt was owed to Central Government in March 2013. Around 90 per cent of debt was owed to HMRC and DWP. Recent Cabinet Office data suggests that Central Government debt rose to around £24 billion [2] in March 2015, against total collected revenue of around £600 billion [3]. Debt is an asset and Government has a duty to manage its customers effectively and fairly as part of good financial management.

There are already sufficient data sharing powers for data to be shared between HMRC and DWP, which covers around 90% of the £24bn of debt owed. However, the remaining 10 per cent of debt (around £2.4bn) is owed to other public authorities, including other Central Government Departments and Local Authorities, where current legislation is more restrictive. Public authorities need to work together more intelligently to ensure more efficient management of debt, and ensure vulnerable customers receive the advice and support they need.

A significant number of customers who owe debts to public authorities are likely to be vulnerable and may have difficulty managing their finances. Better cross-agency management of debt has the potential of providing greater support and advice to customers by supporting affordable and structured repayment plans, and reducing the amount of times public authorities contact customers. Numerous contacts can also have an adverse impact on a customer's wellbeing.

Public authorities already have the ability to share debt data. Around 86 legal gateways to share debt data have grown organically across the public sector over a number of years. However, these gateways are restrictive, often misinterpreted, and are complex and time consuming to use [4]. Public authorities sometimes face delays of up to six years to understand the legislative landscape and then establish an appropriate gateway.

What is clear is that the size of the problem is significant and that more needs to be done to ensure vulnerable customers are adequately supported, and that the Government can recover debts more efficiently.

Rationale for intervention

Sharing identified debt data should facilitate:

- Cross Government coordinated action to identify vulnerable customers, so we can provide greater support to people and businesses who have difficulties repaying debts they owe to Government, thus supporting their wellbeing. These debts are legally collectable and enforceable, and all appeals processes and disputes will have been concluded.
- More efficient and effective cross Government debt management, including the recovery of debt, to save taxpayers' money by streamlining processes and simplifying the legislative landscape.
- Ability to identify and overcome the barriers to look to create a single customer view so that specified public authorities can create a holistic view of a customer and take appropriate coordinated action and interventions.

Policy objective

The policy objective is to improve the management of debt in the public sector by reducing the time and complexity involved in establishing data sharing agreements, and ensuring we provide the right support and advice to vulnerable customers.

We intend to confer a permissive power that enables specified public authorities and private bodies working on behalf of a public authority, to share identified debt data, to enable better debt management, including debt recovery. Creating a clear purposive gateway will provide public authorities with assurance as to what is legally permissible and in turn allow greater flexibility for Government to act more quickly to recover debt, and provide targeted support for vulnerable customers.

We want to improve the efficiency of the recovery of debt owed to Government, whilst ensuring we are collecting multiple debts from our customers under affordable structured repayment plans. Increasing the flexibility of legislation and reducing the time and complexity involved in sharing data will help achieve this. This could also offer significant efficiencies, whilst ensuring vulnerable customers receive the right advice and support to help ensure affordable repayment plans.

The policy seeks to provide a legal gateway, which makes it easier for public authorities, and private bodies who fulfil a public function on behalf of a public authority, to understand what is permissible by way of data sharing for the purposes of taking action in connection with debt owed to a specified public authority. The gateway will be 'purposive' (one that is constrained by the purposes for which the data will be used).

New powers would be permissive and supplement, rather than replace, existing powers. The gateway will allow one or more public authorities specified in a schedule to share identified information in alignment with Data Protection Act principles (e.g. adequate, relevant and not excessive to the purpose for which they are processed).

Whilst the emphasis of any solution will be on flexibility, time and simplicity, it will be balanced by the need to protect the rights and privacy of individuals. Therefore we will ensure that principles of necessity and proportionality are understood and upheld.

Who the policy is meant to apply to

The policy is to introduce a permissive power that covers specified public authorities and private bodies who fulfil a public function on behalf of a public authority. Organisations included in the schedule at introduction include HMRC, DWP, HO, BIS/SLC, CLG, DfT/DVLA, MoJ, local authorities, and private bodies who fulfil a public function on behalf of a public authority.

Description of options considered

Option 1: Do Nothing: Allowing the creation of a number of specific statutory gateways, where there is a need for them.

This option is essentially about maintaining the status quo and making provision for each data-share required for the purposes of sharing data to take action in connection with debt owed to a specified public authority, through existing individual statutory gateways or by creating new statutory gateways.

Option 2: Constrained powers to share data for specific purposes within specified but flexible groups.

Under this option, the proposal is for constrained powers to share identified debt data for the specific purposes of taking action in connection with debt owed to a specified public authority. It is envisaged that this power would have a scope that could permit a range of public authorities to take part. **This is the preferred option**. The power will be constrained by the Code of Practice, which would ensure fairness is central to any debt data-sharing pilot.

The scope of this would be controlled by a list of specified public authorities, which would only be amended following an Order by a Minister. Details of the proposed solution are:

- To create a permissive legislative vehicle that allows a specific group of organisations to share debt data to take action in connection with debt owed to a specified public authority;
- To ensure that this facility is constrained by:

- Ensuring that public authorities are only on the list if they can prove their need to be on it;
- Creating a Code of Practice that specified public authorities must comply with in order to be able to maintain their specified status. This includes specific Fairness Principles, the publication of privacy impact assessments and auditing by the Information Commissioner and operating data sharing arrangements in alignment with DPA and HRA principles;
- Constraining the categories of information shared, in particular exempting non-relevant data classed as sensitive personal data for the DPA (race/ethnic origin, political opinions, religious beliefs or other similar beliefs, Trade Union membership, physical or mental state or condition) and "patient information" as per the NHS Act s251(10); and
- Preserving the unlawful disclosure sanctions of those organisations that have them - DWP and HMRC.

Other options considered during consultation were:

- Providing for a broad, Government-wide presumption to share data
  This was not taken forward as there is a real possibility of future legal challenge with respect to the Data Protection Act or the Human Rights Act, as it enables an extremely wide range of data sharing. There is also a risk of data loss and associated personal costs to citizens, incorrect use of data, as well as reduced trust in government.
- Non-legislative work to change cultural boundaries: simpler guidance, brokerage of data-sharing agreements or other such provision (e.g. communities of practice)
  This option was not taken forward as it would only reduce perceived complexity, and does not include safeguards that would ensure the process was being used in the way it was intended.

Appraisal of options

Option 1: Do Nothing: Allowing the creation of a number of specific statutory gateways, where there is a need for them.

Costs: Whilst such an option meets an immediate need it does not simplify the current legislative landscape or create a more flexible regime, nor does it reduce the time taken to create new data-sharing agreements, as there would still be a need to create specific legislation with each one. The cost associated with creating specific legal gateways is significant. Policy officials will have to lead the work, additional Legal and Parliamentary time will be spent firstly in understanding the complex legal landscape, then creating an appropriate gateway suitable for the specific needs and then passing the gateway through Parliament. The delay this creates (which can be up to six years) in being able to take action in connection with debt owed to a specified public authority also represents a cost, whilst the gateway is being established.

Benefits: Specific gateways (created through secondary legislation) are least burdensome when it comes to producing evidence that such a gateway is required; in order to be added to statute it will be subject to Parliamentary scrutiny and therefore deemed necessary. To do so, it is expected that the case for the gateway will be clearly set out, providing assurance that such a measure was proportionate and necessary before it was created.

Option 2: Constrained powers to share data for specific purposes within specified but flexible groups.

Costs

Training and familiarisation

Public authorities who decide to participate in a data sharing arrangement under the scope of this power, will face one-off costs relating to staff time for familiarising and training regarding the new legislation. This is likely to include officials' time in reading and understanding the new legislation, disseminating the information and training staff to understand the new rules.

It is not known how many individuals would be affected in each organisation- as a result quantifying the estimated staff time is difficult. Below we present a number of scenarios, which set out the estimated cost for central government under differing assumptions. As demonstrated, whilst not insignificant, the cost is not expected to be considerable. These one-off transitional numbers are not included in the headline monetised costs, due to uncertainty in the number of individuals affected.

The assumptions used to calculate the estimated costs of these scenarios are:

- Staff time- We estimate the value of an employee's time to the public sector organisation as being their wage and additional non-wage costs. We assume the median gross hourly pay in the public sector will apply, £14.47 (ASHE 2015 data), uprating for inflation gives £14.63 and we add a further 30% to this to cover overheads and further costs to the employing organisation, resulting in a cost to the organisation of £19.02 per hour.
- Government organisations affected- We assume central government organisations affected by this legislative change are HMRC, DWP, HO, BIS, DfT, MoJ and Cabinet Office. The estimates are calculated on the number of permanent FTE staff in March 2016 (Public sector employment data, 15th June 2016). Other public sector bodies may also be affected, which would increase the associated cost, but given the permissive nature of this power, and the fact that some would need to carry out training and familiarisation under the do nothing option, they are excluded from the analysis below.
- On the basis of a return from one Government department, we calculated that the number of staff affected was approximately 1% of their workforce. We used this assumption for all central government organisations identified above, along with their estimate that training and familiarisation would take approximately 1 hour, to calculate the figure highlighted in grey below. We then assumed, to recognise that there may be differences in other departments that the percentage of staff affected was half and double, and the time spent on familiarisation was half and double, to produce the range of costs set out below.

Illustrative cost scenario

	Total time spent on familiarisation and training (hrs), £		
Percentage of staff affected	0.5	1	2
0.5%	12,300	24,600	49,100
1%	24,600	49,100	98,300
2%	49,100	98,300	196,500

*Note- estimates rounded to nearest £100 and are the total for the Departments listed above. Further detail is set out in Annex A.

There may be some costs for departments to revise guidance and develop the training material- these costs are expected to be minimal.

There may also be costs for private bodies working on behalf of a public authority- these costs will be reimbursed by the public sector as part of commercial arrangements. This legislation does not therefore have a net cost to business and is not in scope of One-in-Three-Out. These are not included in the above estimates as it is not known how many bodies would be affected.

Administrative costs

In order for public authorities, or private bodies who fulfil a public function on behalf of a public authority to use the power, they must first put forward a business case, which would outline the proposed data sharing activity, cost and benefit analysis, and how fairness will be ensured throughout the process. A business case must be produced for each pilot (see below) that sets out the objective of the data share, how the pilot will operate and when it will be evaluated, as well as the criteria against which it will be evaluated. Each pilot would then be evaluated against set criteria, including fairness. There would therefore be some staff time associated with producing and evaluating the business case.

Pilots under the debt data sharing power

For the initial 3 years of the legislation all new data sharing proposals under this legislation are treated as pilots. The legislation will then be reviewed to see how successful it has been, and a view taken

about the usefulness of pilots going forward, with success measured through how many pilots have been run and how successful they have been in delivering their benefits. Pilots will support a better understanding of how data sharing can influence how Government debt is managed and recovered. Pilots may thus be used to help, for example, develop thinking associated with the value of new data sources or to trial new processes.

The Code of Practice will lay down the requirement to define a business case for each debt data sharing pilot. This will need to set out the detail about the purpose of the pilot, list all the data to be shared, and the expected benefits of the pilot. A pilot proposal will include information on the targeted outcome, how success will be measured and how long the pilot will operate for (this can be any length of time (months to years) that the parties agree is suitable for the purpose of the pilot). At the end of the period of pilot operation, its success will be measured against its stated criteria. If a pilot has demonstrated a successful outcomes at the end of its operational period, it will be considered by a steering group, and a recommendation made to the Minister about whether the case for continuing with this data sharing arrangement had been made. The Minister, on the basis of this information, may then confirm that the arrangement can continue as business as usual.

Example of a pilot- single customer view pilot
In the report 'Managing Debt Owed to Central Government' the NAO recommended that the Government should look to develop a single customer view. However, issues around hierarchies and prioritisation of the repayment of multiple debts pose a number of challenges. Any pilots designed to identify and address issues related to developing a Single customer view of debts owed to public authorities will need to decide how Government debt is recovered, and how public authorities will receive their collected debts. Any single customer view pilot will need to ensure that customers have an integrated total view of their debts within the boundary of the named public authorities in the pilot, taking into account that these customers may also have debts with public authorities outside of the pilot.

We would anticipate a higher amount of data sharing post legislation which would require more resources to service it, adding to the administrative burdens of departments as they deal with an increased demand. Data sharing would however be limited to instances where data is used to recover debt owed to Government. These costs cannot be estimated, as these will be dependent on the pilots that are set up under this power, but time will need to be spent on:

i) The production and publication of privacy impact assessments
ii) Auditing by the Information Commissioner
iii) Operating data sharing arrangements in alignment with Data Protection Act (DPA) and Human Rights Act (HRA) principles.

There will be associated *annual* costs to the Cabinet Office, who will need to recruit 3 full time equivalent employees at Band B2 level to form part of a new team that will manage the fraud and debt data sharing legislation power. This would mean 1.5 FTEs would have direct costs linked to the debt strand.

The minimum, mid-point and maximum pay for a Cabinet Office Band B2 is set out below. We add a further 30% to this to cover overheads and further costs.

£	Minimum	Mid-point	Max
Band B2 salary	30,418	34,451	38,484
Including non- wage costs	39,543	44,786	50,029
Cost for 1.5FTEs	59,315	67,179	75,044

As this is an annual cost, we assume an average annual pay increase of 1% per annum over the 10 year period. Costs are discounted by 3.5% per annum, in line with HM Treasury's Green Book Guidance. The discount rate is used to convert costs to 'present values'- further detail is set out in Annex A.

Privacy

Individual costs could accrue in terms of the possible impact on privacy, due to the greater volume of data which may be shared. However, under this option:

- The scope would be controlled by a list of specified public authorities, which would only be amended following an Order by a Minister.
- Public authorities would only be on the list if they can prove their need to be on it;
- A Code of Practice would be created that specified public authorities must comply with in order to be able to maintain their specified status. This includes specific Fairness Principles, the publication of privacy impact assessments and auditing by the Information Commissioner and operating data sharing arrangements in alignment with DPA and HRA principles;
- The categories of information shared would be constrained, in particular exempting non-relevant data classed as sensitive personal data for the DPA (race/ethnic origin, political opinions, religious beliefs or other similar beliefs, Trade Union membership, physical or mental state or condition) and "patient information" as per the NHS Act s251(10); and
- Unlawful disclosure sanctions of those organisations that have them would be preserved - DWP and HMRC.

The constraints and safeguards may serve to reassure individuals that such a data-share would be done in a necessary and proportionate manner and that action would be taken should this not happen. Setting constraints will also serve to increase trust between organisations within the schedule, serving to reduce some of the cultural barriers to sharing data.

Benefits:

Simplifying the legislative framework

The Law Commission scoping report, Data Sharing between public authorities [5], describes how the law surrounding data sharing is complex, with powers to share data scattered across a very large number of statutes. These may be set out expressly or implied. The report indicated that there are problems in practice and that there are differing interpretations of the law governing the sharing of data. In addition to the complex legal landscape, other issues include a reported lack of flexibility (the difficulty in adapting to changing circumstances in a timely fashion given legislative processes) and the time taken to create new data sharing relationships.

This option would simplify the legislative landscape and reduce the time taken to create new data sharing relationships. As legislation need not set out fully all categories of data being shared, it allows a greater agility when seeking to share changing categories of data.

Recovery of debt

Option 2 aids the recovery of debt by:

i) Increasing the likelihood that data sharing powers will be used, through lowering the average cost of setting up an agreement, and reducing the complexity of the arrangement.

ii) Reducing the time it would take to make a data sharing agreement. Specific statutory gateways are complex and time consuming to use [4]. Public authorities sometimes face delays of up to six years to understand the legislative landscape and then establish an appropriate gateway.

iii) Helping the Government work towards establishing a single customer view to create a coordinated response in recovering debt owed to Government.

As set out earlier, there are already sufficient powers for data to be shared between HMRC and DWP, which covers around 90% of the £24bn of debt owed. However, the remaining 10 per cent of debt (around £2.4bn) is owed to other public authorities, including other Central Government Departments and Local Authorities, where current legislation is more restrictive. Improved debt data sharing could help public authorities recover a greater amount of debt, and to recover debt earlier, meaning that aged debt and potential losses due to write offs could reduce.

This option would help enable the identification of customers who owe multiple debts. This power would enable specified public authorities to share information, which would help develop a more effective coordinated way to recover debt where possible, saving taxpayers money. There are clear calls to increase the effectiveness and the efficiency of current data sharing from across the public sector.

The strengthened evidence base from data sharing could also inform better decision making, using more tailored approaches such as behavioural insights, to make interventions more effective.

Administrative savings

Whilst a higher amount of data sharing post legislation could raise administrative costs, there may also be administrative saving associated with not having to set up individual data sharing agreements between Departments; these savings are expected to more than outweigh the admin burden of more requests. Under the current system public authorities are required to research and understand what powers are available to share information, which can be time consuming. Public authorities sometimes face delays of up to six years to understand the legislative landscape and then establish an appropriate gateway.

Furthermore, where express legal gateways are created, they generate their own familiarisation costs. Introducing a standardised process will over time reduce costs, as staff in departments develop a strong understanding of a single legal gateway.

Supporting vulnerable customers and customers in hardship

Delays to the sharing of data, which could occur under the do nothing option, can prevent early intervention or action for those most at risk. Better cross-agency management of debt has the potential of providing greater support and advice to customers by supporting affordable and structured repayment plans, and reducing the amount of times public authorities contact customers. Numerous contacts can also have an adverse impact on a customer's wellbeing.
Pilots will help to identify vulnerable customers and customers in hardship. Using all available data, pilots will help to differentiate between:

- A customer who cannot pay their debt because of vulnerability or hardship, can be offered advice and guidance about the debt owed, and be signposted to non-fee paying debt advice and support, with the aim of minimising the build-up of further debt;
- A customer who can pay their debt, so a fair and manageable repayment plan can be put in place; and
- A customer who has the means to pay their debt, but chooses not to pay, so public authorities, and private bodies acting on their behalf, can assess which interventions could best be used to recover the debt.

Impact on business

There will be no direct impact on businesses as a result of this change. This power will not increase the amount of debt a business will owe the Government, but there may be an indirect impact if these changes lead to a greater proportion of debt recovery from businesses than would be the case under option 1.

Risks and mitigations

The proposed changes are intended to improve public authorities' ability recover debt by reducing the time and complexity involved in sharing data. The risks that these changes will bring about are common to any data sharing process, namely:

a) Loss of data;
b) Incorrect use of data – with biased or incorrect conclusions being drawn and policy ineffectively designed as a result;
c) Challenge from individuals whose data has been shared.

The use of data sharing has increased substantially in recent years, and Government has been encouraged to make better use of existing information. This has meant a better understanding of the risks associated with it. As a result, a number of measures have been developed to mitigate these risks. These mitigation measures are either required by law or considered as good practice and include among others:

- Organisations sharing data have the appropriate organisational measures in place as established by the Data Protection Act. It is good practice to:
    - Design and organise security to fit the type of personal data disclosed or received and the harm that may result from a security breach;
    - Be clear about which staff members in the organisations involved in the sharing are responsible for ensuring information security;
    - Have an appropriate monitoring and auditing procedure in place; and
    - Be ready to respond to any failure to adhere to a data sharing agreement swiftly and effectively.
- Organisations sharing data have the appropriate technical measures in place as established by the Data Protection Act. It is good practice to:
    - Make sure that the format of the data you share is compatible with the systems used by both organisations;
    - Check that the information that is shared is accurate before sharing it;
    - Establish ways for making sure inaccurate data is corrected by all the organisations holding it;
    - Agree common retention periods and deletion arrangements for the shared data; and
    - Train staff so that they know who has the authority to share personal data, and in what circumstances this can take place.
- The various organisations involved in data sharing will each have their own responsibilities and liabilities in respect of the data they disclose or have received. It is therefore good practice:
    - For a senior, experienced person in each of the organisations involved in the sharing to take on overall responsibility for information governance, ensuring compliance with the law, and providing advice to staff faced with making decisions about data sharing;
    - To have a data sharing agreement in place that includes:
        - The purpose of the sharing;
        - The potential recipients or types of recipient and the circumstances in which they will have access;
        - The data to be shared;
        - Data quality – accuracy, relevance, usability, etc.;
        - Data security;
        - Retention of shared data;
        - Individual's rights – procedures for dealing with access requests, queries and complaints
        - Review of effectiveness/termination of the sharing agreement; and
        - Sanctions for failure to comply with the agreement or breaches by individual staff.

Overall, the appropriate mitigating measures depend on the type of information that is shared and the organisations that are sharing them. Therefore, any future policy that requires the use of data sharing should specify what mitigating measures are more appropriate to reduce risks.

Summary and Preferred Option:

Option 1 (Do nothing option)

This has a number of drawbacks. It is essentially about maintaining the status quo of a network of specific data-sharing relationships; the creation of more would inevitably lead to a greater complexity in the overall architecture of data-sharing legislation. This would therefore not meet the aim of simplification which could be argued is a major driver of the cultural barriers to sharing data. Furthermore, this option does not provide an inherent flexibility. Specific statutory gateways, particularly if they follow the current pattern, would not be able to accommodate the need for change of data sharing in the area of debt. The only way of accommodating this would be to keep creating new statutory gateways. This does not reduce the time it takes to create new relationships, nor does it seek to reduce complexity. On balance this option would not be the preferred option in this policy area.

Option 2- Constrained powers to share data for specific purposes within specified but flexible groups.
This provides the best approach to meeting the specified objectives, and the benefits associated with recovery of debt are expected to offset any costs associated with the additional data-sharing burden.
Any such system would require the right governance and safeguards, as there will be decisions to be made about the ability of an organisation to share data, the necessity of that data to be shared for the prescribed purpose and the on-going value of such a data share. Given its ability to provide reduced complexity, provide greater flexibility, and implement a degree of constraint and governance through the Code of Practice that will underpin the power that has not been attempted before, **this is the preferred option**.

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[1] and [6] https://www.nao.org.uk/wp-content/uploads/2015/02/Managing-debt-owed-to-central-government.pdf
[2] Actuals from annual accounts, with the other Government departmental estimate from the the year end Consolidated Data Request (CDR).
[3] Whole of Government Accounts page 7:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/419973/PU1786_WGA_2013-14_Accounts.pdf
[4] Department for Work and Pensions report, *Legal Powers - Data Sharing Survey Results,* February 2012
[5] http://lawcommission.justice.gov.uk/areas/data-sharing.htm

Annex A

Familiarisation and training costs

Department	Permanent FTE employees	1% of employees	Cost of familiarisation (central scenario)
Business, Innovation and Skills	14,680	147	£ 2,792
Cabinet Office	2,000	20	£ 380
HM Revenue and Customs	63,160	632	£ 12,013
Home Office	25,530	255	£ 4,856
Justice	63,590	636	£ 12,095
Transport	12,860	129	£ 2,446
Work and Pensions	76,470	765	£ 14,545
TOTAL	**258,290**	**2,583**	**£ 49,127**

Cabinet Office staff time

		Year										
Type of staff time cost	Detail	0	1	2	3	4	5	6	7	8	9	Total
Min	Salary cost 1.5FTE	45,627	46,083	46,544	47,010	47,480	47,954	48,434	48,918	49,408	49,902	**477,359**
	plus non-wage labour costs	59,315	59,908	60,507	61,112	61,724	62,341	62,964	63,594	64,230	64,872	**620,567**
	Time cost (£, discounted)	59,315	57,882	58,461	55,120	53,788	52,489	51,221	49,984	48,777	47,599	**534,637**
Mid point	Salary cost 1.5FTE	51,677	52,193	52,715	53,242	53,775	54,313	54,856	55,404	55,958	56,518	**540,651**
	plus non-wage labour costs	67,179	67,851	68,530	69,215	69,907	70,606	71,312	72,025	72,746	73,473	**702,846**
	Time cost (£, discounted)	67,179	65,557	63,973	62,428	60,920	59,449	58,013	56,611	55,244	53,910	**603,284**
Max	Salary cost 1.5FTE	57,726	58,303	58,886	59,475	60,070	60,671	61,277	61,890	62,509	63,134	**603,942**
	plus non-wage labour costs	75,044	75,794	76,552	77,318	78,091	78,872	79,661	80,457	81,262	82,074	**785,124**
	Time cost (£, discounted)	75,044	73,231	71,462	69,736	68,052	66,408	64,804	63,239	61,711	60,220	**673,907**

Title: Digital Government - Fraud against the public sector - Introduction of new permissive powers for public bodies to authorise data sharing for the prevention, detection, investigation or prosecution of fraud **IA No:** CO/2004 **Lead department or agency:** Cabinet Office **Other departments or agencies:** HMRC, DWP, HO, BIS/SLC, CLG, DfT/DVLA and MoJ and private bodies who fulfil a public function on behalf of a public body	**Impact Assessment (IA)** **Date:** 10/06/2016 **Stage:** Development/Options **Source of intervention:** Domestic **Type of measure:** Primary legislation **Contact for enquiries:** Naomi Hunter (naomi.hunter@cabinetoffice.gov.uk)

Summary: Intervention and Options

RPC Opinion: Not Applicable

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB on 2009 prices)	**In scope of One-In, Two-Out?**	**Measure qualifies as**
£-0.6m	£m	£m	No	Zero Net Cost

What is the problem under consideration? Why is government intervention necessary?

Public sector estimates of losses due to fraud is estimated to be at least £20.6bn. Wider use of data sharing would improve the prevention, detection and investigation of fraud by aiding better targeting and risk-profiling of potentially fraudulent individuals. However, there are currently legal barriers which place significant burdens on organisations which wish to share data. This limits the ease in establishing data sharing agreements between public bodies.

What are the policy objectives and the intended effects?

The policy objective is to reduce the cost of fraud to the public sector (and by extension to the taxpayer) by increasing flexibility and the reducing the time and complexity involved in establishing the sharing of data. We intend to confer a permissive power on public bodies listed in a schedule in the legislation to authorise data sharing between them for the prevention, detection, investigation or prosecution of fraud against the public sector. Creating a clear purposive gateway will provide public bodies with assurance as to what is legally permissable and in turn allow greater flexibility for Government to act more quickly to combat fraud.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

1) Option 1 - Do nothing: The status quo would be maintained, whereby specific statutory gateways are created when there is a need for them.
2) Option 2 - Introduce new legislation which enables the sharing of data between public bodies within clearly set constraints (who can share, what they can share, and for what purpose). This option reduces data sharing complexity and cost as public sector bodies use the purposive gateway rather than individual gateways. It also balances this benefit with the protection afforded to the individual.
Option 2 is the preferred option as it best meets the specified policy objectives.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** Month/2019

Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	**Micro** No	**< 20** No	**Small** No	**Medium** No	**Large** No
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** N/A	**Non-traded:** N/A	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister: ..... Date: 21 June 2016

Summary: Analysis & Evidence

Policy Option 1

Description: Do nothing

FULL ECONOMIC ASSESSMENT

Price Base Year 2016	PV Base Year 2016	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	**High:** Optional	**Best Estimate:** N/A

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate	N/A		N/A	**N/A**

Description and scale of key monetised costs by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Other key non-monetised costs by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate	N/A		N/A	**N/A**

Description and scale of key monetised benefits by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Other key non-monetised benefits by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Key assumptions/sensitivities/risks **Discount rate (%)**

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: N/A	**Benefits:** N/A	**Net:** N/A	No	NA

Summary: Analysis & Evidence

Policy Option 2

Description: Constrained powers to share data for specific purposes within specified but flexible groups

FULL ECONOMIC ASSESSMENT

Price Base Year 2016	PV Base Year 2016	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -0.5	**High:** -0.7	**Best Estimate:** -0.6

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	**N/K**		**0.06**	0.5
High	**N/K**	**1**	**0.07**	0.7
Best Estimate	**N/K**		**0.08**	0.6

Description and scale of key monetised costs by 'main affected groups'

- There will be associated costs to the Cabinet Office, who will need to recruit 3 full time equivalent members of staff at Band B2 level to form part of a new team that will manage the fraud and debt data sharing legislation power. This would mean 1.5 FTEs would have direct costs linked to the fraud strand.

Other key non-monetised costs by 'main affected groups'

- Familiarisation and training costs for organisations affected by the change in legislation. Given the uncertainty in estimating these familiarisation costs, we have carried out scenario analysis to present an illustration of possible costs.
- Public authorities may also incur one off administrative cost associated with production of a business case when setting up a new agreement, and an ongoing cost due to increased volume of data sharing requests.
- Individual costs could accrue in terms of the possible impact on privacy, due to the greater volume of data which may be shared.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	**Optional**		**Optional**	Optional
High	**Optional**		**Optional**	Optional
Best Estimate	**N/K**		**N/K**	N/K

Description and scale of key monetised benefits by 'main affected groups'

Not known. It is not possible to estimate the benefits of this option.

Other key non-monetised benefits by 'main affected groups'

- Public authorities may benefit from a decrease in the average administrative costs of sharing data (i.e. staff time in researching or establishing legal data sharing gateways).
- Public authorities may be better able to improve the prevention, detection and investigation of fraud
- Simplification of the legislative framework

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5%

The key risk of a legislative change lies in the possibility of future legal challenge with respect to the Data Protection Act or the Human Rights Act. Related to this, there is a risk in data loss and associated personal costs to citizens as well as reduced trust in government. A further risk is in incorrect use of data in policy-making.

BUSINESS ASSESSMENT (Option 4)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: 0	**Benefits:** 0	**Net:** 0	No	NA

Evidence Base (for summary sheets)

Problem under consideration

In 2012, the National Fraud Authority put the loss to the UK economy from fraud at £52 billion, with approximately £20.6bn being attributable to the public sector[1]. This figure in reality is likely to be significantly higher once other factors are taken into account. The estimate also does not consider losses due to error or to the various 'grey areas' between fraud and error, such as negligence and failure to take due care, and it only includes specific aspects of the shadow economy. Top-down econometric estimates of the shadow economy[2] suggest that tax losses and means-tested benefits overpayments may be considerably higher. Together these suggest that total detected and undetected losses for the broadest definition of fraud and error are likely to be significantly higher than the estimated £20.6bn. What is therefore clear is that the size of the problem is significant and that more needs to be done to combat fraud.

Current methods for sharing data, which involve establishing specific gateways for sharing specific data between specific parties through secondary legislation, are far too inflexible and slow to keep up with the constantly changing methods of fraud. Public authorities sometimes face delays of up to six years to understand the legislative landscape and then establish an appropriate gateway.

Rationale for intervention

Wider use of data sharing could improve the prevention, detection and investigation of fraud by:

a) Aiding better targeting and risk-profiling of potentially fraudulent individuals;
b) Saving taxpayers' money by streamlining processes; and
c) Increasing the ability for Government to act more quickly on fraud and simplifying the legislative landscape.

There are clear calls to increase the effectiveness and/or the efficiency of current data sharing from across the public sector and some private sector organisations. The Law Commission scoping report, Data Sharing between Public Bodies[3], describes how the law surrounding data sharing is complex, with powers to share data scattered across a very large number of statutes. They may be set out expressly or implied. The report indicated that there are problems in practice and that there are differing interpretations of the law governing the sharing of data. In addition to the complex legal landscape, other issues include a reported lack of flexibility (the difficulty in adapting to changing circumstances in a timely fashion given legislative processes) and the time taken to create new data sharing relationships.

Policy objective

The policy intention is to reduce the likelihood and cost of fraud to the tax-payer by reducing the time and complexity involved in sharing data. We intend to do this by making it easier to allow parties to share data for the prevention, detection, investigation and prosecution of fraud, reducing the cost of accessing vital information necessary for combating fraud.

For example, two projects that would be enabled by a new power are Household Composition and the Single Fraud Investigation Service. The fraud and error reported under Household Composition alone for DWP in 2014/15 was over £160m[5]. Sharing data would enable Departments to improve the detection and prevention of fraud and lead to significant savings.

Whilst the emphasis of any solution will be on flexibility, time and simplicity; it will be balanced by the need to protect the rights and privacy of individuals. Therefore we will ensure that principles of necessity and proportionality are understood and upheld.

Who the policy is meant to apply to

The policy is to make a general power that covers all public authorities and other bodies that carry out public functions by providing a service to a public authority. Organisations proposed to be included in the schedule at introduction include Home Office, MoJ, HMRC, DoT, NHS Business Authority, Local Authorities in England and private bodies who fulfil a public function on behalf of a public authority.

Description of Options considered

Option 1: Do Nothing: Allowing the creation of a number of specific statutory gateways, where there is a need for them.

This option is essentially maintaining the status quo and making provision for each data-share required for the purposes of sharing data to combat fraud, through individual gateways widening existing statutory gateways or by creating new statutory relationships.

Option 2: Constrained powers to share data for specific purposes within specified but flexible groups.

In this area, the proposal is for constrained powers to share data for the specific purposes of prevention, detection, investigation and prosecution of fraud. It is envisaged that this power would have a scope that could permit a range of public authorities to take part.
The scope of this would be controlled by a prescribed list of organisations which would only be amended following an Order by a Minister. Details of the proposed solution are:

- To create a permissive legislative vehicle that allows a specific group of organisations to share any data for the prevention, detection, investigation and prosecution of fraud;
- To ensure that this facility is constrained:
  i. ensuring that organisations are only on the list if they can prove their need to be on it;
  ii. creating a Code of Practice that prescribed organisations must comply with in order to be able to maintain their prescribed status, this includes the publication of privacy impact assessments and auditing by the Information Commissioner and operating data sharing arrangements in alignment with DPA and HRA principles;
  iii. constraining the categories of information shared, in particular exempting non-relevant data classed as sensitive personal data for the DPA (race/ethnic origin, political opinions, religious beliefs or other similar beliefs, Trade Union membership, physical or mental state or condition) and "patient information" as per the NHS Act s251(10); and
  iv. preserving the unlawful disclosure sanctions of those organisations that have them - DWP and HMRC.

Other options considered during consultation were:

- Providing for a broad, Government-wide presumption to share data
  This was not taken forward as there is a real possibility of future legal challenge with respect to the Data Protection Act or the Human Rights Act, as it enables an extremely wide range of data sharing. There is also a risk of data loss and associated personal costs to citizens, incorrect use of data, as well as reduced trust in government.
- Non-legislative work to change cultural boundaries: simpler guidance, brokerage of data-sharing agreements or other such provision (e.g. communities of practice)
  This option was not taken forward as it would only reduce perceived complexity, and does not include safeguards that would ensure the process was being used in the way it was intended.

Appraisal of options

Option 1: Do Nothing: Allowing the creation of a number of specific statutory gateways, where there is a need for them.

Costs: There would be a need to create specific legislation with each data sharing agreement. The cost associated with creating specific legal gateways is significant, in terms of Official, lawyer and Parliamentary time spent firstly in understanding the complex legal landscape, creating an appropriate gateway suitable for the specific needs and then passing the gateway through Parliament. The delay this creates in being able to identify and act on fraudulent activity also represents a cost whilst the gateway is being established.

Benefits: Specific gateways (created through secondary legislation) are least burdensome when it comes to producing evidence that such a gateway is required; in order to be added to statute it will be subject to Parliamentary scrutiny and therefore deemed necessary. To do so, it is expected that the case for each gateway will be clearly set out, providing assurance that such a measure was proportionate and necessary before it was created.

Option 2: Constrained powers to share data for specific purposes within specified but flexible groups.

Costs

Training and familiarisation

Public authorities who decide to participate in a data sharing arrangement under the scope of this power, will face one-off costs relating to staff time for familiarising and training regarding the new legislation. This is likely to include officials' time in reading and understanding the new legislation, disseminating the information and training staff to understand the new rules.

It is not known how many individuals would be affected in each organisation- as a result quantifying the estimated staff time is difficult. Below we present a number of scenarios, which set out the estimated cost for central government under differing assumptions. As demonstrated, whilst not insignificant, the cost is not expected to be considerable. These one-off transitional numbers are not included in the headline monetised costs, due to uncertainty in the number of individuals affected.

The assumptions used to calculate the estimated costs of these scenarios are:

- Staff time- We estimate the value of an employee's time to the public sector organisation as being their wage and additional non-wage costs. We assume the median gross hourly pay in the public sector will apply, £14.47 (ASHE 2015 data), uprating for inflation gives £14.63 and we add a further 30% to this to cover overheads and further costs to the employing organisation, resulting in a cost to the organisation of £19.02 per hour.
- Government organisations affected- We assume central government organisations affected by this legislative change are HMRC, DWP, HO, DfT, MoJ, CO. The estimates are calculated on the number of permanent FTE staff in March 2016 (Public sector employment data, 15th June 2016). Other public sector bodies may also be affected, which would increase the associated cost, but given the permissive nature of this power, and the fact that some would need to carry out training and familiarisation under the do nothing option, they are excluded from the analysis below.
- On the basis of a return from one Government department, we calculated that the number of staff affected was approximately 1% of their workforce. We used this assumption for all central government organisations identified above, along with their estimate that training and familiarisation would take approximately 1 hour, to calculate the figure highlighted in grey below. We then assumed, to recognise that there may be differences in other departments that the percentage of staff affected was half and double, and the time spent on familiarisation was half and double, to produce the range of costs set out below.

Illustrative cost scenario

	Total time spent on familiarisation and training (hrs), £		
Percentage of staff affected	0.5	1	2
0.5%	11,600	23,200	46,300
1%	23,200	46,300	92,700
2%	46,300	92,700	185,300

*Note- estimates rounded to nearest £100 and are the total for the Departments listed above. Further details are shown in Annex A.

There may be some costs for departments to revise guidance and develop the training material- these costs are expected to be minimal.

There may also be costs for private bodies working on behalf of a public authority- these costs will be reimbursed by the public sector as part of commercial arrangements. This legislation does not therefore have a net cost to business and is not in scope of One-in-Three-Out. These are not included in the above estimates as it is not known how many bodies would be affected.

Administrative costs

In order for public authorities, or private bodies who fulfil a public function on behalf of a public authority to use the power, they must first put forward a business case, which would outline the proposed data sharing activity, cost and benefit analysis, and how fairness will be ensured throughout the process. A business case must be produced for each pilot (see below) that sets out the objective of the data share, how the pilot will operate and when it will be evaluated, as well as the criteria against which it will be evaluated. Each pilot would then be evaluated against set criteria, including fairness. There would therefore be some staff time associated with producing and evaluating the business case.

Pilots under the fraud data sharing power

For the initial 3 years of the legislation all new data sharing proposals under this legislation are treated as pilots. The legislation will then be reviewed to see how successful it has been, and a view taken about the usefulness of pilots going forward, with success measured through how many pilots have been run and how successful they have been in delivering their benefits. Pilots will support a better understanding of how data sharing can influence how fraud is targeted. Pilots may thus be used to help, for example, develop thinking associated with the value of new data sources or to trial new processes.

The Code of Practice will lay down the requirement to define a business case for each fraud data sharing pilot. This will need to set out the detail about the purpose of the pilot, list all the data to be shared, and the expected benefits of the pilot. A pilot proposal will include information on the targeted outcome, how success will be measured and how long the pilot will operate for (this can be any length of time (months to years) that the parties agree is suitable for the purpose of the pilot). At the end of the period of pilot operation, its success will be measured against its stated criteria. If a pilot has demonstrated a successful outcomes at the end of its operational period, it will be considered by a steering group, and a recommendation made to the Minister about whether the case for continuing with this data sharing arrangement had been made. The Minister, on the basis of this information, may then confirm that the arrangement can continue as business as usual.

We would anticipate a higher amount of data sharing post legislation which would require more resources to service it, adding to the administrative burdens of departments as they deal with an increased demand; these savings are expected to more than outweigh the admin burden of more requests. Data sharing would however be limited to instances where data is used for the specific purposes of prevention, detection, investigation and prosecution of fraud. These costs cannot be estimated, as these will be dependent on the pilots that are set up under this power, but time will need to be spent on:

i) The production and publication of privacy impact assessments
ii) Auditing by the Information Commissioner
iii) Operating data sharing arrangements in alignment with Data Protection Act (DPA) and Human Rights Act (HRA) principles.

There will be associated annual costs to the Cabinet Office, who will need to recruit 3 full time equivalent employees at Band B2 level to form part of a new team that will manage the fraud and debt data sharing legislation power. This would mean 1.5 FTEs would have direct costs linked to the fraud strand.

The minimum, mid-point and maximum pay for a Cabinet Office Band B2 is set out below. We add a further 30% to this to cover overheads and further costs.

£	Minimum	Mid-point	Max
Band B2 salary	30,418	34,451	38,484
Including non- wage costs	39,543	44,786	50,029

Cost for 1.5FTEs	59,315	67,179	75,044

As this is an annual cost, we assume an average annual pay increase of 1% per annum over the 10 year period. Costs are discounted by 3.5% per annum, in line with HM Treasury's Green Book Guidance. The discount rate is used to convert costs to 'present values'.

Over the 10 year period there is a total estimated cost of £0.7m (£0.6m NPV), based on the mid-point of the CO pay scale. The estimated range is £0.6m-£0.8m (£0.5m NPV - £0.7m NPV), based on the minimum and maximum of the CO pay scale. Further detail is shown in Annex A.

Privacy

Individual costs could accrue in terms of the possible impact on privacy, due to the greater volume of data which may be shared. However, under this option:

- The scope would be controlled by a list of specified public authorities, which would only be amended following an Order by a Minister.
- Public authorities would only be on the list if they can prove their need to be on it;
- A Code of Practice would be created that specified public authorities must comply with in order to be able to maintain their specified status. This includes specific Fairness Principles, the publication of privacy impact assessments and auditing by the Information Commissioner and operating data sharing arrangements in alignment with DPA and HRA principles;
- The categories of information shared would be constrained, in particular exempting non-relevant data classed as sensitive personal data for the DPA (race/ethnic origin, political opinions, religious beliefs or other similar beliefs, Trade Union membership, physical or mental state or condition) and "patient information" as per the NHS Act s251(10); and
- Unlawful disclosure sanctions of those organisations that have them would be preserved - DWP and HMRC.

The constraints and safeguards may serve to reassure individuals that such a data-share would be done in a necessary and proportionate manner and that action would be taken should this not happen. Setting constraints will also serve to increase trust between organisations within the schedule, serving to reduce some of the cultural barriers to sharing data.

Benefits:

Simplifying the legislative framework

The Law Commission scoping report, Data Sharing between public authorities [5], describes how the law surrounding data sharing is complex, with powers to share data scattered across a very large number of statutes. These may be set out expressly or implied. The report indicated that there are problems in practice and that there are differing interpretations of the law governing the sharing of data. In addition to the complex legal landscape, other issues include a reported lack of flexibility (the difficulty in adapting to changing circumstances in a timely fashion given legislative processes) and the time taken to create new data sharing relationships.

This option would simplify the legislative landscape and reduce the time taken to create new data sharing relationships. As legislation need not set out fully all categories of data being shared, it allows a greater agility when seeking to share changing categories of data.

Improving the prevention, detection and investigation of fraud

In 2012, the National Fraud Authority put the loss to the UK economy from fraud at £52 billion, with approximately £20.6bn being attributable to the public sector[1]. This figure in reality is likely to be significantly higher once other factors are taken into account. The estimate also does not consider losses due to error or to the various 'grey areas' between fraud and error, such as negligence and failure to take due care, and it only includes specific aspects of the shadow economy. Top-down econometric estimates of the shadow economy[2] suggest that tax losses and means-tested benefits overpayments may be considerably higher. Together these suggest that total detected and undetected losses for the broadest definition of fraud and error are likely to be significantly higher than the estimated £20.6bn.

Wider use of data sharing could improve the prevention, detection and investigation of fraud by:

a) Aiding better targeting and risk-profiling of potentially fraudulent individuals;
b) Saving taxpayers' money by streamlining processes; and
c) Increasing the ability for Government to act more quickly on fraud and simplifying the legislative landscape.

The strengthened evidence base from data sharing could also inform better decision making, using more tailored approaches such as behavioural insights, to make interventions more effective. This option also enables or provides an alternative route for a number of other policy initiatives such as the Counter Fraud Checking Service (CFCS).

Administrative savings

Whilst a higher amount of data sharing post legislation could raise administrative costs, there may also be administrative saving associated with not having to set up individual data sharing agreements between Departments. Under the current system public authorities are required to research and understand what powers are available to share information, which can be time consuming. Public authorities sometimes face delays of up to six years to understand the legislative landscape and then establish an appropriate gateway.

Furthermore, where express legal gateways are created, they generate their own familiarisation costs. Introducing a standardised process will over time reduce costs, as staff in departments develop a strong understanding of a single legal gateway.

Risk and Assumptions

The proposed changes are intended to improve public sector bodies' ability to investigate, detect and prevent fraud to reduce the likelihood and cost of fraud to the tax-payer by reducing the time and complexity involved in sharing data. The risks that these changes will bring about are common to any data sharing process, namely:

a) Loss of data;
b) Incorrect use of data – with biased or incorrect conclusions being drawn and policy ineffectively designed as a result;
c) Challenge from individuals whose data has been shared.

The use of data sharing has increased substantially in recent years and it is encouraged within Government to make better use of existing information. This has meant a better understanding of the risks associated with it. As a result, a number of measures have been developed to mitigate these risks. These mitigation measures are either required by law or considered as good practice and include among others:

- Organisations sharing data have the appropriate organisational measures in place as established by the Data Protection Act. It is good practice to:
  - design and organise security to fit the type of personal data disclosed or received and the harm that may result from a security breach
  - be clear about which staff members in the organisations involved in the sharing are responsible for ensuring information security
  - have an appropriate monitoring and auditing procedure in place
  - be ready to respond to any failure to adhere to a data sharing agreement swiftly and effectively
- Organisations sharing data have the appropriate technical measures in place as established by the Data Protection Act. It is good practice to:

- make sure that the format of the data you share is compatible with the systems used by both organisations
- check that the information that is shared is accurate before sharing it
- establish ways for making sure inaccurate data is corrected by all the organisations holding it
- agree common retention periods and deletion arrangements for the shared data
- train staff so that they know who has the authority to share personal data, and in what circumstances this can take place.

- The various organisations involved in data sharing will each have their own responsibilities and liabilities in respect of the data they disclose or have received. It is therefore good practice:
  - for a senior, experienced person in each of the organisations involved in the sharing to take on overall responsibility for information governance, ensuring compliance with the law, and providing advice to staff faced with making decisions about data sharing
  - to have a data sharing agreement in place that includes:
    - The purpose of the sharing
    - The potential recipients or types of recipient and the circumstances in which they will have access
    - The data to be shared
    - Data quality – accuracy, relevance, usability, etc
    - Data security
    - Retention of shared data
    - Individual's rights – procedures for dealing with access requests, queries and complaints
    - Review of effectiveness/termination of the sharing agreement, and
    - Sanctions for failure to comply with the agreement or breaches by individual staff.

Overall, the appropriate mitigating measures depend on the type of information that is shared and the organisations that are sharing them. Therefore, any future policy that requires the use of data sharing should specify what mitigating measures are more appropriate to reduce risks.

Summary and Preferred Option:

Option 1 (Do nothing option) This has a number of drawbacks. It is essentially about maintaining the status quo of a network of specific data-sharing relationships; the creation of more would inevitably lead to a greater complexity in the overall architecture of data-sharing legislation, and not assist in speeding up the detection of fraud. Further, this option does not provide an inherent flexibility. Specific statutory gateways, particularly if they follow the current pattern, would not be able to accommodate the need for change of data-sharing in the area of fraud. The only way of accommodating this would be to keep creating new statutory gateways. This does not reduce the time it takes to create new relationships, nor does it seek to reduce complexity. On balance this option would not be the preferred option in this policy area.

Option 2 provides the best approach to meeting the Government intention. Any such system would require governance around it as there will be decisions to be made about the ability of an organisation to share data, the necessity of that data to be shared for the prescribed purpose and the ongoing value of such a data-share. Given its ability to provide reduced complexity, greater flexibility and a degree of constraint that has not been attempted before, **this is the preferred option** that will meet the main challenge of this policy.

The proposals seek to create a permissive legislative vehicle that allows a specific group of organisations to share any data for the prevention, detection, investigation and pursuance of fraud. To ensure that this facility is constrained: ensuring that organisations are only on the list if they can prove their need to be on it; creating explicit reference to the DPA and HRA; and creating a specific need to uphold principles of proportionality and necessity when sharing data.

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[1] The most recent Annual Fraud Indicator (published June 2013 and found at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206552/nfa-annual-fraud-indicator-2013.pdf).
[2] Schneider, F. and Williams, C.C. (2013), The Shadow Economy, The Institute for Economic Affairs, London.
[3] http://lawcommission.justice.gov.uk/areas/data-sharing.htm
[4] These scenarios are purely hypothetical and not based upon any additional information
[5] https://www.gov.uk/government/statistics/fraud-and-error-in-the-benefit-system-financial-year-201415-estimates

Annex A

Familiarisation and training costs

Department	Permanent FTE employees [1]	1% of employees [2]	Cost of familiarisation (central scenario) [3]
Cabinet Office	2,000	20	£ 380
HM Revenue and Customs	63,160	632	£ 12,013
Home Office	25,530	255	£ 4,856
Justice	63,590	636	£ 12,095
Transport	12,860	129	£ 2,446
Work and Pensions	76,470	765	£ 14,545
TOTAL	**243,610**	**2,436**	**£ 46,335**

Sources:
[1]http://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/publicsectorpersonnel/datasets/publicsectoremploymentreferencetable
[2] Based on a return from one Government department, we calculated that the number of staff affected was approximately 1% of their workforce.
[3] Based on one hour of staff time (£19.02 per hour, including both wage and additional non-wage costs) multiplied by the number of employees.

Cabinet Office staff time

		Year										
Type of staff time cost	Detail	0	1	2	3	4	5	6	7	8	9	Total
Min	Salary cost 1.5FTE	45,627	46,083	46,544	47,010	47,480	47,954	48,434	48,918	49,408	49,902	**477,359**
	plus non-wage labour costs	59,315	59,908	60,507	61,112	61,724	62,341	62,964	63,594	64,230	64,872	**620,567**
	Time cost (£, discounted)	59,315	57,882	58,461	55,120	53,788	52,489	51,221	49,984	48,777	47,599	**534,637**
Mid point	Salary cost 1.5FTE	51,677	52,193	52,715	53,242	53,775	54,313	54,856	55,404	55,958	56,518	**540,651**
	plus non-wage labour costs	67,179	67,851	68,530	69,215	69,907	70,606	71,312	72,025	72,746	73,473	**702,846**
	Time cost (£, discounted)	67,179	65,557	63,973	62,428	60,920	59,449	58,013	56,611	55,244	53,910	**603,284**
Max	Salary cost 1.5FTE	57,726	58,303	58,886	59,475	60,070	60,671	61,277	61,890	62,509	63,134	**603,942**
	plus non-wage labour costs	75,044	75,794	76,552	77,318	78,091	78,872	79,661	80,457	81,262	82,074	**785,124**
	Time cost (£, discounted)	75,044	73,231	71,462	69,736	68,052	66,408	64,804	63,239	61,711	60,220	**673,907**

Source:
Salary information taken from the 2016/17 Cabinet Office pay scales.

Title: Digital Government: Sharing for research - Introduction of a new power to allow public authorities to disclose de-identified data in controlled conditions for research in the public interest **IA No:** CO/2004 **RPC Reference No:** **Lead department or agency:** Cabinet Office **Other departments or agencies:** **UKSA, HMRC, and DWP**	**Impact Assessment (IA)** **Date:** 17/06/2016 **Stage:** Development/Options **Source of intervention:** Domestic **Type of measure:** Primary legislation **Contact for enquiries:** Simon Meats (simon.meats@cabinetoffice.gov.uk)

Summary: Intervention and Options

RPC Opinion: Not Applicable

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANDCB in 2014 prices)	**One-In, Three-Out**	**Business Impact Target Status**
£m	£m	£m	Not in scope	Non qualifying provision

What is the problem under consideration? Why is government intervention necessary?

Data held by public authorities is of great potential value to researchers in government, academia, charities and industry. Access to more varied and better quality data would significantly improve the evidence base for research, including enabling more accurate analysis of economic and social issues to better inform policy design to improve public outcomes. But access has often been limited by a complex and uncertain legal landscape, resulting in research projects being delayed or abandoned. This proposal will provide a clear unambiguous power to allow public authorities to share data in safe settings for research in the public interest.

What are the policy objectives and the intended effects?

The policy objective is to facilitate a greater use of public data, encouraging a richer and more varied understanding of our economy and society. Specifically more data sharing for research purposes will assist in the delivery of a range of public benefits, from better policy design, to improved understanding of a economic and social issues and the better targeting of public services. We wish to introduce legislation to enable, across all public authorities (with exceptions) the sharing and linking of de-identified datasets for analysis by accredited researchers in a secure environment. The overall intention is to improve research outputs for public benefit whilst protecting privacy.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

1) Option 1 – Do nothing: The status quo would be maintained, whereby specific statutory gateways are created when there is a need for them.

2) Option 2 (preferred option) - Introduce new legislation which enables the sharing of de-identified data by public authorities to accredited researchers using specified conditions for research purposes in the public interest. This option reduces data sharing complexity and cost as it provides a clear purposive permissive power. It also balances this benefit with the protection afforded to the individual.

Will the policy be reviewed? It will not be reviewed. **If applicable, set review date:** Month/Year

Does implementation go beyond minimum EU requirements?		No		
Are any of these organisations in scope?	**Micro** No	**Small** No	**Medium** No	**Large** No
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)		**Traded:** N/A	**Non-traded:** N/A	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister: _____ Date: 21 June 2016

Summary: Analysis & Evidence

Policy Option 1

Description: Do nothing

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	**High:** Optional	**Best Estimate:**

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate				

Description and scale of key monetised costs by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Other key non-monetised costs by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate				

Description and scale of key monetised benefits by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Other key non-monetised benefits by 'main affected groups'

In line with impact assessment guidance the do nothing option has zero costs or benefits as impacts are assessed as marginal changes against the do nothing baseline.

Key assumptions/sensitivities/risks **Discount rate (%)**

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs:	**Benefits:**	**Net:**	

Summary: Analysis & Evidence

Policy Option 2

Description: Introduce legislation which enables the sharing of de-identified data by public authorities to accredited researchers for research purposes in the public interest

FULL ECONOMIC ASSESSMENT

Price Base Year 2016	PV Base Year 2016	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: N/K	**High:** N/K	**Best Estimate:** N/K

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	**Optional**		**Optional**	Optional
High	**Optional**		**Optional**	Optional
Best Estimate	**N/K**		**N/K**	N/K

Description and scale of key monetised costs by 'main affected groups'

-

Other key non-monetised costs by 'main affected groups'

It is expected that public sector bodies affected by the legislative change will face one-off familiarisation and training costs associated with the change in legislation. Public sector bodies will also incur administrative costs associated with an increased volume of data sharing requests. There will be further administrative costs to the UKSA who will act as an accrediting body to those who want to access data, and to providers of secure environments who will facilitate the matching of data.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	**Optional**		**Optional**	Optional
High	**Optional**		**Optional**	Optional
Best Estimate	**N/K**		**N/K**	N/K

Description and scale of key monetised benefits by 'main affected groups'

N/A

Other key non-monetised benefits by 'main affected groups'

Public sector bodies will benefit from a decrease in the administrative costs of sharing data (i.e. staff time in researching or establishing legal data sharing gateways). The public sector and the general public will also benefit from faster and more effective policy delivery enabled through public sector bodies' ability to share data more quickly. The overall magnitude of benefits will depend on the number of future policies that make use of shared data. The legislative framework will be simplified.

Key assumptions/sensitivities/risks — **Discount rate (%)** 3.5%

The key risk of a legislative change lies in the possibility of future legal challenge with respect to the Data Protection Act or the Human Rights Act. Related to this, there is a risk in data loss and associated personal costs to citizens as well as reduced trust in government. A further risk is in incorrect use of data in policy-making.

BUSINESS ASSESSMENT (Option 4)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: 0	**Benefits: 0**	**Net:** 0	No	NA

Evidence Base (for summary sheets)

Problem under consideration

Data held by public authorities is of great potential value to researchers in government, academia, charities and industry. Access to more varied and better quality data helps to create an improved evidence base for researchers both within and outside government, enabling better informed analysis and research, a deeper, more granular understanding of what underpins key policy challenges, in order to improve the evidence base for policy development to improve a range of public benefits. Linking datasets held by two or more public authorities in a controlled environment offers the opportunity to gain new insights into the social and economic challenges that citizens face. It would provide better understanding of how people live their lives, the patterns of need and use of different services, and the resultant outcomes. It would allow the delivery of better, more efficient and more effective services and processes, leading to improved understanding and responses to challenges relating to the health and wellbeing of citizens. Currently in the majority of cases, research using government-held data is limited to the analysis of single data sets. Consequently the possibility to undertake deeper research using cross-linked but separate datasets is both rare and difficult.

At present researchers are often frustrated in their efforts to access public sector-held data for research projects that have a potential public benefit. The current legislation causes public authorities to be uncertain as to what information can be disclosed. The issue of whether disclosing a particular dataset is lawful can lead to lengthy delays and inconsistent decisions around access. Meanwhile, the possible economic or social benefit from a proposed research project could be lost due to delays in reaching a decision, with the risk of some potentially valuable projects being abandoned. It has been the view of representatives of the research and statistics community for some time that this situation is overdue for reform.

Given the sensitivities around data sharing issues, it is essential that any regime for linking publicly-held datasets for interrogation by researchers must be:

- secure in its operations;
- transparent in its governance; and
- in the public interest.

In researching this problem the Cabinet Office surveyed a variety of public bodies. The results of the survey was analysed by CO policy lawyers and revealed that many public bodies could share de-identified data in secure conditions, but they could not all do so in all circumstances. This has led to a level of ambiguity, and some Departments are often not willing to engage in data sharing for research. University and third sector researchers have confirmed to us that this lack of clarity is often given to them by departments as a reason as to why they are unable to be provided with linked de-identified administrative data.

Rationale for intervention

Wider use of data sharing would facilitate an improvement in understanding our economy and society, and provide a more informative platform for policy development. More informed evidence based policy will encourage the creation of government services that draw upon the more sophisticated understanding of patterns in users and behaviours to tailor services more closely to the individual to improve quality and reduce costs.

By restricting access to data not by intent but by the arbitrary and complex pattern of primary and secondary legislation that has often followed the creation of Government departments and agencies, we risk stemming the potential benefits of that data to research and by extension to our economy and society. At present, research projects can be subject to delays of years whilst a bespoke legal gateway is created.

Introducing the proposed new legislation will improve conditions for research in two major respects:

- Public authorities will have much greater clarity about what data is permitted to be shared.

- The proposed power places conditions on the secure disclosure of data to provide additional assurance to public authorities, researchers and the public that their data is being used correctly. It requires the use of specific safeguards to ensure that any information that could be used to identify, or help to identify, an individual (e.g. names, date of birth and postcode) is de-identified through privacy-enhancing conditions.

The need for intervention was highlighted by the December 2012 report from the Administrative Data Taskforce (ADT)[1]. This was formed in December 2011 with the aim of improving access to and linkage between government administrative data for research purposes for researchers both inside and outside government. A key recommendation of this report was the creation of a new generic gateway to allow access to publicly held data by the research community. The ADT report also recommended some models of privacy enhancing data sharing, to allow data to be linked in a secure way. Cabinet Office initially proposed legislation based around the use of such models, but following much comment from the research community and other quarters it has decided to pursue a less restrictive, more flexible, conditions-based approach.

The case for new legislation, setting out conditions to protect personal privacy to protect personal privacy, was explored fully during the open policy-making discussions in 2014-15, and it was agreed that access to data that has been de-identified for research purposes under this power would be conditional on the use of such methods. The open policy-making group, which included representatives from organisation involved in or connected with the ADT report, reached consensus on this and other proposals for linking and de-identifying data for research purposes.

Policy objective

The objective is to enable conditions that facilitate more data-sharing for research that will assist in the delivery of a range of public benefits, from better policy design, to improved understanding of a variety of economic and social issues and the better targeting of public services.

The policy is not to make access mandatory, but just to make it possible. There is no guarantee that outside researchers will obtain greater access to data as a consequence of these provisions as access will still be dependent on the permission of the relevant data controller. However it is hoped by making the legislative and administrative provisions to provide for data sharing in safe settings according to prescribed conditions, that overall access will increase, leading to more sharing taking place due to public authorities and research organisations being 'comfortable' to share data where there is an established set off conditions to follow. This is important for the following reasons:

i) This will allow for a richer analysis to be produced from a wider range of variables leading to greater flexibility for analytical/research programmes;
ii) It would provide better understanding of how people live their lives, the patterns of need and use of different services, and the resultant outcomes. This will allow for the delivery of better, more efficient and more effective services and processes leading to better outcomes for the UK Government and the public.

A supporting objective is to provide a secure framework for public authorities to allow the research community access to data. This framework requires a set of conditions to be met in order to protect personal data including:

- The removal of any information that might be used to identify an individual or organisation contained in a dataset and its replacement by reference numbers by the data holder (thus "de-identifying" the data before it is sent for processing)

[1] http://www.esrc.ac.uk/collaboration/collaborative-research/adt/

- All environments (such as "Trusted Third Party (TTP)" indexers (which are described in more detail under Option 4) to allow the matching or two or more datasets without disclosing identifying information to researchers as described in the Information Commissioner's Office Anonymisation Code of Practice), will be subject to accreditation as described below
- Entry to the regime by researchers and those providing indexing or secure access facilities will be subjected to accreditation by a designated body, which has been specified as the UK Statistics Authority.

The UKSA will be responsible for setting guidance, including parameters as to what may be considered to be research in the public interest, and will have the power to set the condition for accreditation, and for withdrawing accreditation. It will also have certain responsibilities regarding transparency, including publishing a register of accredited researchers and the type of research being undertaken. This will support the need to provide public assurance.

Who the policy is meant to apply to

1. All public authorities (with the exception of public bodies providing health and social care). We are defining a public authority as a person with functions of a public nature (consistent with the definition in the Human Rights Act)
2. The UK Statistics Authority, as the designated accreditation body
3. Those research organisations and individual researchers seeking accreditation under the new power, who wish to participate
4. Providers of secure access environments, including government departments with in-house facilities, who wish to participate

Exclusions – health bodies

Certain organisations and persons should not be able to benefit from the extension in the vires. These are as follows:

a. specifically defined bodies delivering health services[2] and adult social care[3] should be excluded;
b. any person who provides health services, or adult social care, pursuant to arrangements made with a public body exercising functions in connection with the provision of such services or care should be excluded.

Private health and care service providers are not to be specifically excluded as they are not public bodies, and therefore would not be affected by any extension in the vires.

The carve-out for bodies delivering health services is not a prohibition. It is merely a carve-out from any enhancement in their vires, and therefore any public body delivering health services that has sufficient vires already to share under these conditions will be unaffected by the exclusion.

It is not health data per se that is excluded, since DWP holds health data that they may have received from the health bodies, such as the disability status of an individual. Such health data in the hands of DWP should be able to be disclosed by DWP to accredited researchers under these conditions.

[2] "Health services" means services which must or may be provided as part of the health service as defined by s275(1) of the NHS Act 2006

[3] Adult social care includes all forms of personal care and other practical assistance provided for individuals who, by reason of age, illness, disability, pregnancy, childbirth, dependence on alcohol or drugs, or any other similar circumstances, are in need of such care or other assistance

The justification for the health and social care bodies data exclusion (which has been provided by Department of Health officials after consultation with their lawyers) is that clinicians, patients and members of the public in England have all expressed serious misgivings about sharing health information for secondary purposes – even where these purposes are healthcare related. The recent controversy over "care.data" – a pseudonymised dataset containing person-level primary care data – has highlighted these concerns and the strength of feeling. Implementation of care.data is currently on hold while the Department of Health consults with stakeholders over the additional safeguards required to reassure patients and clinicians that confidential data will not be misused.

Similar exclusions to those described above will have to be constructed for health bodies in the devolved administrations to ensure consistency of approach across the UK.

Other exclusions

Processing of personal data under the power must be for research purposes in the public interest. Though the outputs of a research project under the power can be used to inform strategic decisions on policy and operations, the power cannot be used for specific decisions against data subjects (i.e. such as the loss of a benefit). The policy developed in partnership with civil society groups, is intended to ensure that data shared for research purposes is not directly used to the detriment of a data subject(s).

Description of options considered (including status-quo)

The following options were identified and appraised:

Option 1: Do Nothing: Allowing the creation of a number of specific statutory gateways, where there is a need for them.

This option is essentially about maintaining the status quo and making provision for each data-share required for the purposes of research, through existing individual statutory gateways or by creating new statutory gateways.

Option 2 - Introduce new legislation which enables the sharing of (VML)de-identified data by public authorities to accredited researchers using specified processes for research purposes in the public interest.

This will be permissive power to ensure that public bodies (except health services bodies and data held by bodies in respect of their role in adult social care) are able, if they so wish, to engage, for the purposes of research or statistical analysis, in the process of linking two or more datasets from two or more data controllers providing a set of specified conditions have been met.

Other options considered during consultation were:

- Introduce general power for any and all public authorities to disclose identified data to each other for research purposes.
  As a permissive power, this option would not place any statutory obligations on public authorities to share data, but would allow them to share data for research purposes if two or more agreed to do so in any given case. It would not require the privacy protection conditions and accreditation process referred to earlier, as this would involve public authorities sharing between themselves (and presumably producing de-identified outputs if they wished). It would also require a robust set of safeguards to protect personal data. Further, it does not allow access to publicly-held data by research groups; this was rejected by civil society organisations during the open policy-making process, who felt that it went too far in terms of risks to personal privacy.

- Non-legislative work to change cultural boundaries: simpler guidance, brokerage of data-sharing agreements or other such provision.
  This option recognises the issue that a number of the barriers to effective data-sharing are cultural: overly-cautious interpretation of statute, trust in how other organisations will use data,

incentives to withhold the supply of data, a lack of confidence in the integrity of the data being shared and a lack of consistent standards in definitions, formats and collection methodology. All these add to the issue of public authorities being reluctant to share with each other and more broadly.
Some work has been undertaken, for example through the establishment of the Administrative Data Research Network (ADRN), the result of another recommendation from the ADT report, towards assisting the scientific community in facilitating a secure environment for data access in safe settings. The Government also provided funding to support the ADRN's establishment, although its representatives claim that further funding is need. However, cultural change and funding alone will not solve the problem of statutory barriers or uncertainty that has prevented public authorities from sharing data.

Monetised and non-monetised costs and benefits of each option (including administrative burden)

Option 1: Do Nothing: Allowing the creation of a number of specific statutory gateways, where there is a need for them.

Costs:
The cost associated with creating specific legal gateways is significant, in terms of official, lawyer and Parliamentary time spent firstly in understanding the complex legal landscape, creating an appropriate gateway suitable for the specific needs and then passing the gateway through Parliament.
Some legislative barriers will require new primary legislation to overcome them, which is subject to even greater competition for Ministerial or Parliamentary time.

The costs to the research community and the wider public interest will be that the problems outlined earlier in this document will remain. This would not provide the research and policy benefits that will derive from making available a more transparent, more consistent method of linking de-identified datasets for any research purpose.

Benefits:
Specific gateways (created through secondary legislation) are least burdensome when it comes to producing evidence that such a gateway is required; in order to be added to statute it will be subject to Parliamentary scrutiny and therefore deemed necessary. To do so, it is expected that the case for the gateway will be clearly set out, providing assurance that such a measure was proportionate and necessary before it was created.

Option 2 (preferred option) - Introduce new legislation which enables the sharing of de-identified data by public authorities to accredited researchers using specified processes for research purposes in the public interest.

Costs:

This is a permissive power, therefore costs and benefits would largely be dependent on the level of uptake by public authorities.

Familiarisation and training (one-off)

Public authorities who decide to participate in a data sharing arrangement under the scope of this power, will face one-off costs relating to staff time for familiarising and training regarding the new legislation. This is likely to include officials' time in reading and understanding the new legislation, disseminating the information and training staff to understand the new rules.

It is not known how many individuals would be affected in each organisation- as a result quantifying the estimated staff time is difficult. Below we present a number of scenarios, which set out the estimated cost for central government only under differing assumptions. These one-off transitional numbers are not included in the headline monetised costs, due to uncertainty in the number of individuals and organisations affected.

The assumptions used to calculate the estimated costs of these scenarios are:

- Staff time- We estimate the value of an employee's time to the public sector organisation as being their wage and additional non-wage costs. We assume the median gross hourly pay in the public sector will apply, £14.47 (ASHE 2015 data), uprating for inflation gives £14.63 and we add a further 30% to this to cover overheads and further costs to the employing organisation, resulting in a cost to the organisation of £19.02 per hour.
- Government organisations affected- We assume central government organisations affected by this legislative change are CLG, DWP, HMRC, and the MoJ. The estimates are calculated on the number of permanent FTE staff in March 2016 (Public sector employment data, 15th June 2016). Other public sector bodies may also be affected, which would increase the associated cost, but given the permissive nature of this power, and the fact that some would need to carry out training and familiarisation under the do nothing option, they are excluded from the analysis below.
- On the basis of a return from one Government department, we calculated that the number of staff affected was approximately 1% of their workforce. We used this assumption for all central government organisations identified above, along with their estimate that training and familiarisation would take approximately 1 hour, to calculate the figure highlighted in grey below. We then assumed, to recognise that there may be differences in other departments, the percentage of staff affected was half and double, and the time spent on familiarisation was half and double, to produce the range of costs set out below.

Illustrative cost scenarios

	Total time spent on familiarisation and training (hrs), £		
Percentage of staff affected	0.5	1	2
0.5%	9,800	19,600	39,100
1%	19,600	39,100	78,200
2%	39,100	78,200	156,400

*Note- estimates rounded to nearest £100 and are the total for the Departments listed above. Further details are shown in Annex A.

There may also be some costs for departments to revise guidance and develop the training material- these costs are expected to be minimal.

In addition to the costs for public sector organisations, there may also be familiarisation and training costs for private bodies working on behalf of a public authority, and researchers/ research organisations. The permissive nature of this power, makes quantification of these costs difficult, as cost are largely dependent on the level of uptake.
Private bodies working on behalf of a public authority would have their costs reimbursed by the public sector as part of commercial arrangements; this legislation does not therefore have a net cost to business and is not in scope of One-in-Three-Out.

Administrative costs (ongoing)
This legislation may result in an increase in the number of requests for data to be shared. However, this would now be limited to accredited researchers for research purposes in the public interest. This would bring about administrative costs in terms of compiling and processing additional data that is requested. It is expected that the benefits to the public in terms of well-tailored, timely policy would outweigh such administrative costs.

Individual privacy costs (ongoing)
Individual costs could accrue in terms of the possible impact on privacy, due to the greater volume of data which may be shared. The constraints and safeguards may serve to reassure individuals that such a data-share would be done in a necessary and proportionate manner and that action would be taken should this not happen.

Accreditation costs (ongoing)
This option would require researchers and other participants to be accredited in order to participate. However, existing approved researcher schemes such as those run by the Administrative Data Research Network and ONS' Virtual Microdata Laboratory (VML) have been established to ensure that data is accessed securely. Likewise, providers of secure environments are subject to existing accreditation

schemes and standards. Therefore, making accreditation a statutory requirement should not place any new burdens on researchers and organisations who are already accredited. New researchers, or other new participants would need to apply for accreditation under the new arrangements, although we do not expect this to be significantly time-consuming.

In terms of cost burdens on the UKSA, as the designated accrediting body UKSA will have an administrative cost burden. The main activities required to be undertaken will include:

- Establishing a new system for accreditation and developing a Code of Practice through consultation with the Minister for the Cabinet Office, the Information Commissioner and any other persons as deemed appropriate. This Code would need to be supported by a set of technical standards, which would in turn need to be kept up-to-date
- Publication of new system and invitations to research and statistics community; for example through a website, which would need managing and updating
- Processing applications to participate under this system, ensuring smooth passage of the application and communicating decisions to the applicant.
- An appeals process for rejected applications might also be necessary. Final decision/oversight of process would be made through a panel/board which considers recommendations from officials.
- Maintaining and publishing:
    - A list of accredited bodies who facilitate research, providing indexing and secure access facilities etc;
    - A list of organisations, research projects and individual level researchers who are permitted to undertake research under this system;
    - Information regarding those applications that have been rejected (format to be agreed with UKSA).
- Enforcing a Code of Practice and applying sanctions for breaches (for which the accrediting body will need to establish a mechanism to enforce sanctions against breaches of the code).
- Maintaining continuous improvement and review of standards.
- Additional staff to process accreditation, undertake accreditation of indexers/secure environments/Trusted Third Parties
- Additional technical/ hosting infrastructure in which to host data for secure access by accredited researchers/indexers. The infrastructure costs would include (1) the base platform, (2) additional storage and (3) statistical software licences.

This proposal does not provide for any charging mechanism for a researcher seeking accreditation, and we understand that there is no current intention for secure access facilities to charge for accreditation or to charge for access to data.

There are additional costs of using a secure environment in order to meet the conditions set out in the legislation. It is expected that secure conditions would need to conform to best practices and standards for securing, storing and destroying data. Requirements under these powers would be governed through a Code of Practice and overseen by the UKSA as the designated accreditation body.

Benefits:

The monetised benefits of the proposal are not possible to quantify, as it is not possible to predict the increase in volume of data shares arising from the use of this power. However, key non-monetised benefits arising from the proposal would include the following:

Improved evidence base (ongoing)

Data held by public authorities is of great potential value to researchers in government, academia, charities and industry. Access to more varied and better quality data helps to create an improved evidence base for researchers both within and outside government, enabling better informed analysis and research, a deeper, more granular understanding of what underpins key policy challenges, in order to improve the evidence base for policy development to improve a range of public benefits. Linking datasets held by two or more public authorities in a controlled environment offers the opportunity to gain new insights into the social and economic challenges that citizens face. It would provide better understanding of how people live their lives, the patterns of need and use of different services, and the resultant outcomes. It would allow the delivery of better, more efficient and more effective services and

processes, leading to improved understanding and responses to challenges relating to the health and wellbeing of citizens. Currently in the majority of cases, research using government-held data is limited to the analysis of single data sets. Consequently the possibility to undertake deeper research using cross-linked but separate datasets is both rare and difficult.

This option would enable better informed policy-making in a number of areas. Examples include:

- Linking data on employment, training, education, unemployment, incomes and benefits to increasing understanding of social mobility issues;
- Enabling research of causal pathways over the life course – linking data on education, employment, incomes and wealth;
- Informing policies designed to tackle poverty – linking data on housing conditions, incomes, and benefits
- Constructing indicators of parental employment, social background, and childcare.
- Linking data on offending behaviour, incomes and benefits to improve understanding of the possible relationships between these subjects

It is expected that better informed policy will encourage the creation of government services that draw upon the more sophisticated understanding of patterns in users and behaviours to tailor services more closely to the individual to improve quality and reduce costs; it will enable more efficient timing of interventions and make policy evaluations easier.

Simplifying the legislative framework (ongoing)

It would remove a layer of legal barriers and uncertainties which have caused considerable delays and have in some cases prevented worthwhile research projects from going ahead.
At present researchers are often frustrated in their efforts to access public sector-held data for research projects that have a potential public benefit. The current legislation causes public authorities to be uncertain as to what information can be disclosed. The issue of whether disclosing a particular dataset is lawful can lead to lengthy delays and inconsistent decisions around access. Meanwhile, the possible economic or social benefit from a proposed research project could be lost due to delays in reaching a decision, with the risk of some potentially valuable projects being abandoned. It has been the view of representatives of the research and statistics community for some time that this situation is overdue for reform.

Examples of frustrated or seriously delayed research projects include:

- To consider UK productivity and growth and understand the productivity gap, linking data from a number departments including their earning and social welfare status (including DfE, HMRC, and DWP) to explore relationships between individuals' employment, qualifications and the profitability of business

- Linking data relating to higher education, employment/benefits and earnings to explore the relationship between individuals moving between secondary or higher education and the labour market, including variables such as receiving free school meals or working age benefits

- The Chief Medical Officer for Wales' to access housing data from the Valuation Office Agency to explore the relationship between winter mortality and housing conditions

- Research to link earnings and employment data to explore the relationship between social mobility and age cohorts

- A detailed analysis of how exposure to international trade and the export activities of UK firms impacts upon firm-level indicators such as productivity or innovation

Administrative savings

This option would enable savings to public authorities in terms of time resource for policy and legal officials in determining whether a particular proposal was lawful.

Impact on business

Apart from the possible familiarisation costs to private sector organisations carrying out functions on behalf of public authorities referred to above, we do not anticipate any impact on business, directly or indirectly, as this is a permissive power aimed at improving access to data held by public authorities. It is hoped, however, that the long term benefits of better informed policy making will have a positive indirect impact on business.

Risks and assumptions

The proposed changes are intended to improve public sector bodies' ability to share de-identified data with researchers inside and outside of Government to improve policy design and public outcomes. The risks that these changes will bring about are common to any data sharing process, namely:

a) Loss of data;

b) Incorrect use of data – with biased or incorrect conclusions being drawn and policy ineffectively designed as a result;

c) Challenge from individuals whose data has been shared.

The use of data sharing has increased substantially in recent years and it is encouraged within Government to make better use of existing information. This has meant a better understanding of the risks associated with it. As a result, a number of measures have been developed to mitigate these risks. These mitigation measures are either required by law or considered as good practice and include among others:

5. Organisations sharing data have the appropriate organisational measures in place as established by the Data Protection Act. It is good practice to:
   - design and organise security to fit the type of personal data disclosed or received and the harm that may result from a security breach
   - be clear about which staff members in the organisations involved in the sharing are responsible for ensuring information security
   - have an appropriate monitoring and auditing procedure in place
   - be ready to respond to any failure to adhere to a data sharing agreement swiftly and effectively
6. Organisations sharing data have the appropriate technical measures in place as established by the Data Protection Act. It is good practice to:
   - make sure that the format of the data you share is compatible with the systems used by both organisations
   - check that the information that is shared is accurate before sharing it
   - establish ways for making sure inaccurate data is corrected by all the organisations holding it
   - agree common retention periods and deletion arrangements for the shared data
   - train staff so that they know who has the authority to share personal data, and in what circumstances this can take place.
7. The various organisations involved in data sharing will each have their own responsibilities and liabilities in respect of the data they disclose or have received. It is therefore good practice:
   - for a senior, experienced person in each of the organisations involved in the sharing to take on overall responsibility for information governance, ensuring compliance with the law, and providing advice to staff faced with making decisions about data sharing
   - to have a data sharing agreement in place that includes:

- The purpose of the sharing
- The potential recipients or types of recipient and the circumstances in which they will have access
- The data to be shared
- Data quality – accuracy, relevance, usability, etc
- Data security
- Retention of shared data
- Individual's rights – procedures for dealing with access requests, queries and complaints
- Review of effectiveness/termination of the sharing agreement, and
- Sanctions for failure to comply with the agreement or breaches by individual staff.

Overall, the appropriate mitigating measures depend on the type of information that is shared and the organisations that are sharing them. Therefore, any future policy that requires the use of data sharing should specify what mitigating measures are more appropriate to reduce risks.

Annex A

Familiarisation and training costs

Department	Permanent FTE employees	1% of employees	Cost of familiarisation (central scenario)
CLG	2,000	24	£ 449
DWP	76,470	765	£ 14,545
HMRC	63,160	632	£ 12,013
MoJ	63,590	636	£ 12,095
TOTAL	**205,220**	**2,056**	**£ 39,101**

Sources:
[1] http://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/publicsectorpersonnel/datasets/publicsectoremploymentreferencetable
[2] Based on a return from one Government department, we calculated that the number of staff affected was approximately 1% of their workforce.
[3] Based on one hour of staff time (£19.02 per hour, including both wage and additional non-wage costs) multiplied by the number of employees.

Annex B

Detailed description of the process

Overview

Data legislative measures will provide all UK public bodies who 'would not otherwise have power to make the disclosure', with a power, where the purpose of the share or disclosure is to enable processing for the purpose of research in the public interest, provided that the following conditions are met:

a. personal data must be de-identified before it is supplied to researchers;
b. the research must be in the public interest;
c. the processing of data must be undertaken in a way that minimises the risk of the identity of individuals being identified and prevents inappropriate disclosure of personal data;
d. all persons who receive, process or access data from the data holding department for the purposes of this power, whether they are from public authorities or the research community, must be accredited according to the conditions provided for in the proposed powers.
e. All environments, whether physical or otherwise, that are used to support the supply or processing of data (including arrangements for the retention and destruction of data) and including access by researchers, must be accredited under the conditions provided for in the proposed powers.

Our proposals are intended to enable data sharing under these conditions, but not in the sense that the Bill will implicitly or explicitly repeal all contrary law and guarantee that such data shares can take place.

Instead, the proposed legislation should remove the initial constraints that prohibit public bodies from even getting to the stage of considering if a data share would comply the DPA and HRA.

Safeguards and accreditation

Given that the data sharing power above is wide in both the scope of bodies it would apply to, and the scope of material covered, it is appropriate that the legislation would also need to include specific safeguard provisions. Therefore, the vires provision is made subject to a condition that it may only be used when all the bodies and individuals involved in a data share (other than the data sources) are accredited bodies. The legislation therefore also specifies that the UK Statistics Authority will be the accreditation body on the basis that exercises functions throughout the whole of the UK, and it has the necessary expertise in research and statistical analysis.

The accreditation body would accredit those providing secure environments, researchers and the research itself. The accreditation body would themselves develop and publish additional detailed standards and requirements to attain and maintain this accreditation.

The data that is processed and shared using the proposed power is separated into payload data and identifiers. Therefore it is important that there are safeguards against the risk of re-identification by the researchers and secure access facilities. In order to provide the safeguards, the accreditation body needs to be provided by the primary legislation with a power to accredit under primary legislation. They would be expected to accredit the following:

- Secure environments, including access facilities and indexers under current practices
- Researchers
- Research

The legislation will require the UKSA to keep a central register of those who are accredited, indicating in each case the specific accreditation(s) that they hold. They must publish this register (preferably online) and keep it current.

Where the accrediting body becomes aware that an accredited person is for some reason no longer considered to be a fit and proper person in the light of published criteria, the accrediting body must be able to remove the accreditation for the purposes of future data shares. The appeals process for removal of accreditation is the same as that for refusal of an initial grant of accreditation and is described later in this document.

The minimum standard for those who are to be accredited to meet is set out in the primary legislation in order to provide privacy assurance. The minimum standard is “Fit and proper”. The accrediting body must from time to time publish criteria by reference to which it will determine whether to grant accreditation; it must consult on these criteria before publication.

Primary legislation will specify that an Accredited Researcher must be a fit and proper person; the accrediting body must from time to time publish criteria by reference to which it will determine whether to grant accreditation; as a matter of precedent the SRSA contains provisions for “approved researcher status” in s39(5-6). There is a provision to oblige the accrediting body to consult on these criteria.

A a matter of policy we do not intend to exclude the possibility of private bodies or persons becoming accredited researchers.

The researchers will, without specific provision in the legislation, be subject to all the existing law that applies to the data that they are accessing e.g. statutory bars on disclosure contained in Statistics and Registration Services Act, Commissioners for Revenue and Customs Act 2005, the requirements of Data Protection Act, the law of confidence, the contractual conditions of access set by the data source controllers, which the researchers will sign.

Primary legislation will specify that Accredited research must be research that is, in the opinion of the accrediting body or any body to which it validly sub-delegates its power, in the public interest;

- the accrediting body, or any body it delegates its power to, must publish criteria by reference to which it will determine whether to grant accreditation to the research; these criteria may impose additional conditions to those set out in the primary legislation. The accrediting body is obliged to consult on these criteria.

The additional conditions that the UKSA are likely to set out in the Code of Practice and not in primary legislation will include that proposed research projects will:

- be feasible, viable, ethical and have a clear potential public benefit;
- make a case for using administrative data to carry out the research; and
- not be research which a government department or agency would carry out as part of its normal operations

The outcome of the research must be published by the accrediting body or any body to which it validly sub-delegates its power. This is a separate condition to the public interest test.

Annex C

Interaction with existing law and practice

The DPA and Human Rights Act will continue to apply in full to each proposed processing activity and data shares made under this Bill. No data sharing under this Bill should breach the Data Protection Act. S33 DPA has a well-established legislative provision that provides certain exemptions from the provisions of the DPA for data processed for research purposes and we would expect the provisions in the proposed Bill to build on or cross refer to this existing provision. In addition a researcher should be able to rely on the legitimising condition in Schedule 2 paragraph 6, that the "processing is necessary for the purposes of legitimate interests pursued by the data controller."

The approach adopted is one of enabling the bodies concerned to share data under specified conditions within the existing legal framework. The following restrictions on disclosure by public authorities should not be overruled by the legislation. The reason for this is that this would not be acceptable from a privacy protection point of view:

- Human Rights Act 1998;
- Data Protection Act 1998 – where the processing is of personal data and the principles set out in the schedule 1 to DPA are not met;
- Intellectual property rights – where the use of the information in the manner proposed will amount to a breach;
- Official Secrets Act – where disclosure would cause an individual who is subject to the Act to be in breach of the duties contained in the Act; and
- FOIA – where data would be withheld in response to a freedom of information request

There is no proposal to alter or amend those laws nor is there any intention to make any data sharing mandatory on any party (the system is to be entirely permissive in nature).

It is assumed that under the existing law the Source data controllers will place whatever restrictions they wish on the processing of the data, from retaining complete control under a data processing contract, through to restricting onward disclosure or location of the data or the types of processing that can be conducted with the data under a data share agreement4.

The Bill should make any changes necessary to provide public bodies with the necessary vires and/or removing statutory bars so that they are put in a position equivalent to a private company able to share

[4] It is worth noting that the 1st Data protection Principle requires personal data to be processed only in a manner that is 'fair' and this includes abiding by any requirements imposed when the personal data was obtained through a data share. Consequently a breach of, for example, a no onward disclosure provision from the original data share agreement would mean a breach of the DPA even if but for that term in the share agreement it would be allowed and DPA compliant.

data using these conditions, as long as the share complies with the DPA. Though we expect the vast majority of the structure and administrative arrangements for this arrangement of data-sharing to be created administratively or under existing law, we are aware that a few provisions will require new provision to be made and a statutory basis.

Reporting

As soon as possible after the end of each financial year (this follows the precedent of s27 SRSA) the UKSA must produce a report on what it has done during that year and what it intends to do during the next financial year. It must lay this report before Parliament and all the devolved legislatures. This report must be published.

Appeals process

As a matter of general legal principle, fairness and Human Rights requirements, any accreditation power provided by the legislation should be subject to a right of appeal. As the body taking the accrediting decision is a recognised public body subject to judicial review (e.g. the UK Statistics Authority) then judicial review should provide this appeal function.

Title: Digital Government: HMRC - Introduction of new power to allow HMRC to disclose non-identifying data for a purpose in the public interest **IA No:** **Lead department or agency:** HMRC **Other departments or agencies:** CO, DWP, and MoJ	**Impact Assessment (IA)** **Date:** 20/06/2016 **Stage:** Development/Options **Source of intervention:** Domestic **Type of measure:** Primary legislation **Contact for enquiries:** Firoze Salim (firoze.salim@cabinetoffice.gov.uk)

Summary: Intervention and Options

RPC Opinion: Not Applicable

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB on 2009 prices)	**In scope of One-In, Two-Out?**	**Measure qualifies as**
£0m	£0m	£0m	No	Zero Net Cost

What is the problem under consideration? Why is government intervention necessary?

HMRC was created by the Commissioners for Revenue and Customs Act 2005, which imposes a duty of confidentiality on HMRC officials applicable to all information held in connection with its functions. HMRC may share information only in limited circumstances set out in legislation, in particular for the purposes of HMRC's functions. As a result, HMRC has been unable to disclose information, particularly non-identifying information, which could have delivered a wider public benefit beyond its own functions. A more tailored approach is required to allow HMRC to contribute more effectively to wider policy issues, in areas such as transparency, economic growth, social mobility and health.

What are the policy objectives and the intended effects?

HMRC holds an important range of non-identifying data which is of great value for research, policy development and public service delivery purposes. Enabling greater access to this general and aggregated data would allow HMRC to contribute to the more efficient and effective delivery of services and benefits beyond HMRC's functions. The ultimate intention is to enable greater use of data held by HMRC for the benefit of UK plc.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

1) Option 1 – Do nothing: The status quo would be maintained, creating a number of specific statutory gateways where there is a need for them.
2) Option 2 - Introduce a new power which permits disclosure for a purpose beyond HMRC's functions. The view was that this created too broad a gateway.
3) Option 3 (preferred option) - Introduce a new power which permits disclosure for a purpose in the public interest. This approach is consistent with that taken in Chapter 4 of the Bill (Sharing for Research Purposes) and with that of other public authorities such as the UKSA (see section 39(5) of the Statistics and Registration Service Act 2007).

Will the policy be reviewed? It will not be reviewed. **If applicable, set review date:** Month/Year

Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	**Micro** No	**< 20** No	**Small** No	**Medium** No	**Large** No
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** N/A	**Non-traded:** N/A	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister: ..... Date: 21 June 2016

Summary: Analysis & Evidence

Policy Option 1

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	**High:** Optional	**Best Estimate:**

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate				

Description and scale of key monetised costs by 'main affected groups'

The introduction of a new legal gateway will provide greater efficiency for HMRC than the costs associated with setting up ad hoc express legal gateways to enable the disclosure of general and aggregate data. HMRC will continue to ask government departments to cover HMRC's costs in providing the data.

Other key non-monetised costs by 'main affected groups'

N/A

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		Optional	**Optional**
High	Optional		Optional	**Optional**
Best Estimate				

Description and scale of key monetised benefits by 'main affected groups'

The absence of a legal gateway can frustrate wider policy formulation and development and addressing these data needs by the usual way of a new legal gateway on a case-by-case basis is time-consuming and resource-intensive. By increasing access to less sensitive data types through the gateway, HMRC would be contributing more effectively to wider initiatives with a view of delivering public benefits on a broader scale.

Other key non-monetised benefits by 'main affected groups'

As the power will be permissive, benefits are dependent on the projects submitted and enabled by the powers. Government departments could be encouraged to seek less sensitive data by way of this new gateway rather than the default of seeking a new express gateway for potentially identifying information.

Key assumptions/sensitivities/risks **Discount rate (%)**

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs:	**Benefits:**	**Net:**	Yes/No	IN/OUT/Zero net cost

Evidence Base (for summary sheets)

Current situation

1. HMRC is a statutory body created and governed by the Commissioners for Revenue and Customs Act (CRCA) 2005. This means that unlike other Government departments, which can rely on common law powers to share data, HMRC is permitted to share information only if its legal framework permits it to do so. This can limit the degree to which HMRC can contribute to policy discussions, particularly where these relate to matters that are beyond the department's statutory functions.

2. Section 18(1) CRCA imposes a duty of confidentiality on HMRC officials, which applies to all information that HMRC holds in connection with its functions. A criminal sanction protects against the unlawful disclosure of information that identifies a person or through which their identity can be deduced (called identifying information for these purposes). HMRC may share information only in limited circumstances set out in legislation, in particular:

- for the purposes of HMRC's functions;
- with the consent of each subject of the information; or
- through specific legislative gateways

3. Once it has a valid legal basis enabling disclosure in each case, HMRC must ensure compliance with the Data Protection Act 1998 and Human Rights Act 1998, alongside practical elements - resource implications etc.

4. HMRC holds sensitive information and it is right for there to be robust scrutiny of any information sharing proposals. However the spectrum of information held ranges from non-identifying through to identifying information that is extremely sensitive in nature. The current protections offer more protection to non-identifying information than is needed. A more tailored approach could be taken with appropriate safeguards, allowing for sensitivity and risk, to ensure that confidentiality is not compromised.

5. HMRC identified information types that it considered to be at the lower end of this sensitivity spectrum and in 2013 consulted on specific proposals, including proposals to share non-identifying (ie, general and aggregate) and de-identified information for purposes wider than HMRC's functions where this would result in public benefits.

Non-identifying information

6. General information is information that is not, nor ever has been, identifying information, for example, information on policies and processes.

7. Aggregate information is grouped information, summarising the characteristics of a set of data. This is potentially more disclosive than general information, but still generally low risk within the spectrum of information types that HMRC holds, because it is not disclosed on an individual-level basis. Where HMRC is currently able to disclose this type of information, it does so using safeguards that are appropriate to the data type. This includes employing strict security and information management processes, and robust statistical disclosure policies. Permissive powers mean that disclosure is not mandatory and the criminal sanction protects against unlawful disclosure of identifying information (which could occur if, for example, the aggregation was at too granular a level).

8. If HMRC could share non-identifying information beyond its functions, where the purpose was in the public interest (eg, the delivery of more efficient and effective public services), there would be a clear public benefit.

Evidence for and against change

9. If the status quo remains, HMRC will, as now, be approached with requests to disclose information, which will be considered on a case-by-case basis. If a valid legal basis is available that could allow disclosure, HMRC will need to consider any data sharing options or proposals, i.e. the need to ensure compliance with the DPA and HRA, alongside practical elements - resource implications etc. However if a valid legal basis is not available, this has to be provided for before disclosure can be made. A legislative vehicle needs to be found and the process of creating a statutory gateway can typically take up to two years.

10. The proposal would enable a gateway to be implemented by reference to information type (i.e. general and aggregated data), where the purpose is in the public interest. This would allow HMRC to contribute to a wider range of government initiatives than it currently can and for purposes beyond HMRC's own functions.

11. The absence of a legal gateway can frustrate wider policy formulation and development and addressing these data needs by the usual way of a new legal gateway on a case-by-case basis is time-consuming and resource-intensive. Identifying information (especially financial information) is particularly sensitive and disclosure proposals should be subject to rigorous and on-going scrutiny and critical assessment. However disclosure of less sensitive data with appropriate safeguards would permit HMRC to support initiatives which deliver wider public benefits. Moreover, a gateway permitting the disclosure of less sensitive data (if implemented) would reduce the likelihood of departments seeking a new and potentially wider gateway.

12. Responses to the public consultation in 2013 were supportive of this proposal as long as there were adequate safeguards. HMRC already makes non-identifying information available where there is a link to HMRC's functions and disclosures must comply with its policies and processes, including statistical disclosure controls. HMRC understands the concerns raised and will continue to ensure that the safeguards applied are appropriate to the information and its sensitivity.

Options identified and appraised

13. The proposals for wider sharing of general and aggregate data and the safeguards to be applied set out in this assessment and in the earlier consultation document were informed by HMRC's experience of disclosing these types of data, where the department is permitted to do so in support of its functions. HMRC proposes to continue to apply similar appropriate safeguards to disclosures for purposes in the public interest (if permitted).

14. It is proposed that the purpose of the disclosures made through the gateway should be for purposes in the public interest. This approach is consistent with that taken in Chapter 4 of the Bill (Sharing for Research Purposes) and with that of other public authorities such as the UKSA (see section 39(5) of the Statistics and Registration Service Act 2007). An alternative approach would be to specify disclosure for purposes beyond HMRC's functions, but this would have permitted a much wider discretion than the proposed public interest requirement.

Proposed method for delivering the recommended approach

15. The legislation provides the structural framework for a permissive (not mandatory) legal gateway for non-identifying (ie, general and aggregated) information to be disclosed for a purpose in the public interest, alongside the main safeguard of a criminal sanction protecting against unlawful disclosure of information that identifies a person or through which their identity could be deduced. For the gateway to have flexibility for the future, important processes and principles will be applied from outside the legislation, for example guidance and statistical disclosure controls. For example, a policy statement could be used to set out the statistical disclosure tests that HMRC applies to aggregate information in order to ensure that it will not be possible to deduce information about identifiable individual persons from aggregate information.

16. These clauses do not make any change with regard to the disclosure by HMRC of de-identified information (ie, information on identifiable natural or legal persons where identities are not specified or cannot be deduced). HMRC already uses de-identified information in a carefully controlled environment for research and analysis where this supports HMRC's functions. Chapter 4 (Sharing for Research Purposes) is intended to permit HMRC to use de-identified information for research in the public interest in cases where there is no link to HMRC's functions.

17. HMRC currently asks other government departments to cover HMRC's costs in providing data to them and would expect that other government departments would account for this element, when determining the costs and benefits of their policies.

Title: Digital Government: Statistics - Introduction of new powers for access to identified data for the purposes of producing national and other official statistics and research **IA No:** **RPC Reference No:** **Lead department or agency:** Cabinet Office **Other department or agencies:** UK Statistics Authority / Office for National Statistics	**Impact Assessment (IA)** **Date:** 01/06/2016 **Stage:** Final **Source of intervention:** Domestic **Type of measure:** Primary legislation **Contact for enquiries:** firoze.salim@cabinetoffice.gov.uk / ross.young@statistics.gsi.gov.uk

Summary: Intervention and Options

RPC Opinion: Validated

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANDCB on 2014 prices)	**One-In, Three-Out**	**Business Impact Target Status**
£237m	£4.78m	-£555,589 (net benefit)	In scope	In scope

What is the problem under consideration? Why is government intervention necessary?
Official statistics produced by the Office for National Statistics (ONS) play a crucial role in supporting the development of economic and public policy and informing public and commercial decision-makers. The current legislative arrangements governing the production of statistics are however increasingly costly, cumbersome, inhibitive of methodological innovation and lag far behind those of many of the UK's international partners. New legislation is necessary to support modernisation in the way statistical data is collected and to ensure ONS has access to the data it needs to produce fit-for-purpose official statistics that meet the emerging challenges of a modern administration and the evolving needs of statistical users.

What are the policy objectives and the intended effects?
The proposed legislation gives ONS a right of access to new sources of data and a right to be consulted where data owners make changes to the data they collect or in the way this data is collected and processed to ensure the integrity and continued supply of statistical products dependent on this data. The new sources of data ONS will be able to access through this legislation will improve the quality of existing statistics and support the development of new statistical outputs that will provide greater insight into the UK's society and economy. They will also significantly reduce existing compliance burdens on respondents (including businesses, households and individuals).

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)
Option 1 (preferred): to give ONS a statutory right of access to identifiable data held by public authorities and private undertakings for the purpose of supporting the Authority's statutory functions; Option 2: To give ONS a statutory right of access to data held by public authorities only; and Option 3: do nothing. The preferred option will improve the current restrictive legislative framework ('do nothing'), giving ONS access to a wide range of rich datasets that will improve the quality of existing statistics and support the development of new statistical outputs that will provide greater insight into the UK's society and economy. Data-rich private undertakings hold some of the most extensive datasets in the country, access to which will improve the quality and range of official statistics in ways option 2 could not. The estimated economic benefits under option 1 would also be significantly greater, and the concentration of compliance burden on the largest undertakings will allow ONS to reduce burdens on small and medium undertakings and deliver benefits to competition.

Will the policy be reviewed? It will be reviewed after 5 years. **It applicable, set review date:** 2022

Does implementation go beyond minimum EU requirements		N/A		
Are any of these organisations in scope?	**Micro** No	**Small** No	**Medium** Yes	**Large** Yes
What is the CO2 equivalent charge in greenhouse gas emissions? (Million tonnes CO2 equivalent)		**Traded:** N/A	**Non-traded:** N/A	

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs.

Signed by the responsible Minister: Date: 21 June 2016

Summary: Analysis & Evidence

Policy Option 1

Description:
FULL ECONOMIC ASSESSMENT

Price Base Year: 2014	PV Base Year: 2017	Time Period Years: 10	Net Benefit (Present Value (PV)) (£m)		
			Low: £160m	**High:** £314m	**Best Estimate:** £237m

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	£11m		£1.6m	£26m
High	£18m		£2.7m	£43m
Best Estimate	£14m		£2.2m	£34m

Description and scale of key monetised costs by 'main affected groups'
The proposed legislation gives the UKSA the power to require public authorities and private undertakings, under specific conditions, to provide ONS with access to administrative data. In addition to costs on government departments associated with updating infrastructures to accommodate new data flows to ONS, the UK Statistics Authority anticipates a small number of private undertakings will incur compliance costs based on the need to transition or upgrade data collection and transmission systems and familiarise staff.

Other key non-monetised costs by 'main affected groups'
The UK Statistics Authority anticipates minimal internal non-monetarised costs associated with the proposed legislation, although recognises the potential for unanticipated costs to arise from the internal transformation exercises required for the organisation to fully exploit administrative data. The legislation may also lead to non-monetary opportunity costs on UK businesses. Non-monetised costs will be identified and mitigated (where reasonable) on an individual basis during discussions with data holders.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	£6m		£22m	£203m
High	£10m		£37m	£339m
Best Estimate	£8m		£29m	£271m

Description and scale of key monetised costs by 'main affected groups'
The transformation of data collection practices enabled by the legislation would lead to a reduction, over time, of costs associated with compliance, currently estimated at £24 million annually for UK businesses. The legislation will also help to deliver future savings within the ONS by reducing the cost of survey collection and validation, and will remove the legal and administrative costs associated with the existing secondary legislation process (Information Sharing Orders).

Other key non-monetised costs by 'main affected groups'
Better decision-making, based on more accurate, frequent and timely statistical outputs, will support central, local and devolved governments in delivering better targeted and more efficient front-line services, with a range of tangible social benefits for service users and indirect benefits accrued from a corresponding reduction of inefficiencies and wastage. Businesses of all sizes will also benefit from a better statistical evidence base through more informed, and therefore better, monetary and fiscal decision-making.

Key assumptions/sensitivities/risks **Discount Rate (%)** 3.5

The policy proposal is based on a reasonable assumption that ONS will be able to effectively exploit future sources of administrative data. The possibility of administrative data being unhelpful for statistical purposes, or validation and integration being too costly, represent small risks. There are also public acceptability risks associated with privacy, mitigated by ONS's proven record in handling data securely and by the limitations of its statutory function to allow data to be used only in the production of statistics.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m: -£0.56m (net benefit)			Scope for Business Impact Target (qualifying provisions only) £m:
Costs: £17m	**Benefits:** £22m	**Net:** £5m (net benefit)	In scope (100% of impact)

Summary: Analysis & Evidence

Policy Option 2

Description:
FULL ECONOMIC ASSESSMENT

Price Base Year: 2014	PV Base Year: 2017	Time Period Years: 10	Net Benefit (Present Value (PV)) (£m)		
			Low: £98m	**High:** £182m	**Best Estimate:** £140m

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	£4m		£0.6m	£10m
High	£6m		£1.1m	£16m
Best Estimate	£5m		£0.9m	£13m

Description and scale of key monetised costs by 'main affected groups'
This policy option would give the UKSA the power to compel public authorities to provide ONS with access to holdings of administrative data, unless the public authority can demonstrate strong grounds for not doing so. Government departments and other public bodies will incur compliance costs associated with updating infrastructures to accommodate new data flows to ONS.

Other key non-monetised costs by 'main affected groups'
The UK Statistics Authority anticipates minimal internal non-monetarised costs associated with the proposed legislation, although recognises the potential for unanticipated costs to arise from the internal transformation exercises required for the organisation to fully exploit administrative data. The legislation may also lead to non-monetary opportunity costs on UK businesses. Non-monetised costs will be identified and mitigated (where reasonable) on an individual basis during discussions with data holders.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	£3m		£12m	£114m
High	£5m		£21m	£192m
Best Estimate	£4m		£17m	£153m

Description and scale of key monetised costs by 'main affected groups'
The transformation of data collection practices enabled by the legislation would lead to some reduction, over time, of costs associated with compliance, currently estimated at £24 million annually for UK businesses. The legislation will also help to deliver future savings within the ONS by reducing the cost of survey collection and validation, and will remove the legal and administrative costs associated with the existing secondary legislation process (Information Sharing Orders).

Other key non-monetised costs by 'main affected groups'
Better decision-making, based on more accurate, frequent and timely statistical outputs, will support central, local and devolved governments in delivering better targeted and more efficient front-line services, with a range of tangible social benefits for service users and indirect benefits accrued from a corresponding reduction of inefficiencies and wastage. Businesses of all sizes will also benefit from a better statistical evidence base through more informed, and therefore better, monetary and fiscal decision-making.

Key assumptions/sensitivities/risks **Discount Rate (%)** 3.5

The policy proposal is based on a reasonable assumption that ONS will be able to effectively exploit future sources of administrative data. The possibility of administrative data being unhelpful for statistical purposes, or validation and integration being too costly, represent small risks. There are also public acceptability risks associated with privacy, mitigated by ONS's proven record in handling data securely and by the limitations of its statutory function to allow data to be used only in the production of statistics.

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			Scope for Business Impact Target (qualifying provisions only) £m:
-£2.51m (net benefit)			In scope (100% of impact)
Costs: £0m	**Benefits:** £22m	**Net:** £22m (net benefit)	

Evidence Base

Problem under consideration

1. The production, analysis and dissemination of official and National Statistics provides independent, impartial information on the demographic, social and economic characteristics of the UK and the way these characteristics are changing over time. Statistics are a vital public good for the information age; they serve an important role as what former president of the European Central Bank, Jean-Claude Trichet, once called the "glasses through which policy-makers and all other economic agents view macroeconomic statistics [and] are a neutral and trustworthy benchmark for market participants and the public at large."[1] The insights provided by official and National Statistics are critical to the work of a range of public and private individuals and organisations, such as:

   - **Government and local authorities**, who use official statistics to guide decisions about the allocation of central government funding and the provision of public services
   - **Policy-makers in central and local government**, who make use of official statistics when assessing the need for new policy interventions and for tailoring existing policies to reflect the changing circumstances of the population and the economy. Official statistics are also used to help monitor and evaluate public services to ensure public expenditure is directed to where it is most needed
   - **Academics and researchers**, who rely on official statistics as an important analytical tool to test hypotheses and to teach students about the world we live in
   - **The media**, that uses official statistics as a channel through which to communicate the importance and relevance of news stories
   - **Businesses and financial institutions**, who use official statistics about the population and the economy to understand their market position and to inform their commercial and policy decisions[2]
   - **Individuals**, who use official statistics to guide personal and household decisions, and to hold Government, elected representatives and policy-makers to account.

2. As the UK's National Statistical Institute (NSI), the UK Statistics Authority (UKSA) and its executive office, the Office for National Statistics (ONS),[3] recognise that meeting these user needs means ensuring that official and National Statistics are accurate, relevant, reliable and produced in a timely fashion. This in turn requires that statisticians have sufficient and timely access to a broad, rich range of data sources; that the design, management and development of data collection and processing systems and practices are regularly updated to reflect and respond to changes in society; and that adequate safeguards are put in place to ensure the professional integrity of official statistics. The current legislative arrangements enabling ONS to have access to the array of administrative data sources (including about businesses) that are **already** held within government, which are needed to produce the National and official statistics that decision makers need and expect, are cumbersome, costly, burdensome, and inhibit methodological innovation. The proposed new legislation will enable ONS to access and use such administrative data already collected, including about businesses, which will substantially reduce the current extent of traditional survey-based data collections, and therefore

[1] Trichet, J (2004), 'Euro area statistics and their use for ECB policy-making: opening address', in *Statistics and their Use for Monetary and Economic Policy-Making*, pp.31 & 37. European Central Bank: Second ECB Conference on Statistics, 22 and 23 April 2004.

[2] For a detailed exposition of how businesses in the financial sector use official statistics, for example, see UKSA, (2014), *Monitoring Review 3/14: The Use of Official Statistics by the Financial Services Industry*. Available at: https://www.statisticsauthority.gov.uk/archive/assessment/monitoring/monitoring-reviews/monitoring-review-3-2014---financial-services-and-official-statistics.pdf

[3] The UK Statistics Authority was established by the Statistics and Registration Service Act 2007, referred to as the Statistics Board in that Act. The Authority has two main functions: (i) monitoring and oversight of the Office for National Statistics; and (ii) reporting on all UK official statistics, wherever produced, and independent assessment of official statistics. The proposed powers discussed in this impact assessment are vested in the Statistics Board (that is, the Board of the UK Statistics Authority). The different uses of ONS and the UK Statistics Authority/the Authority in this document reflect the distinction that the powers are formally vested in the UK Statistics Authority, and that ONS will, in practice, operationalise these powers vis-à-vis establishing access to and processing new sources of data under the terms of the proposed legislation, as well as disseminating statistical outputs based on these data.

significantly reduce the burdens presently placed on individual and commercial respondents. The new legislation will also enable ONS to directly access and exploit new data sources held outside the public sector, which has the potential to transform UK economic and social statistics; but, as discussed below, in practice ONS expects the scope of this to extend to a very small fraction of private undertakings overall.

3. Official and National Statistics are principally produced by analysing data collected through voluntary or statutory (mandatory) surveys of individuals, households and businesses, or by reusing data that have been collected across Government and elsewhere. Historically, these methods have served the UK statistical service well; public trust in ONS remains very high[4] and the extensive range of statistics produced by ONS and the wider statistical service continues to support the decision-making of policy-makers, businesses and individuals across the UK.

4. There is, however, mounting evidence that these established methods require urgent modernisation. As societies grow ever more complex and public service provision becomes more integrated, so policy-makers and service providers require access to more timely and granular data and analysis to ensure economic and public policy remains relevant. As governments seek greater efficiencies in public administration the imperative to avoid duplication across government departments increases, and the data management principle of 'collect once, use many times' becomes more important to the way official statistics are produced and disseminated. As survey response rates fall[5] and governments prioritise removing red-tape on businesses, so the producers of official statistics must correspondingly seek more innovative ways of accessing data and reducing the burdens associated with traditional survey-based data collection methods. As data systems become more sophisticated and data itself becomes both more ubiquitous and more valuable, so must statistical producers find ways to keep pace with and harness the power of new technologies, from 'cloud' computing to the 'internet of things', in the pursuit of better, richer and more useful statistics. And as the UK's international partners increasingly recognise and respond to the need for such modernisation, so must the UK ensure the policies, practices and legislation underpinning the production of official statistics in the UK keeps pace with developments elsewhere in the world.

5. Official statistics should be at the forefront not just of using new technology, but also of identifying and exploiting new methods and data sources – as has been recognised by a range of organisations in a number of different forums and contexts, gaining greater access to administrative data lies at the heart of such modernisation.[6] Eurostat, for example, has consistently made a case for the effective exploitation of administrative data. This is particularly true in the case of official economic statistics, where statistical producers have been challenged to respond to economies that are becoming increasingly diverse, interconnected and service-based, while technological developments have changed the way economic exchanges take place and increased the scale of data that governments, businesses and statistical agencies can collect, store and process.[7] For the Organisation for Economic Cooperation and Development (OECD), administrative data has a central role in addressing the 'downward bias' in GDP figures where national accounts have failed to capture the 'non-observed', informal, underground or illegal forms of economic activity.[8]

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[4] Simpson, I., Beninger, K., Ormston, R. (2015), *Public Confidence in Official Statistics*. London: NatCen, particularly pp.12ff.

[5] For instance, response rates for the quarterly Labour Force Survey (LFS) have declined from around 80 per cent in the early 2000s to under 50 per cent in 2015. Similar trends are apparent across ONS's suite of voluntary surveys. A recent paper considered by the Statistics Board highlighted the extent of the problem, noting that declining response rates were being observed worldwide. See UK Statistics Authority (2015), *Labour Force Survey (LFS) and other Household Survey Response Rates*. Availabl at: https://www.statisticsauthority.gov.uk/wp-content/uploads/2016/02/Published-Papers-UKSA-Dec-2015.pdf

[6] The value of administrative data in the production of economic statistics was recognised in a report into official economic statistics carried out by Stephen Pickford in 1989. See Pickford S. (1989), *Government Economic Statistics: A Scrutiny Report*, London: HMSO.

[7] Eurostat (2000), *Use of Administrative Sources for Business Statistics Purposes: Handbook on Good Practices*. Luxembourg: Office for Official Publications of the European Communities.

[8] OECD / IMF / ILO (2002), *Measuring the Non-Observed Economy: A Handbook*. Paris: OECD. See also Coyle, D. (2015), 'Modernising Economic Statistics: Why It Matters', *National Institute Economic Review* No. 234. Available at: http://www.niesr.ac.uk/sites/default/files/publications/NIER234Commentary.pdf

6. *European Union (EU) Regulation No. 223/2009*[9] establishes in European law the expectation that National Statistical Institutes should have access to administrative data sources "necessary for the development, production and dissemination of European statistics". Statistical institutes should also be "consulted on, and involved in, the initial design, subsequent development and discontinuation of administrative records", and in the "standardisation [of] activities concerning administrative records needed to produce coherent official statistics".[10] This commitment was subsequently reflected in the *European Statistics Code of Practice*, which states that statistical institutes have a "clear legal mandate" to collect information for statistical purposes and should be "allowed by law to use administrative data" for such purposes.[11]

7. In 2009 the UK Statistics Authority prepared and published its own Code of Practice, in which it acknowledged this international consensus and committed to "maximis[ing] opportunities for the use of administrative data", affirming that "administrative sources should be fully exploited for statistical purposes, subject to adherence to appropriate safeguards."[12] In line with Protocol 3 of the *Code of Practice for Official Statistics*[13] the Statistics Authority has taken steps to make better use of administrative and other data sources to this end, and to actively encourage and support other public bodies to do similarly (see box below for an example).

Modernisation in practice: the Census Transformation Programme (CTP)

The modernisation of the UK's ten-yearly census, which cost £480 million in 2011, provides an instructive example of this work in practice. The census provides information for public and private organisations critical for the planning of national and local policies and services over the next ten years, for example:

- An accurate population count helps the Government to calculate the grants it allocates to local authorities.
- Data collected and analysed about the age, social and economic composition of the population, and on general health and long-term illness, enables local authorities to plan and fund health and social services.
- Information about housing and its occupants indicates where accommodation provision is inadequate and helps in planning new housing.
- Knowing how many people work in different occupations helps the Government, local authorities and businesses to plan jobs and training policies.
- Information about travel to and from work and car ownership highlights the pressures on transport systems and how road and public transport can be developed to meet local needs.
- Information about ethnicity helps central and local government to plan and fund programmes to meet the needs of BME groups.
- Population statistics enable licensed census distributors to create business planning software products.
- Census statistics help research organisations to decide how, when and where to capture representative samples.
- Population statistics help businesses to decide where to locate or expand their premises to reflect local demand and the available workforce.

ONS has conducted research into the economic value of the census for the public and private sectors. These benefits were estimated by surveying local authorities and a sample of commercial users, and obtaining estimates from industry experts on the market value of census data to business, presented in the table below in terms of the typical annual benefit at 2015/16 prices. This research revealed a (conservative) estimated typical annual benefit of **£525m**.

[9] As amended by Regulation *2015/759 of the European Parliament and of the Council of 29 April 2015*.
[10] http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32015R0759&from=EN
[11] Eurostat (2011), *European Statistics Code of Practice: For the National and Community Statistical Authorities*. Luxembourg: European Union Publications Office, p.3. Available at: http://ec.europa.eu/eurostat/documents/3859598/5921861/KS-32-11-955-EN.PDF/5fa1ebc6-90bb-43fa-888f-dde032471e15
[12] UK Statistics Authority (2009), *Code of Practice for Official Statistics*. London: Crown Copyright, p.15.
[13] UK Statistics Authority,*Code of Practice for Official Statistics*, p.15.

In March 2014, following a public consultation, the National Statistician published UKSA's recommendations on the 2021 census. The National Statistician recommended:

(i) the development of an online census of all households and communal establishments in England and Wales in 2021 as a modern successor to the traditional, paper-based ten-yearly census; and

(ii) increased use of administrative and other data sources to enhance population statistics for 2021 and beyond, and to improve the quality, coverage and timeliness of official population estimates between censuses. The Government confirmed its support for the National Statistician's recommendation in July 2014.

ONS has established a Census Transformation Programme[14] to take forward the development of an online census in 2021, to increase the use of administrative data to enhance population statistics, and to develop plans for the delivery of population statistics after 2021. A research paper published in October 2013 set out an initial assessment of a broad range of public authority administrative data sources that could be used for the purposes of census-taking and the production of population statistics.[15] In May 2014, ONS published four case studies which reviewed the potential for using administrative data for some key census topics: ethnicity, household estimates, unemployment and income.[16] The work revealed the clear benefits of combining administrative with other data sources to provide this information. In October 2015, ONS published an update of its administrative data research programme, including trial population estimates using administrative sources as the first of a series of annualised estimates.[17]

In parallel with developments in the CTP, the UK Statistics Authority has prioritised a programme to deliver electronic data collection, so that by the end of the current planning period (2017/18) business data collection will be digital by default. Electronic data collection will be introduced for the business surveys that underpin ONS's economic statistics, leading to savings within ONS and also significant compliance savings for businesses. ONS's economic statistics will build on this foundation to develop a statistical production model that is fit for the digital age.

8. The UK Statistics Authority has faced a number of challenges in progressing work focused on making better use of administrative and other non-survey sources of data, many of which stem from the current restrictions in UK statistical law. The current legislation governing the collection of data for the purpose of producing official and National Statistics is principally contained within two Acts, the *Statistics of Trade Act 1947* (STA), and the *Statistics and Registration Service Act 2007* (SRSA), which make provision for broad-ranging powers enabling the ONS to collect survey-based data in a range of areas.[18] These are supported by provisions within the *Census Act 1920*, which provides

[14] http://www.ons.gov.uk/census/censustransformationprogramme

[15] www.ons.gov.uk/ons/about-ons/who-ons-are/programmes-and-projects/beyond-2011/reports-and-publications/beyond-2011-producing-socio-demographic-statistics-2.pdf.

[16] http://www.ons.gov.uk/ons/about-ons/who-ons-are/programmes-and-projects/beyond-2011/reports-and-publications/methods-and-policies-reports/beyond-2011--statistical-research-update.pdf.

[17] http://www.ons.gov.uk/ons/guide-method/census/2021-census/progress-and-development/research-projects/beyond-2011-research-and-design/research-outputs/index.html

[18] The *Statistics of Trade Act 1947* establishes the authority of government departments to collect a specific range of data from undertakings and to publish statistics for the "appreciation of economic trends and the discharge of their function". Under the terms of this legislation, businesses or individuals who fail to comply with these requests are liable to prosecution and penalties (including custodial sentences). In accordance with provisions in the *Statistics and Registration Service Act 2007,* functions carried out on behalf of the Chancellor of the Exchequer, such as conducting surveys under the legislation provided by the STA, were delegated to the UK Statistics Authority..

statutory authority for taking a census in Great Britain,[19] as well as specific provisions within legislation covering a range of associated matters.[20]

9. However, this legislation contains only limited provisions enabling the sharing of data collected for operational purposes from elsewhere in government.[21] Outside of the data specified within these provisions ONS is forced to rely on a combination of non-statistical legislation, common law powers available to some ministerial departments[22] and the costly and cumbersome process of Information Sharing Orders (ISOs) provided for within the SRSA to secure access to data held elsewhere in Government (see below). In addition, while private undertakings are able to share data as long as they comply with data protection legislation in doing so, the Schedule of the STA strictly limits ONS' *power to compel* private undertakings to disclose information to a range of specified subject matters relating only to information about the nature of the businesses and its employees. In practice, the restrictions of this legislative framework means there is no or little incentive for large data-holding Government departments or private undertakings to provide ONS with access to sources of administrative data that would significantly improve the quality of official and National Statistics.

10. These limitations have been recently acknowledged in reports on the production of official statistics in the UK. In 2015, Eurostat conducted a peer review of the UK statistical system in which it noted that the UK's use of administrative data for statistical purposes "is relatively limited" as a result of existing "legal obstacles". It noted that "removing the current obstacles and allowing the use and linking of administrative data would result in cost reductions, greatly improve operational efficiency and increase the supply of data and statistics."[23] It further recommended that the Statistics Authority should "continue to seek agreements on new legislation which would authorise, encourage and facilitate the use of administrative data for statistical purposes, subject to proper governance and confidentiality arrangements".[24]

11. In March 2016 the former Deputy Governor of the Bank of England, Professor Sir Charles Bean, concluded a review into the production of economic statistics in the UK in which he underlined the importance of amending the legislation as part of the modernisation of economic statistics.[25] In his covering statement to the publication of the interim report in December 2015, Sir Charles Bean noted that it is "nonsensical that different bits of the government don't speak to each other, so that businesses and households have to provide the same information twice. Unlocking the data hoard already held by the public sector will not only save businesses money but also produce more timely and accurate statistics."[26] While recognising that legal gateways exist through which ONS can, with the full cooperation of the data holders, gain access to administrative data, Sir Charles Bean nevertheless stated that "the UK significantly lags many other advanced economies in its exploitation of administrative data [reflecting] the cumbersome nature of the present legal framework governing the sharing of such data". He continued to recommend that there "should be a presumption that all

[19] The duty for carrying out a census rests with Statistics Board in England and Wales and the Registrar General in Scotland. Separate provisions under the *Census Act (Northern Ireland) 1969* permit the Register General for Northern Ireland (part of the Northern Ireland Statistics and Research Agency) to carry out a census in Northern Ireland.

[20] Such as the *Population (Statistics) Act 1938* and the *Registration Service Act 1953*. In Northern Ireland, the collection of business data in Northern Ireland is enabled by provisions within the *Statistics of Trade and Employment (Northern Ireland) Order 1988*.

[21] Specifically, section 42 of the SRSA provides ONS with access to registration data (births, deaths, marriages etc.) from the General Register Office; sections 43 and 44 provide ONS with access to English and Welsh NHS registration data respectively and section 45 provides ONS with access to (non-personal) information held by HMRC.

[22] While some ministerial departments may be able to make use of common law powers to share data with ONS, new powers are necessary because most data-holding departments lack such powers and for the sake of clarity and certainty – in some instances other legislation has "occupied the field" so as to cast doubt on the existence of the common law powers.

[23] European Statistical Governance Advisory Board (2015), *Peer Review Report: On Compliance with the Code of Practice and the Coordination Role of the National Statistical Institute – United Kingdom*. Brussels: Eurostat, p.4. Available at: http://ec.europa.eu/eurostat/documents/64157/4372828/2015-UK-report/d44f7d3f-64c1-4450-8a37-bfadb8542607

[24] European Statistical Governance Advisory Board, *Peer Review Report*.

[25] The review considered in detail the current ways in which ONS uses administrative and other data sources in its production of UK economic statistics, alongside the current legislative and other barriers to further use, international comparisons, and future opportunities from improvements in this area.

[26] Bean, C. (2015), *Independent Review of UK Economic Statistics: Interim Report*. Available at https://www.gov.uk/government/publications/independent-review-of-uk-economic-statistics-interim-report/press-notice-unlock-public-sector-data-hoard-to-transform-statistics-says-charlie-bean

publicly-held data is available to ONS for the purpose of producing economic statistics, except where there is a strong reason not to, for example for reasons of national security."

12. Sir Charles Bean observed that the existing legislative framework has led to a cultural reluctance to provide access to administrative data held by public authorities, whereby there is a "natural resistance within Whitehall to making data freely accessible [due to] recent high-profile losses of data by data-holding departments, an aversion to risk, and the fact that the benefits of data sharing accrue not to the provider but to the recipient [which] all make for excessive caution [so that] it can often seem easier to say 'No' rather than 'Yes'". This confirms the experience of ONS statisticians on the ground, who on approaching departments to investigate the feasibility of data sharing with ONS have been confronted with a reluctance to provide access based on a number of factors, ranging from resource constraints and prioritisation to data security or pre-existing legal barriers.

13. In his final report, Sir Charles Bean concluded that "greater use of public and private administrative data has the potential to transform the provision of economic statistics in the long term",[27] but that such progress would depend on developments in a number of key priority areas, including:

- **Amending the legal framework to increase flexibility:** such a framework should "start from the presumption that, subject to appropriate measures being in place to preserve confidentiality, data held by public authorities should be available to ONS for the purpose of producing statistics...This represents a reversal of the burden of proof. The public may indeed already believe that this is what happens. But in any case, in order to ensure that access is not abused, an independent ombudsman (or similar) could be appointed to adjudicate difficult cases, for example to check that use is consonant with legislation, and more generally to ensure that the regime operates ethically."[28]
- **Exploiting new data sources, particularly in the private sector**: "ONS should seek to exploit new data sources from outside of the public sector that have the potential to transform economic statistics. Given that new data sources emerge all the time, it will be important for ONS to be constantly on the lookout for new data sources and techniques that it can exploit, possibly in partnership with the data owner. ONS also needs to be fully aware of the activities of businesses and other NSIs that are at the cutting edge of the exploitation of such data."[29]

14. The Royal Statistical Society (RSS) has long made a similar ambition part of its Data Manifesto,[30] and in its response to the formal consultation on the proposed legislation echoed Sir Charles Bean's conclusions in agreeing that "the current framework is cumbersome and unwieldy", and suggesting that ONS should have an "automatic right of access" and that "the mandate for the ONS should be strengthened so that there is a presumption of data access for statistical purposes". The RSS further reinforces Sir Charles Bean's view that new legislation should facilitate a model of data access similar to that currently used by the Office for Budget Responsibility. The Academy of Social Sciences and the Administrative Data Research Network concurred in their consultation responses, with the former arguing that stronger data sharing rights are also "essential to achieve the reduction in respondent burdens and the financial savings envisaged in the consultation document."

15. These consultation responses, along with the findings and recommendations of Sir Charles Bean's *Independent Review of UK Economic Statistics*, are based upon a number of specific aspects of the current legislative framework, outlined in greater detail in the sections below.

[27] Bean, *Independent Review of UK Economic Statistics*, p.66.
[28] Bean, *Independent Review of UK Economic Statistics*.
[29] Bean, *Independent Review of UK Economic Statistics*.
[30] http://www.rss.org.uk/Images/PDF/influencing-change/rss-data-manifesto-2014.pdf

The rationale for intervention

16. The rationale for intervention relates to three aspects of the current legislative arrangements:
    i. The legislative arrangements governing data sharing in the UK statistical system have led to data sharing practices that are both cumbersome and costly;
    ii. These arrangements do not do enough to support the sorts of development in the production of official and National Statistics highlighted in Sir Charles Bean's review and other reports. By limiting the legal provision of data collection powers to those focused on traditional survey-based methods, these arrangements inhibit the development of the sorts of innovative methods of data collection necessary to capture emerging changes in the UK's economic and social configuration; and
    iii. Current arrangements lag far behind those of statistical systems in many other countries, including direct economic competitors in Europe and among Commonwealth nations. This risks harming the UK's global competitiveness. It also restricts the UK's capacity to fulfil its ambition to become an effective partner in the realisation of the 'data revolution' and world leader in the development of statistical services and data science.

Building an agile statistical service

17. Where no legal gateway already exists current legislation requires ONS to secure access to identifiable data held elsewhere in Government through ISOs. However, the procedure around ISOs is cumbersome and time-consuming. Much of this is due to the need to resolve the uncertainties about whether a new gateway is necessary (that is, identifying whether or not a legal gateway already exists for the proposed data share). Only then can work begin on establishing whether there is a sound justification for the required sharing of data. Once agreement has been reached that data sharing is justified and a new gateway is needed, the ISO is drafted. Before it can come into effect, it must be approved by Parliament through the affirmative resolution procedure. Once before Parliament, draft orders cannot be amended; if one point causes concern, the entire provision falls. The parliamentary procedures around affirmative resolutions have been found to add at least an additional six months to the overall time taken before data can eventually be shared with ONS and sometimes much longer (see table below).

18. ISOs are also inflexible. The SRSA requires the Minister for the Cabinet Office to make ISOs to authorise a public authority to disclose clearly defined sets of data to ONS. Reflecting the general caution around data sharing, the practice has apparently become established for each ISO precisely to specify the purpose, the variables and data items required, and how the data can be used. Such excessively cautious secondary legislation creates three major problems:
    i. they lack the flexibility needed to operate effectively: they prevent re-use of data for other, previously unforeseen, statistical purposes and require further legislative consent through another ISO, causing further delays;
    ii. cautious drafting has sometimes made implementation of an ISO difficult in practice because it cannot reflect the complexity of the operational systems on which the data are held. For example, the Disclosure of Social Security Information regulations were not able to be used operationally in practice: the wording of the Regulation placed limitations on the data that could be provided. This made it impossible for the department concerned to provide the data because of the way their operational systems were designed; and
    iii. this approach is impractical where large-scale datasets with many attributes are involved (this can run to several thousands). Without new legislation this cautious approach is expected to continue.

19. The need to seek approval from Parliament before ONS accesses data makes it very hard for ONS to carry out the necessary feasibility work required to develop the case needed to secure such parliamentary approval.

20. Moreover, ISOs can only give legal gateways to remove a barrier in a rule of law or an Act passed *before* July 2007 but not for a prohibition that came into force after that date, as it was anticipated that ONS would be able to lobby legislating departments to include data sharing clauses in new legislation. In practice, departments working on draft legislation have been reluctant to add provisions to permit access to data for statistical and research purposes with the same effect as section 47 of the SRSA, even when the departments support the principle. This is because of the potential to disrupt the passage of the Bill over what is considered to be a secondary issue.

21. Legislation covering access to data from businesses dates from the STA, and does not have the flexibility to tailor the public good need for access to statistics with efficient, effective and proportionate mechanisms expected by businesses. Section 1 of the STA allows for ONS to compel private undertakings to provide estimates and returns containing the information listed in the Schedule to that Act, and then only for the limited purpose of obtaining the information necessary for the "appreciation of economic trends and the provision of a statistical service for industry and for the discharge by government departments of their functions".

22. As a consequence of restrictions in the STA and SRSA, decision-makers in Government, Parliament and the wider public and private sectors are increasingly frustrated that better statistics and research cannot be generated on a wide range of topics, ranging from the economy to immigration. The operation of these legislative arrangements is therefore in practice incompatible with meeting the needs of users of statistics across Government and beyond for timely and responsive data from the statistical service to inform better decision-making.

Statutory instrument	Information sources	Data owner	Purpose	Time taken*
Statistics and Registration Service Act 2007 (Disclosure of Pupil Information)(England) 2009	School census, National student database	Department for Education	Population statistics; Census arrangements; assessment of Census returns	24 months
Statistics and Registration Service Act 2007 (Disclosure of Higher Education Student Data) 2009	Student demographic information	Higher Education Statistics Agency	Population statistics; Census arrangements; assessment of Census returns	22 months
Statistics and Registration Service Act 2007 (Disclosure of Pupil Information)(Wales) 2011	Pupil level school census for Wales	Welsh Government	Population statistics; assessment of Census returns	18 months
Statistics and Registration Service Act 2007 (Disclosure of Value Added Tax Information) 2011	VAT information	HM Revenue and Customs	Economic and business statistics	20 months
Statistics and Registration Service Act 2007 (Disclosure of Social Security Information) 2012	Customer Information System data	HM Revenue and Customs/Department for Work and Pensions	Population statistics; assessment of Census returns	23 months
Statistics and Registration Service Act 2007 (Disclosure of Revenue Information) 2015	Physical characteristics of properties	Valuation Office Agency	Economic statistics	6 months

* Time taken is calculated as the length of time from the start of official-level feasibility discussions to the conclusion of the parliamentary process

Source: UK Statistics Authority

23. In addition, the current need for respondents – individuals, households and businesses – to complete voluntary or compulsory surveys, often supplying information already held elsewhere across Government, imposes a significant administrative burden both on data collectors and data providers. Across the Government Statistical Service (GSS) the compliance burden placed on business was calculated in 2013/14 at circa **£33 million**. ONS compulsory business surveys account for **£24 million**, representing around 73 per cent of the total statistical service survey-based compliance

burden.[31] [32] The legal authority provided in the STA for ONS to collect data from businesses is limited to the issuing of compulsory surveys; legislation that recognises and authorises the collection of data using less burdensome and expensive methods would therefore be a necessary precondition for the reduction of the data collection burden.[33] [34] By providing access to administrative data held across Government and by medium and large-sized private undertakings ONS can ensure data is collected once but used many times, reducing the burdens on survey respondents and administrative costs associated with collecting the data.

24. The UK Statistics Authority anticipates that efforts to reduce costs for these and other data collection programmes within ONS would be significantly assisted by greater access to and use of administrative and other data sources. Government departments, other public authorities and private undertakings **already** hold increasing amounts of administrative data collected as a by-product of their services to users and consumers which could be opened up and be used by the statistical service for the purposes of producing aggregate official statistics and analysis about the UK economy and society. By using data which are already available within administrative systems rather than collecting data afresh ONS can, over time, reduce the overall burden placed on its data providers, lower its data collection and processing costs, increase the timeliness, coverage and quality of published statistics, and better answer policy-makers' questions in support of better decision-making for the public good.

Diversifying, improving and future proofing statistics

25. Administrative and other, non-survey based sources of data, particularly when they are linked and matched with data from other sources, can provide a rich and flexible source of information about how our society, population, economy and businesses are changing. New legislation would enable the statistical service to improve the quality of official statistics in six critical areas:

    i. **relevance**: how closely the data relate to the concepts and issues of most interest to the users (such as policy priorities);
    ii. **accuracy**: whether the data are compiled from a large sample and if they are subject to large revisions;
    iii. **timeliness**: how quickly the data are available and how responsive statistical outputs can therefore be to emerging user needs;
    iv. **accessibility**: how easy it is to get hold of the data;
    v. **interpretability**: whether the data is supported by supplementary materials or metadata, concerning methodology etc. and;
    vi. **coherence**: how well data relate to similar datasets or work within broad analytical frameworks and represent an appropriately long timespan.[35]

26. Access to new data sources will also provide fresh insights on social and economic change which will strengthen the evidence base for policies and decision-making based on research and statistics in a range of areas, including:

    • **Population and public policy:** Modernisation of the Census (cost £480 million in 2011), and better quality statistics about our population, migration, crime and life events. For example, more frequent and better integrated population statistics outputs, and the development of new indicators (e.g. local authority-based estimates of long and short-term international migration).

[31] Compliance burden costs are calculated using current GSS methodology. For more information see ONS (2015), *Annual Report on Government Statistical Surveys for Official Statistical of Businesses and Local Authorities 2013/14*, pp.14-15. Available at http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/dcp171776_392084.pdf
[32] Figures sourced from ONS, *Annual Report on Government Statistical Surveys*, pp.11-12.
[33] In line with recommendations of Better Regulation Task Force (2005), *Regulation – Less is More; Reducing Burdens, Improving Outcomes*.
[34] For more on benefits see chapter 1 of Wallgren, A. and Wallgren, B. (2007), *Register-based Statistics: Administrative Data for Statistical Purposes*. London: Wiley.
[35] Brackstone, G. (1999), 'Managing data quality in a statistical agency', Statistics Canada, Survey Methodology 25:2. These criteria have informed statistical reforms in numerous public institutions, including the Bank of England and the International Monetary Fund. See for example Carson, C. (2001), *Toward a framework for assessing data quality: IMF Working Paper 25*. International Monetary Fund and Eurostat. Available at: http://www.imf.org/external/pubs/ft/wp/2001/wp0125.pdf; and Eurostat (2001), *Quality Report Prepared for the 14th Meeting of the IMF Balance of Payments Working Group*. Brussels: Eurostat. Available at: http://www.imf.org/external/pubs/ft/bop/2001/01-42.pdf

- **Economy and productivity:** Improving our understanding of the economy, including economic productivity, consumer prices, National Accounts, GDP, and regional economies. For example, better estimates of the contribution of different industries to economic growth, and the characteristics of regional economic variation to support the development of local economic policies.
- **Employment and incomes:** Better statistical analysis of the labour market, pensions, earnings, and household and personal incomes. For example, analysis about continuous and multiple employment, variations in earnings, and the determinants of moving between being in work and on benefits.
- **Business statistics:** Access to sources of data about businesses will reduce the current level of respondent burden, and reduce the size, scope and number of existing mandatory business surveys, while improving the quality of statistical estimates and outputs.
- **Registers, sampling and coverage:** Increasing the coverage, for example, of the inter-departmental business register to identify the active trading status of businesses and to more easily identify the smallest of undertakings, will enable ONS to improve its analysis of the economy and provide more responsive analysis.

27. NSIs are also uniquely well-placed to help society take advantage of the opportunities offered by so-called 'big data';[36] new legislation will be crucial in allowing ONS to make more effective use of these sources. The House of Commons Science and Technology Committee recently published its report on the *Big Data Dilemma*, concluding that effective use of big data could create up to **58,000 jobs** and contribute **£216bn** to the UK economy over a five-year period. Big data was recognised as key to making improvements in 'data equity', driving improvements in market and customer intelligence across all sectors, supporting entrepreneurial activity and encouraging new market entrants by lowering the barriers to market entry. Exploitation of big data sources was also identified as key to improving operational efficiency and the targeting of service delivery in the public sector, with benefits including savings of £2bn in fraud detection and £4bn through better performance management.[37]

28. Despite these acknowledged benefits, the report argued that there is much still to do to fully exploit these sources of data. The report argued that the Government could "do more to make its databases 'open' and to share them with businesses, and across Government departments to improve and develop new public services".[38] The Committee made several recommendations on how this might be achieved, specifically to the Office for National Statistics for the purposes of producing official statistics and improving data quality, stating:

- "There are enormous benefits in prospect for the economy and for people's lives from making the nation's core data infrastructure 'open'. The Government's work in this area has put the UK in a world-leading position. But there is more to do to break down departmental data silos, to bring data together in order to further improve public services, as well as to improve data quality. The Government should set out how it can build capacity to deliver more datasets, increasingly in real-time, both to decision-makers in Government and to external users and, in particular, should work to establish a right of access to data for the Office for National Statistics. The Government should also establish a framework – to be overseen by the Government Digital Service, the Office for National Statistics or another expert body – for auditing the quality of data within Government departments amenable for big data applications, and for pro-actively identifying data sharing opportunities to break departmental data silos (Paragraph 42)

[and]

- "While the private sector is making great strides in identifying opportunities for bringing different datasets together, it is understandably more challenging for businesses in a

[36] Struijs,P., Braaksma, B. and Daas, P. (2014), 'Official Statistics and Big Data', *Big Data and Society*. Available at: https://www.researchgate.net/publication/264927300_Official_statistics_and_Big_Data

[37] See House of Commons Science and Technology Committee (2015), *The Big Data Dilemma: Fourth Report of Session 2015-16*, p.3ff. Available at: http://www.publications.parliament.uk/pa/cm201516/cmselect/cmsctech/468/468.pdf. The economic benefits of big data were calculated in 2012 by the Centre for Economics and Business Research. See CEBR (2012), *Data Equity: Unlocking the Value of Big Data*. Available at: http://www.bdvc.nl/images/Rapporten/Value-of-Data-Equity-Cebr.pdf

[38] House of Commons Science and Technology Committee, *The Big Data Dilemma*.

competitive market to share valuable data with one another or with Government. The Government's Digital Catapult therefore plays a vitally important role in facilitating private sector data sharing in a 'safe', trusted environment. The Government should map out how the Catapult's work and its own plans to open and share Government data could be dovetailed. The Government should also consider the scope for giving the Office for National Statistics greater access both to Government departments' data and private sector data (Paragraph 56)."

29. Gaining greater access to administrative and other sources of data will help deliver a range of new statistical outputs, improving and extending decision-makers' understanding of the way industries and parts of society work and change over time. ONS has conducted a futurecasting exercise to identify a number of key case studies that illustrate such benefits. These are described further at Annex B.

Improving the UK's international standing

30. As noted in the Open Data Institute's response to the *Better Use of Data in Government Consultation*,[39] the "transition to using existing data sources for statistics and research wherever possible, rather than via purpose specific survey collection, is being discussed in statistical offices around the world." In the UK, however, the legislative arrangements to support positive developments around these discussions lag far behind international best practice. Legislation to give the UK Statistics Authority a statutory right of access to the sources of data it needs for its functions will, therefore, also bring the UK's statistical system into line with European requirements and recommendations, and broader international best practice. During the preparation of its policy proposals the Authority consulted with a number of its international partners, identifying practices governing the use of administrative data and the legal provisions underwriting the production of official statistics in a range of international case studies. The table below, based on a survey conducted by the Authority with fellow members of Eurostat, presents a snapshot of the statistical data sharing environment in a number of the UK's European counterparts.

31. The survey responses are reflected in official documentation with regard to the laws governing the production of official statistics and the institutional practices, policies and strategic plans of international NSIs. In the **Republic of Ireland**, for example, the production of official statistics takes place within the framework of the *Statistics Act 1993*.[40] This gives the Irish NSI, the Central Statistical Office (CSO), a legal right to free access to the administrative records held by other public authorities for the purposes of producing official statistics. The legislation also places an obligation on data providers to consult with the CSO Director General when making changes to the way data used in the production of official statistics is collected, stored or retrieved, and contains a permissive gateway allowing persons and undertakings to furnish the CSO with administrative or other records. Moreover, section 26 of the Act empowers the CSO, following intervention by the Taoiseach, to compel private undertakings to "supply any record, copy of or extract from any record" required for the production of official statistics. Since late 2013 the Department of Public Expenditure and Reform has been consulting on the drafting of new cross government data-sharing powers and corresponding safeguards under the proposed *Data-Sharing and Governance Bill*.[41] In its recent strategy documents the CSO has noted the reduction in administrative and compliance burdens it has been able to deliver as a consequence of access to administrative and other sources of data for the production of official statistics.[42]

[39] https://www.gov.uk/government/consultations/better-use-of-data-in-government
[40] http://www.irishstatutebook.ie/eli/1993/act/21/enacted/en/print
[41] http://www.per.gov.ie/en/datasharing/
[42] The National Statistics Board (2015), *A World Class Statistical System for Ireland: Strategic Priorities for Official Statistics 2015-2020*. Available at: http://www.nsb.ie/media/nsbie/pdfdocs/NSB_Strategy_2015-2020.pdf.

Data sharing legislation across the European Union

	Characteristics of legislation							Impact of legislation			Future	
	Data sources				*Obligations*		*In force*					
	Civil registration	Household tax and benefits	Businesses	Health	Business data: Free-of-charge	Consulted on changes to data systems	> 10 years	Improved Quality	Reduced costs	Reduced burden	New legislation	Increase dependency on admin sources
Austria	√	√	√	X	√	X	√	√	√	√	√	
Belgium	√	√	√	X	√	X	X	*No change*	√	√	X	√
Bulgaria	√	√	X	√	X	X	X	*No change*	*No change*	*No change*	√	√
Czech Republic	√	√	√	√	√	√	√	√	*No change*	√	√	√
Denmark	√	√	√	√	√	√	√	*No change*	*No change*	*No change*	n/a	√
Estonia	√	√	√	√	√	√	√	√	*No change*	√	X	√
Finland	√	√	√	X	X	X	√	√	*No change*	√	√	√
France	√	√	√	√	√	X	√	√	*No change*	√	√	√
Hungary	√	√	√	√	X	X	√	√	*No change*	*No change*	√	√
Iceland	√	√	√	√	√	√		√	√	√	X	√
Lithuania	√	√	√	√	X	X	√	√	√	√	√	√
Poland	√	√	X	√	X	√	√	*No change*	√	√	X	√
Slovakia	√	X	√	X	X	√	X	√	*No change*	√	√	√
Switzerland	√	√	√	√	X	X	√	√	√	√	n/a	n/a
United Kingdom	√	X	X	X	X	X	X	n/a	n/a	n/a	√	√

Source: UK Statistics Authority

Note: The data in this table have been provided by official working-level contacts in response to desk research with European National Statistical Institutes; they represent the views of the individuals and not the national statistical institute concerned.

32. In **Finland**, the *Statistics Act* incorporates the principle that statistics should be c administrative records wherever possible. Under section 14, state and local gove authorities and "incorporated enterprises, unincorporated public enterprises and institutions and foundations" are, with limited exceptions described under sectior provide Statistics Finland with such data in their possession that are necessary f production of statistics, as well as with data on their own activities, finances, duti other resources required in their activities". The Act also gives Statistics Finland access and link record-level administrative data for statistical purposes.[43] As a c this legislative environment Statistics Finland has estimated that around 96 per c originate from administrative sources.[44]

33. Since 2008 Statistics **Denmark** has made use of a number of administrative reg by the Central Customs and Tax Administration Department in its production of e statistics. The "e-income" register, for example, provides income and tax data fr employees in Denmark, while access to the Central Pension Register and the Pe Register allow Statistics Denmark to produce statistical reports on pension arran estimate wealth. Access to these registers is mandated by law; under section 6 c *Statistics Denmark* public authorities are required by law to supply "such informa possess when called upon to do so by Statistics Denmark", provided this is for s statistical purposes. Section 8 of the Act lists a wide range of data that private ur Denmark are required to provide to Statistics Denmark.[45]

34. In 2007, Statistics **Portugal** developed a system of sharing business informatior Ministry of Justice, the Ministry of Finance and the Bank of Portugal. The Simplif Information system (IES) has meant the 400,000 businesses based in Portugal c the information necessary for taxation and statistical purposes through a single e The data is then accessed by all the members of the IES – meaning that Statisti been able to discontinue its paper-based surveys of Portuguese businesses and IES to produce its structural business statistics and National Accounts instead. T supported by bespoke legislative arrangements agreed between 2007 and 2008 reduction in burden on business and of the corresponding administrative costs. T also driven improvements in the quality of Portuguese business statistics, becau earlier and more regular access to business data and the system facilitates Stati access to the entire business population, eliminating sampling-based errors and also supports linkage with individual and household data, assisting Statistics Por on the full range of economic units.[47]

35. The *Official Statistics Act* in **Estonia** includes a requirement that "producer[s] of shall primarily use data collected in administrative records and databases…if su the production of official statistics complying with the quality criteria of official sta the Act goes further, permitting the producers of official statistics to make propos "amending the composition of data and the classifications used in administrative databases" if the coverage, composition, level of detail or quality of data do not s the production of official statistics.[48] The legislation has been crucial to realising Government's ambition to create an open 'e-society' and a corresponding range digital public services. Statistics Estonia has also been able to benefit from the c

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[43] http://tilastokeskus.fi/meta/lait/2013_tilastolaki_en.pdf. See also Statistics Finland (2007), *Use of Regis Administrative Data Sources for Statistical Purposes: Best Practices of Statistics Finland*. Helsinki: Statist
[44] Statistics Finland (2004), *Use of Registers and Administrative Data Sources for Statistical Purposes: B Statistics Finland*, p.7. Available at: http://www.stat.fi/tup/julkaisut/kasikirjoja_45_en.pdf
[45] http://www.dst.dk/pukora/epub/upload/2285/5_1_en.pdf
[46] Namely *Decree-Law No. 8/2007* (establishing the IES) and *Executive Orders Nos. 208/2007, 8/2008* (d variables to be transmitted) and 499/2007 and 245/2008 (defining the transmission procedures).
[47] http://ec.europa.eu/eurostat/documents/1001617/4411693/II-3-PORTUGAL-STRUCTURAL-BUSINESS
[48] https://www.riigiteataja.ee/en/eli/ee/506012015002/consolide/current

range of linked business and population registers facilitated both by the provisions of the Official Statistics Act and a number of complementary public service and data Acts (such as the Population Registry Law).[49]

36. In **France,** current statistical law dates back to 1951, when *Act No 51-711 on The Legal Obligation, Coordination and Confidentiality in the Field of Statistics* gave the various institutions of the French Statistical System the authority to collect survey data on a range of economic and social matters for the production of official statistics. In the last year the French NSI (INSEE), has developed a series of legislative amendments to oblige private undertakings operating in France to provide INSEE with access to administrative or other sources of data on request as a replacement for surveys conducted as part of the statistical programme. The legislation, which has broad bi-partisan support, is currently being scrutinised by the French Senate, having passed a vote in the National Assembly earlier in 2016. INSEE, like its equivalent in the federal **German** government, Destatis, anticipates establishing a series of direct data feeds from businesses for the purpose of producing official statistics.

37. There are also a number of examples of similar legislation outside the EU. Statistics **Canada**, for example, has the right to access "any documents or records that are maintained in any department or in any municipal office, corporation, business or organisation, from which information is sought". Survey respondents in Canada are also routinely offered the option to have their records taken direct from administrative sources held elsewhere rather than be required to answer survey or census questions. The vast majority opt to do so. In 2006 Statistics Canada reported that the use of administrative data in the production of its National Accounts had led to a significant reduction in the survey burden placed on small businesses.[50]

38. Statistics **New Zealand** has a legal right to "require information from any person in a position to provide it to enable the production of official statistics". The sharing of data between departments and Statistics New Zealand does not require specific legislation. The goal is to "use administrative data as a first source" so that direct data collection is only undertaken "where necessary". The department is currently consulting on new legislation to explicitly support the production of administrative data based censuses in the future, estimating that being able to do so would reduce the survey burden on the public by as much as 70 per cent.[51]

39. As part of its commitment to make better use of administrative data, the **Australian** Bureau of Statistics (ABS) is currently developing an integrated platform to support the linking and analysis of a range of administrative datasets held by the Australian Taxation Office, including personal and business income tax, PAYE, business activity statements and the ABS Business Register. Recognising that the legislative arrangements governing the sharing of administrative data between state governments are patchy, in 2015 the ABS announced it had begun a programme of work with the Federal Government to enhance the "legislative and governance arrangements to take advantage of 21st century opportunities such as…the use of administrative data for statistical and research purposes", work which would "connect up government efforts on data, and address critical data gaps, barriers to data sharing, data acquisition, data integration and data access, as well as increase productivity and reduce duplication of statistical functions in government agencies."[52]

[49] https://e-estonia.com/
[50] Statistics Canada (2006), The *Integrated Approach to Economic Surveys in Canada*. Available at: http://www.bfs.admin.ch/bfs/portal/en/index/institutionen/statistikaemter_in/03/02.parsys.0100.downloadList.01001.DownloadFile.tmp/statcanintegratedapproach.pdf%20page%2015
[51] http://www.stats.govt.nz/~/media/Statistics/about-us/corporate-publications/cabinet%20papers/census-trans-promising-future-redacted.pdf
[52] http://www.abs.gov.au/websitedbs/Corporate.nsf/Home/government+investment+in+the+ABS#AdminData

Responding to the consultation

40. The proposed legislation has been developed as part of a two-year open policy making period with representatives across government and from civil society and business.[53] The proposals were subject to an 8-week period of formal consultation. The general themes of responses included:

- A generally high level of support for the proposals and of agreement with the rationale presented in making the case for new legislation;
- The importance of avoiding a 'one-size-fits-all' approach to implementing the legislation, and to instead devise data access arrangements and security provisions that recognise the diverse needs, resources, interests and cultures of the public authorities and private undertakings that fall within the scope of the legislation, as well as the particular sensitivities of the data being shared;
- The importance of including a wide range of stakeholders in consultation on models of implementation, specifically in the development of the accompanying Code of Practice and Statement of Principles;
- The importance of pro-active transparency, of ensuring data providers, data subjects and the general public are made aware of what data is being captured and shared, and the statistical purposes of doing so.
- The need to ensure definitional and procedural clarity, as well as legal clarity regarding the intersection of the provisions of new legislation with those governing other data protection and management legislation;
- The importance of being proportionate and of making use of data access powers only where it is demonstrably necessary.
- The need to clearly demonstrate the value of increased data access powers, and the benefits derived from the exercise of these powers for the providers of data and the data subjects themselves;
- The importance of being collaborative with data owners, and of using enforcement mechanisms only as a last resort;
- The need to ensure safeguards and data security measures are future-proofed; that such measures are regularly reviewed and that mechanisms exist to ensure they remain fit for purpose;
- The importance of recognising the limitations of administrative data, and the need for robust quality assurance mechanisms to prevent the degradation in quality of the statistical outputs that substantively replace survey-based data with administrative sources of data.

41. The UK Statistics Authority agrees with these observations. The Authority notes further the high level of support recognising the need for new legislation and agreeing with the principles upon which it is based, and acknowledges that the particulars of these responses are focused largely on the implementation of the legislation. Insofar as is possible at this stage, the Authority has addressed these observations at various points in the drafting of this Impact Assessment and will continue to do so in the preparation of other supporting documents and the development of associated policies and practices. For the most part, these issues are either already addressed in the *Code of Practice for Official Statistics*, or will be addressed in the Statement of Principles and the new Code of Practice provided for by the proposed legislation. Elsewhere they will be addressed in the development of implementation procedures and oversight mechanisms (see Annex D for an illustration of how these might look). In response to observations concerning the limitations of administrative data, the UK Statistics Authority, alongside its international colleagues in other statistical departments, is part of an evolving conversation around best practice in the use of administrative data for the production of statistics. Many of these conversations reflect widespread recognition of the need for appropriate quality assurance mechanisms when making use of administrative data for statistical purposes. The Statistics Authority is continuing to advance work to this end (see Annex E).

[53] For more information see the OPM website at http://datasharing.org.uk/

Policy objectives

42. The proposed legislation has four key objectives; specifically to:
    i. Give the UK Statistics Authority a right of access to data held by public authorities and private undertakings for the sole purpose of supporting the Authority's statistical functions;[54]
    ii. Include an obligation for data holders to consult the Authority before changes to data collection are made in order to protect the security of data supply, and the accuracy and reliability of statistical outputs derived from these data;
    iii. Enable the UK Statistics Authority to securely share information with statisticians in the devolved administrations for their statistical purposes; and
    iv. Uphold rigorous penalties for the inappropriate use of identifiable data to maintain public confidence and trust.

43. This statutory framework would provide the Authority with a gateway to access a much wider range of administrative data sources to use for statistical purposes than is currently possible, while providing strong restrictions and safeguards. Public authorities and private undertakings covered by these new powers would have an obligation to comply with a request to disclose data that is needed Authority's statistical functions. In effect, the legislation would be a 'one way valve' through which identifiable data can be accessed by the Authority for statistical purposes but cannot then subsequently be used and passed on for operational purposes. This would be similar to the arrangements in a range of other international contexts, including Canada, Ireland and New Zealand (discussed above).

44. It is proposed that the power's territorial extent will cover the devolved administrations in Scotland, Wales and Northern Ireland. The Authority is currently in discussions with representatives of the devolved administrations to identify mechanisms to enable the Authority to share data for statistical purposes with other statistical producers in the devolved administrations. This would enable Scotland, Wales and Northern Ireland to meet their statistical needs from further devolution, and also for the Authority to continue to meet its international obligations to produce comparable statistics for the UK as a whole. Arrangements facilitating data sharing between the Authority and the statistical departments of the devolved administrations will be subject to strict disclosure and security controls.

45. The SRSA limits the Authority's statutory role to producing official statistics, promoting and assisting in statistical research, and providing statistical services, for the public good. The proposed legislation contains further restrictions prohibiting the Authority from using information provided under new powers for the purpose of providing statistical services without the consent of the body that has provided the information. It also provides statutory protections for identified data, including strict criminal penalties for unlawful disclosure or misuse. New legislation would maintain the offences and penalties described at section 39 of the SRSA, which make provision for a term of imprisonment or a fine for individuals who have unlawfully disclosed personal information, as defined at section 39(3) of the SRSA.

46. The proposed powers would also provide the Authority with the right to require public authorities or undertakings that provide data to ONS to consult the Authority before making changes to their processes for collecting, organising, storing, retrieving or supplying these data. Continuity of data supply is essential if the statistical service is to reduce its reliance on traditional survey-based sources in favour of directly accessing administrative and other sources. The Authority will therefore need to be consulted about changes to the collection and processing systems for data which are used subsequently to support the Authority's statistical functions in order to

[54] The functions of the UK Statistics Authority (as set out in the SRSA) include: the production and dissemination of official statistics; the development of definitions, methodologies, classifications and standards in relation to official statistics; the monitoring and assessment of official statistics produced by other government departments; the provision of statistical services; the promotion of statistical research; and the reporting of its activities to Parliament.

provide for security of data supply and to maintain the quality and integrity of ONS's official statistics outputs.

Scope of the policy

47. The proposed policy will create a gateway to enable the disclosure of data by public authorities (as defined by section 67 of the SRSA) to ONS. This gateway will be supported by a power to compel disclosure via notice of data held by non-Crown public authorities and private undertakings. Under this power data can only be provided for the sole purpose of supporting the UK Statistics Authority's statutory functions. This limitation applies whether the data is being accessed via the permissive gateway or through compulsion via notice.

48. The proposed legislation includes medium and large-sized private undertakings within its scope, defined by section 33 of the *Small Business Enterprise and Employment Act 2015* as undertakings employing 50 or more persons and with an annual turnover or balance sheet total above the small business threshold.[55] This definition places approximately 42,000 undertakings in the nominal scope of the legislation.[56]

49. The Authority nonetheless estimates that the real scope of the legislation as applied to public authorities and private undertakings will be a fraction of the nominal scope. Two reasons account for this:

    i. The provisions of the proposed legislation require the Authority to prepare and lay before Parliament a Statement of Principles (hereafter the Statement), outlining the principles to which ONS will have regard when approaching an undertaking for data and the processes through which the data will be secured. A high-level overview of the proposed principles is presented at Annex D. The Statement will require ONS to demonstrate, *inter alia*, that the data requested is of sufficient scale and quality to be useable in the production of official statistics. Moreover, these principles, and those under the existing Code of Practice for Statistics, require ONS to ensure that public authorities and undertakings are not subject to unreasonable or disproportionate burdens when supplying requested data. In practice, only a very small percentage of public authorities and undertakings will hold data of sufficient quality and coverage to support the production of aggregate official statistics. The requirement to minimise burdens and ensure any burdens are proportionate will further limit the number of private undertakings from which ONS will seek data to those with appropriately advanced and resourced data infrastructures. Adherence to these principles will significantly reduce the number of organisations that could feasibly be required to provide data and that could be compelled to do so under the provisions of the proposed legislation. The Authority therefore anticipates compliance burdens will only apply to a small fraction of the bodies within the nominal scope of the legislation.

    ii. The Authority has undertaken a broad scoping exercise across ONS to identify the public authorities and types of undertakings most likely to own datasets of value in the production of official statistics. This work identified a range of government departments, public agencies and non-government bodies that would hold data that could be accessed in a way that is consistent with the principles referred to at (i) above. In the private sector the scoping exercise identified 12 sectors of interest; previous evaluation work has revealed the existence (or the very probable existence) of appropriately large and rich sources of data. UKSA's assessment of the likely number of undertakings directly affected by new

[55] http://www.legislation.gov.uk/ukpga/2015/26/pdfs/ukpga_20150026_en.pdf

[56] According to the latest Business Population Estimates (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/467443/bpe_2015_statistical_release.pdf) and data from the Charities Register (see http://apps.charitycommission.gov.uk/Showcharity/RegisterOfCharities/SectorData/CharitiesByIncomeBand.aspx). Under section 33 of the *Small Business, Enterprise and Employment Act 2015* small and medium-sized undertakings (which section 27 makes clear includes charities) are defined as such where they have both more than 50 employees and turnover or balance sheet totals exceed the small business threshold, currently defined within the *Companies Act 2006* as £6.5 million (turnover) or £3.26 million (balance sheet total).

compliance burdens is therefore further reinforced by a sectoral analysis (see Annex C) demonstrating that economic activity is unevenly distributed, with small numbers of large companies accounting for a majority percentage of economic activity within these sectors.[57] While not a perfect proxy for the possession of data suitable for use in the production of national statistics, UKSA believes it is reasonable to presuppose a degree of correlation between economic activity and the ownership of data pertaining to that activity, whether those data describe aspects of the economic activity itself or the parties engaged in that activity (that is, businesses and their customers).

50. Based on the internal scoping work and sectoral analysis described above, UKSA estimates that it will seek to secure data from approximately 50 public authorities, inclusive of a majority of central Government departments and a small number of the largest data-holding public agencies and local authorities.[58] In seeking access to data from public authorities ONS will adhere to the illustrative principles outlined in the Statement (see Annex D), particularly a commitment to ensure that data is only sought where scoping reveals it to be of sufficient quality and coverage to contribute to the production of official statistics. ONS also undertakes to seek data only from those authorities best-positioned to absorb the burdens and that data will only be requested where it is justified by the statistical benefits. This will, in practice, rule out many agencies with limited or very specific datasets and local authorities unless, for example, where scoping work reveals local data can account for gaps in the coverage of nationally-held datasets with national coverage.

51. UKSA further anticipates approximately 200 undertakings falling into the real scope of the legislation, accounting for the 10 largest firms across 15 sectors, alongside small numbers of sufficiently large trade associations, private regulators and other data brokers and intermediaries (where such bodies hold aggregate industry-specific data). It is not possible to be more precise about the number of public authorities and private undertakings within the real scope of this policy. This is because in the absence of legislation providing access to data it is neither possible nor feasible to conduct the large-scale, detailed scoping work necessary to determine which organisations have data of the quality and coverage necessary for the production of official statistics.

52. On the basis of an economic assessment of the costs and burdens of the legislation, UKSA anticipates that the legislation will result in a small direct cost to the public sector and a small direct net relief of burden to private undertakings. Where new compliance costs are introduced, UKSA's firm expectation is that these will be concentrated on large undertakings with comparatively high levels of organisational capacity and that can draw upon substantial data expertise and experience, high levels of resource, sophisticated data infrastructures and networks, and well-established customer bases.

53. UKSA considers that given the time needed to develop further its data and analytic infrastructures to fully make use of new sources of data it is highly unlikely that these numbers will be exceeded in the medium-term, and in any case in advance of the first post-implementation review. UKSA undertakes to provide ongoing assessments of impact (see post-implementation review, at Annex D) as part of its commitment to transparency, and to conduct and subject additional impact assessments to scrutiny where it anticipates this indicative scope may be substantively exceeded in the future.

[57] Analysis of ONS Annual Business Survey data reveals, for instance, that the 1000 biggest companies in the UK contribute 52 per cent of the total GDP contributions made by private sector organisations; the largest 500 contribute 46 per cent and the biggest 200 38 per cent.

[58] The Statistics Authority is currently discussing the obligations the legislation would place on Crown bodies. There are currently 24 ministerial departments and 22 non-ministerial departments. A list of these is available at https://www.gov.uk/government/organisations

Privacy and safeguards

54. All work undertaken by ONS is governed by statutory requirements and specific ethical obligations including those set out in the Code of Practice for Official Statistics. ONS has a number of long-standing policies and practices in place intended to safeguard the privacy of individuals, households and businesses whose data is collected and processed for the production of official statistics. The Statement / Code of Practice governing the implementation of the legislation will require ONS to evaluate the privacy risks associated with proposed new data access arrangements, to take appropriate steps to minimise these risks in collaboration with data owners, and to be transparent about how it has done so.

55. The Authority recognises that the public has a right to information on the amount and type of information being collected, and an interest in understanding the impact of technological innovation and legislative change on the way information is collected. The Authority additionally recognises the need to demonstrate that in accessing, collecting and processing data ONS' work is carried out with due regard for privacy, specifically by demonstrating how ONS:

- protects all the data that it accesses and uses;
- prevents the abuse or misuse of data; and
- takes measures to avoid accidental or deliberate disclosure of data or any other data losses.

56. New legislation would be tightly restricted to give access only to the data necessary to support the statistical functions of the Authority. Data acquired through new legislation would be subject to the same range of measures that safeguard existing data, namely:

i. **Limited to statistics and research purposes:** The SRSA limits the statutory functions of the UK Statistics Authority (and thereby ONS as its executive office) to the production and publication of official statistics that serve the public good. The Authority cannot exercise any functions beyond the scope of the SRSA; data held by ONS therefore cannot be used subsequently for operational purposes. Provisions of the proposed legislation also exclude the use of data secured under new powers in support of the provision of statistical services, while a subsequent provision also requires data owners to consent to the passing on of data to approved researchers.

ii. **Criminal penalties for misuse:** The SRSA provides for a strong criminal penalty on the unlawful disclosure of data. ONS's collection, production and dissemination of statistics is also subject to the *Data Protection Act 1998*, the *Human Rights Act 1998*, and other relevant legislation and legal conventions.

iii. **Statutory independence:** The UK Statistics Authority has statutory independence from ministers, operates at arm's length from government, and is directly accountable to Parliament. The Authority Board has a majority of non-executive members, and the Chair of the Authority is appointed after a pre-appointment hearing before a parliamentary committee and a formal motion debated on the floor of the House of Commons. The Chair and senior executives are held publicly to account and routinely provide evidence to parliamentary committees.

iv. **Professional experience:** ONS has a strong professional track record in secure data linkage for statistical and research purposes that is recognised by other departments. For example, ONS is currently working with the Department for Communities and Local Government to provide an anonymised dataset to assist the Department in its evaluation of the Troubled Families Programme. This work links together various administrative sources held across government to individual-level data for people eligible for the Programme. Identified data is held and managed in ONS's secure data linkage environment.

v. **Transparency and standards:** ONS operates transparently and publishes guidance about what data it uses and when, and the public value that is derived from the data and information supplied to it for the purposes of producing official statistics and statistical

research. ONS's Respondent Charters set out how ONS carries out its responsibilities for handling personal information from businesses, households and individuals.[59]

vi. **Strict security controls:** ONS has a strong record in protecting and safeguarding the security of data and information supplied to it, not least in its rigorous protection of personal Census information collected over the past 200 years. ONS imposes strict controls around physical security, personnel security and procedural security of the identifiable data it holds. All ONS staff must sign the ONS Confidentiality Declaration to confirm they understand strict obligations to keep information safe and secure, and the penalties for any infringement. ONS also adheres to the Government's Security Policy Framework.[60]

vii. **Statistical disclosure control:** All ONS statistical outputs are subject to Statistical Disclosure Control which prevents the identification of individuals, households and businesses (and their attributes).[61]

viii. **Codes of practice:** The *Code of Practice for Official Statistics* has statutory underpinning in the SRSA and statisticians are under an obligation to adhere to its ethical requirements, including its principles of integrity, confidentiality, and the use of administrative sources for statistical purposes. The UK Statistics Authority will seek to expand and secure public confidence through the development of additional public documents clarifying the principles and procedures governing the exercise of new powers under the proposed legislation. These documents will reaffirm the Authority's commitment to key principles related to privacy, specifically by

- underlining the Authority's obligation to ensure that access to new sources of data will only be sought where such access would be fully legally compliant and consistent with the Authority's statutory functions; and
- reaffirming the Authority's commitment to the highest standards of data security, and to ensuring that data is collected and processed in ways that are proportionate, fair and transparent.

The operationalisation of these principles will be determined subsequent to their finalisation, and will be subject to ongoing review and assessment in line with the Authority's commitment to post-implementation review of the legislation and its impact.

ix. **External scrutiny:** The National Statistician recently established the National Statistician's Data Ethics Advisory Committee which provides ethical consideration of proposals to access, share and use data. The committee has a majority of independent and lay members from outside Government, and operates transparently with all papers and minutes published. This committee provides independent scrutiny of data shares and reports to the National Statistician who reports to the Board of the UK Statistics Authority.

57. The UK Statistics Authority is committed to supporting the production of official statistics in the devolved administrations in Scotland, Wales and Northern Ireland. The Authority is currently in discussion with the statistical departments of these devolved administrations to discuss means of sharing its data with these departments for the purpose of supporting these departments to fulfil their devolved statistical functions. The practices and policies governing data sharing arrangements between ONS and the statistical departments of the devolved administrations would be underwritten by the principles on data security described above; the Authority further anticipates implementing a number of additional safeguards in such cases, such as:

i. The UK Statistics Authority will consider sharing data it holds and has collected for the purpose of carrying out its own statistical functions following a request from a member of a

[59] https://www.ons.gov.uk/surveys/informationforhouseholdsandindividuals/respondentcharterforsurveysofhouseholdsandindividuals and https://www.ons.gov.uk/surveys/informationforbusinesses/respondentcharterforbusinesssurveys

[60] For further details see ONS (2013), *Beyond 2011: Safeguarding Data for Research: Our Policy*, pp.4-5. Available at: http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/about-ons/who-ons-are/programmes-and-projects/beyond-2011/reports-and-publications/beyond-2011-safeguarding-data-for-research-our-policy--m10-.pdf

[61] For further details see https://www.ons.gov.uk/methodology/methodologytopicsandstatisticalconcepts/disclosurecontrol

devolved administration only where it is satisfied this data will be used solely for the purpose of producing devolved statistics (as defined at section 66 of the SRSA). Under no circumstances will the Authority consider sharing data for operational purposes.

ii. The UK Statistics Authority may only share that information with the consent of the data providing body, and if the disclosure is legal, ethical and does not breach any obligation of confidence owed by the data providing body or any other restriction on disclosure. The devolved administration(s) must not disclose the information to any persons beyond those granted access without making a further request that the Authority may consider.

iii. The devolved administration must nominate a responsible senior officer who is responsible for ensuring compliance with any conditions placed on them by the UK Statistics Authority.

iv. In granting such a request, the UK Statistics Authority may place any conditions it sees fit on the disclosure of information and may amend the conditions or withdraw access to the data at any time. The Authority will publish information about requests made by the devolved administrations and any conditions that have been attached by the Authority to those requests.

Options considered

58. The following three options have been considered:

Option 1

59. To give the UK Statistics Authority a statutory right of access to identifiable data held by **public authorities and large and medium-sized private undertakings** for the sole purpose of supporting the Authority's statistical functions. This option would also include legislation creating an obligation for public and private sector data providers to consult the Authority about changes to the collection and/or processing of data used for these purposes.

Benefits of option 1

60. This option will deliver a broad range of direct and indirect benefits not achievable through non-regulatory or narrower alternatives. The UK Statistics Authority anticipates that new legislation in this area will deliver a number of direct monetary benefits to UK businesses, the public sector and the UK's statistical service. In total, ONS currently receives approximately 1.2 million survey responses from more than 340,000 businesses annually. While it is unlikely that legislation will completely remove the need for surveys, evidence from the introduction of similar legislation elsewhere (such as Portugal[62]) suggests there is good reason to anticipate that greater access to business data facilitated by new legislation will lead to a significant reduction in the number and/or length of surveys that businesses are currently legally required to complete. This will lead to a corresponding reduction in the time and costs associated with survey compliance for businesses, a cost currently calculated using the GSS compliance methodology[63] at approximately £24 million per year.[64]

61. These will be supplemented by a number of anticipated indirect monetary benefits. As discussed above, the increased capacity the legislation will provide for ONS to access data holdings elsewhere in Government and the private sector will lead to considerable improvements and expansions in its suite of publicly-available national statistics, with corresponding benefits for the development of economic and public policy. In addition, UK businesses and not-for-profit organisations are also regular users of ONS statistics; the richer and more robust data landscape created by new legislation will therefore also improve the capacity of UK businesses to make informed commercial decisions, with corresponding benefits for the UK's commercial competitiveness and economic prosperity.

62. The Statistics Authority anticipates the concentrated distributional impact of the proposed legislation will support existing work to mitigate and reduce the burdens of data collection on smaller firms, leading to indirect improvements in the competitiveness of the UK economy. It is reasonable to expect that smaller firms without large research capacity or established trade and information networks will derive significant benefits from the availability of better and more extensive economic, market or demographic statistics. Improvements in the quality or scale of official statistics would also decrease barriers to entry, reducing the amount of disproportionate investment that start-up businesses and small charities are required to make in order to become competitive (or attract sufficient funding, in the case of charities) in their market. It is expected that improvements in the competitiveness of the UK economy will lead to an increase in

[62] The introduction of the Simplified Business Information has led to a significant reduction in the need for Statistics Portugal to collect survey data from businesses. See https://www.ine.pt/filme_inst/essnet/papers/Session3/Paper3.6.pdf

[63] ONS (2015), *Annual Report on Government Statistical Surveys for Official Statistics of Businesses and Local Authorities 2013/14*. Available at: http://www.ons.gov.uk/ons/rel/government-statistical-surveys/annual-report-on-government-statistical-surveys/2013-14-annual-report-on-government-statistical-surveys-for-official-statistics-of-businesses-and-local-authorities/index.html

[64] ONS, *Annual Report on Government Statistical Surveys*.

productivity and encourage inward investment and support economic growth. Some of these anticipated wider impacts are discussed and modelled in the economic assessment below.

63. The proposed new legislation would also allow ONS to make further efficiencies in the way it collects and analyses data, as well as eliminating the legal and administrative costs associated with the process around ISOs. The requirement for public and private sector data providers to consult the UK Statistics Authority would also ensure the legislation is future-proofed by guaranteeing a continuity of data supply where policy, cultural or technological developments drive changes to the way public and private sector data providers collect and process data.

Costs

64. The UK Statistics Authority anticipates that there will be costs for data owners that will be obliged, under the terms of the proposed legislation, to provide ONS with access to administrative datasets for the purposes of producing official statistics. These costs may include the establishment of access arrangements, the alignment of data collection practices and infrastructures to ensure the data is transmitted securely and in useable formats, and costs associated with facilitating access to datasets for scoping/feasibility purposes. Data providers may also incur some additional costs around familiarising staff with new requirements of the legislation, building compliance capacity, developing appropriate quality assurance arrangements, and any costs associated with the secure transmission of the data.

65. The Authority further anticipates some additional costs incurred by ONS under this option associated with the transition to access to new sources of data. These will include the costs associated with transforming the ONS workforce and infrastructure to enable full use of new data sources, including costs associated with the analysis, validation and quality assurance of administrative data. However, as part of a broader goal of diversifying and modernising its data collection practices (including electronic data collection, using 'big data' and the use of existing administrative datasets), ONS is already incurring a number of these costs. Moreover, ONS has long-standing capacity and expertise in handling large amounts of sensitive, identifiable data, including census and commercially-sensitive data;[65] the Authority therefore anticipates that there will be no significant additional costs related to physical data infrastructures.

66. There will be some costs associated with the variations in the quality and usability of publicly-held administrative data, including time lags around the transmission of data, although the restricted access ONS has to administrative data in the absence of legislation makes it difficult to assess, in a precise fashion, the quality and full economic potential of this data (and therefore associated costs). The costs and burdens associated with securing access to administrative data will be limited by Principle 6 of the *Code of Practice for Official Statistics*, which currently requires ONS to ensure costs and burdens are not excessive and are proportionate to the benefits, as well as by any reinforced commitments to such a principle within the Statement accompanying the new legislation. ONS will undertake scoping work prior to the establishment of any data access arrangement to identify these costs and burdens and to confirm the proposed arrangement complies with these principles.

Option 2

67. To give the UK Statistics Authority a statutory right of access to data held by public authorities **only** for the sole purpose of supporting the Authority's statistical functions. As for Option 1, this option would include legislation creating an obligation for public and private sector data providers to consult the Authority about changes to the collection and/or processing of data used for these purposes.

[65] See ONS (2013), *Beyond 2011: Safeguarding Data for Research: Our Policy*. Available at: http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/about-ons/who-ons-are/programmes-and-projects/beyond-2011/reports-and-publications/beyond-2011-safeguarding-data-for-research-our-policy--m10-.pdf

Benefits

68. This option would deliver a range of anticipated benefits to the production of official statistics. Guaranteed access to administrative data held by public authorities would support ONS in making improvements to the quality and timeliness of official statistics, leading to more informed government and commercial decision-making. The improvements to policy and commercial decision-making will lead to indirect improvements in the efficiency and effectiveness of public services and the UK's commercial competitiveness and economic prosperity.

69. Legislation under this option would also lead to a reduction in the costs and burdens associated with the collection, analysis and dissemination of data and the production of official statistics. The UK Statistics Authority anticipates that this will include some reductions on the current burden on UK businesses where ONS access to administrative data on businesses held by public authorities supports the removal of some of the current duplication of data collection across Government. The Authority anticipates, however, that the most sizeable cost reductions will occur within ONS itself, where gaining access to administrative data held by public authorities will lead to a reduction in the data collection and validation costs associated with the production of a range of economic and social statistics. The Census Transformation Programme is an example of the sorts of practice transformations that access to administrative data held by public authorities may support. Legislation under option 2 would also remove the legal and administrative costs associated with the process around ISOs. The requirement for public sector data providers to consult the UK Statistics Authority would help future-proof the legislation, ensuring a continuity of data supply where policy, cultural or technological developments drive changes to the way public sector data providers collect and process data.

Costs

70. Implementation of legislation under this option may involve increased costs on public sector data owners associated with the secure transmission of data and the familiarisation costs necessary to train staff and review and develop systems capable of meeting the new requirements. Transformational costs incurred by ONS in order to fully exploit access to new data sources facilitated by the legislation would be largely accounted for within the budget projections of existing transformation programmes (see 'costs' section of option 1 above). As private undertakings would fall outside the scope of legislation delivered under this policy option, this option would not lead to any increased costs on business.

Opportunity costs associated with option 2

71. The UK Statistics Authority has also identified a series of opportunity costs associated with legislation providing for access to publicly-held administrative data but excluding private sector sources of data. For instance, the Authority expects the reduction in the £24 million cost of survey compliance on business to be significantly smaller under option 2 than option 1, where data provided directly by private undertakings would lead to a significant reduction in the frequency or scale of survey-based data collection among businesses. This option would also not provide the same means for delivering improvements in the coverage, accuracy and timeliness of statistical estimates derived from data from businesses.

72. By excluding private sector data this option would represent a significant missed opportunity to make better use of the growing and still largely untapped sources of 'big data', with a range of corresponding economic and social opportunity costs. Big data and its effective exploitation are seen by a range of research and data-centric organisations as an increasingly important priority, due to the potential, as the Economic and Social Research Council has set out, for big data to "transform public and private sector organisations, drive research and development, and increase productivity and innovation". Big data is a "significant resource within the UK which can be used to the mutual benefit of academic research, organisations and society as a whole."[66]

[66] http://www.esrc.ac.uk/research/our-research/big-data-network/

73. The exclusion of private sector undertakings would also present problems in the context of the ongoing growth of integrated service provision and where private undertakings become involved in the provision of services previously undertaken by Government departments. Since the financial crisis the public sector has undergone a process of significant consolidation and rationalisation as part of an effort to improve the efficiency and effectiveness of national and local public service provision.[67] The result has been an increased outsourcing of work to private firms in many areas of public service provision, from the police to education and health.[68] Legislation under this option would therefore fail to mitigate the costs when critical gaps open between the policies and governance of public service provision and its front line delivery. There is the very real possibility that legislation limited to providing access to data held by public authorities only would allow changes in the size and relative roles of the private and public sectors to outpace ONS's capacity to respond, therefore reducing the quality and relevance of its statistical outputs. The inclusion of private undertakings would future proof the legislation by ensuring that ONS can access data related to the provision of front-line services, even where current and future private sector service providers are not contractually obliged to share that data with the commissioning public bodies.

Option 3 (do nothing)

74. In line with the opinion of Sir Charles Bean and others and reflection on progress since the passage of the SRSA,[69] the Statistics Authority believes that there is no clear evidence to suggest that ONS's current capacity to access public or private data will increase in the absence of new legislation. It therefore treats this option as a 'stand still' option.The current restrictive legislative framework for giving ONS access to identifiable data held by public authorities and private undertakings will prevent improvements to the coverage, accuracy and timeliness of official statistics. The Statistics Authority anticipates that under this option the existing costs and administrative/financial burdens on survey respondents associated with survey-based data collection will remain (and are likely to increase over time where validation costs increase as a result of falling survey response rates).

Summary of comparative advantages / disadvantages of options

75. The UK Statistics Authority currently anticipates that options 1 and 2 **will result in a <u>net reduction</u> in the cost of compliance on UK business** – although this reduction will be smaller under option 2. The currently anticipated advantages and disadvantages of each policy option are summarised in the table below.

Option 1 (access to public authority & private sector data) vs **Option 3** (do nothing)		
Direct comparative advantages	Indirect comparative advantages	Direct and indirect comparative disadvantages
• **Net reduction** in £24 million compliance burden on UK business. • **Improved distribution of impact,** reducing existing disproportionate impact of compliance on SMEs, reducing barriers to entry and	• **Improvements in the quality and timeliness of statistical outputs**, supporting improved political and commercial	• Some potential disproportionate impacts for undertakings for whom data has a comparatively high commercial value. Mitigation principles and

[67] The public sector workforce makes up just under 20 per cent of total employment, lower than at any point in the last 40 years. See Cribb, J., Disney, R., & Sibieta, L. (2014) *The Public Sector Workforce: Past, Present and Future*. London: Institute for Fiscal Studies, p.2.

[68] Cribb, *The Public Sector Workforce*.

[69] For instance, since commencement of the SRSA ONS has been able to secure only six ISOs. As discussed ISOs also prohibit exploratory and feasibility work necessary to support attempts to gain access to new sources of administrative data.

improving competition • **Significant net reduction** of costs incurred by Government (ONS) of data collection and validation • **Removal of legal and administrative costs** associated with current secondary legislation (Information Sharing Orders)	decision-making • **Improvement** in legislative framework governing statistics to maintain continuity of statistical production in face of societal and political changes	strategies will be developed during the drafting of a statement and code of practice governing the principles and procedures of the exercise of new powers under this legislation.
Option 2 (access to public authority data **only**) vs **Option 3** (do nothing)		
Direct comparative advantages	Indirect comparative advantages	Direct and indirect comparative disadvantages
• **Net reduction** in £24 million compliance burden on UK business (as a result of reduced cross-government duplication in business data collection) • **Slightly improved distribution of impact,** reducing existing disproportionate impact of compliance on SMEs, reducing barriers to entry and improving competition • **Net reduction**, over time, of the costs incurred by government (ONS) of data collection and validation • **Removal of legal and administrative costs** associated with current secondary legislation	• **Improvements in the quality and timeliness of statistical outputs**, leading to improved political and commercial decision-making • **Partial improvement** in legislative framework governing statistics to maintain continuity of statistical production in face of societal and political changes	• None anticipated.

Economic assessment of options

76. As part of its evaluation of the impact of the proposed legislation, a cost-benefit analysis has been developed by the Corporate Analysis team in the Office for the Chief Economic Adviser within ONS. This analysis quantifies the principal costs and benefits associated with greater access to administrative and other sources of data for the purposes of producing official statistics and statistical research. Based on existing methodologies, this analysis will principally seek to quantify the burden relief associated with new legislation, including direct financial savings and the reduction of identifiable opportunity costs associated with the time taken to complete surveys.

77. This analysis involved three strands of work, integrated with ongoing broader workforce and transformation exercises:

i. a review of the transformation of data collection, based on models estimating the anticipated reduction in surveys and transition arrangements to safeguard core business outputs;
ii. a verification of the costs of current data collection processes, an analysis of costs of new data collection models as anticipated in (i), and a comparative analysis of both; and
iii. a projection of the indirect benefits for UK government, business and society associated with better decision-making and a richer, more responsive and relevant statistical/data/analytic landscape.

78. This work quantified a number of additional procedural and strategic considerations, including processes around data transmission, data collection and systems integration. Under (i) above, this will incorporate ongoing work within ONS to identify the internal changes necessary to fully exploit new data sources. This is focused on producing transformational models that account for critical externalities associated with greater reliance on administrative data; namely the variation in quality of administrative data sources, and the time lags and costs associated with accessing, validating, quality controlling and, ultimately, fully utilising new data sources in statistical production.

Evidence summary

79. The 10 Year Expected Net Present Value (NPV) for option 1 is approximately **£237 million** (2014 prices). This is almost £100m above option 2's NPV. Full details of the headline numbers are provided in Figure 1 in the Outputs section below, with detailed estimates, ranges and breakdowns for all options presented in Figure 2. Figure 3 outlines the different types of costs and benefits that have been captured.

80. Over the first 10 years option 1 is expected to return **£8 of benefit for each £1 cost**. The benefit-cost ratios are higher for option 2 than for the preferred option. The lower ratio for option 1 is mostly a result of the additional compliance costs that would be incurred by private undertakings sector. However, a benefit cost ratio of 8:1 is still high, while the NPV for option 1 is considerably greater than for option 2. Hence option 1 remains the preferred option.

81. It is important to consider that the provision of statistics includes a large scope of social benefits that the market would not deliver, for example:

- Measures of economic performance to which the government can be held accountable;
- The CPI rate of inflation, which helps ensure workers receive the correct wage to reflect to their living costs;
- Crime statistics that help to optimise the focus of police services; and
- Total population statistics which are a vital aid to estimating public service requirements.

82. These positive externalities mean that a large ratio of benefits to costs is to be expected when one combines the wider benefits of higher quality statistics with a programme, delivering net savings to ONS and to private undertakings by replacing expensive survey work with pre-existing data. Option 1 has a much higher NPV than option 2 mostly due to the greater capacity for private sector data to deliver these benefits.

83. The wider economic benefits of higher quality statistics have been captured in the 'wider society' category in Figure 2. This is because the benefits to society would be extremely wide ranging, and it has not been possible to attribute exactly the distribution of the benefits of higher quality statistics across society. If it were possible to quantify exactly where the benefits of higher quality statistics would fall, one would expect the NPV figures for households, businesses and the rest of government to be considerably greater.

84. The maximum and minimum estimates of the impacts of the legislation are also shown in Figures 1 and 2. In most cases, they are estimated as plus or minus 25 per cent of the expected impacts across all costs and benefits, unless it was possible to obtain a more accurate range.

85. The 'direct effects' of the legislation, shown on the right hand side of Figures 1 and 2, show where the costs and benefits fall excluding the wider economic benefits. The NPVs for both options remain positive.

Business effects

86. The Equivalent Annual Net Direct Cost to Business (EANDCB) is the estimated annual net direct cost to businesses. A negative number therefore implies a net saving to businesses. Figure 1 shows that p expected to make an average annual saving of £555,589 (2014 prices) for 10 years through reduced survey compliance costs on a large numbers of firms, resulting from reductions in ONS business surveys. These savings are expected to outweigh the additional compliance costs that option 1 imposes in requiring a small number of businesses to provide data to ONS.

Outputs

Figure 1: 10 Year Totals	10 Year All Effects			10 Year Direct Effects		
	Expected NPV	Min NPV	Max NPV	Expected NPV	Min NPV	Max NPV
Option 1 NPV	£236,883,572	£160,074,347	£313,692,797	£16,729,846	-£5,040,947	£38,500,640
Option 1 Benefit-Cost Ratio	8.0	8.0	4.8	13.3	1.5	0.9
Option 1 EANCB (EANDCB)	-£555,589	-£555,589	£587,896	-£1,699,074	-£555,589	£587,896
Option 2 NPV	£140,260,231	£98,472,861	£182,047,601	£30,183,368	£15,915,214	£44,451,522
Option 2 Benefit-Cost Ratio	12.1	12.1	7.2	20.1	3.4	2.0
Option 2 EANCB (EANDCB)	-£2,515,219	-£2,515,219	-£1,886,414	-£3,144,024	-£2,515,219	-£1,886,414

Figure 2: 10 Year NPV Summary	10 Year All Effects			10 Year Direct Effects		
	Expected NPV	Min NPV	Max NPV	Expected NPV	Min NPV	Max NPV
Option 1:	£236,883,572	£160,074,347	£313,692,797	£16,729,846	-£5,040,947	£38,500,640
Private sector only:	£96,623,341	£61,601,486	£131,645,196	-£13,453,522	-£20,956,161	-£5,950,882
Option 2 - public sector only:	£140,260,231	£98,472,861	£182,047,601	£30,183,368	£15,915,214	£44,451,522
Option 3 - do nothing:	£0	£0	£0	£0	£0	£0
Option 1 by:						
ONS	£2,337,260	-£2,864,619	£7,539,140	£2,337,260	-£2,864,619	£7,539,140
Other Government Departments	-£6,867,757	-£9,474,407	-£4,261,107	-£6,867,757	-£9,474,407	-£4,261,107
Business	£4,782,338	-£5,060,425	£14,625,100	£4,782,338	-£5,060,425	£14,625,100
Household	£4,497,167	£3,372,875	£5,621,458	£4,497,167	£3,372,875	£5,621,458
Wider Society	£232,134,565	£174,100,924	£290,168,206	£11,980,839	£8,985,629	£14,976,049
Option 2 by:						
ONS	£178,221	-£2,265,057	£2,621,499	£178,221	-£2,265,057	£2,621,499
Other Government Departments	-£7,223,642	-£9,741,321	-£4,705,963	-£7,223,642	-£9,741,321	-£4,705,963
Business	£21,650,216	£16,237,662	£27,062,770	£21,650,216	£16,237,662	£27,062,770
Household	£3,597,733	£2,698,300	£4,497,167	£3,597,733	£2,698,300	£4,497,167
Wider Society	£122,057,702	£91,543,276	£152,572,127	£11,980,839	£8,985,629	£14,976,049

Figure 3: Category Breakdown				
Areas affected	**Surveys affected**	**Other effects**	**Statistics affected**	**10 year**
Point of Sale	Monthly Business Survey (Retail Sales Index).	Field force price collection cost saving	Measures of inflation; Retail Sales Index	£2,572,269
House Prices		Saving from outsourced data costs. ONS staff team saving	Mortgage, rent and final-sale house price data	£734,665
Flow of Funds		Saving from outsourced costs	Financial Accounts; National Accounts	£2,703,361
Social and Financial Survey Savings	Labour Force Survey; International Passenger Survey; Family Resources Survey; Living Costs and Food Survey; Survey of Income and Living Conditions; the Wealth and Assets Survey.		Labour Market; migration, international travel and tourism and related earning and spending; statistics for DWP; household expenditure for GDP; poverty; wealth	£8,945,720
Obtaining HMRC data	Annual Survey into Hours & Earnings, Short-Term Employment Surveys, the Business Register Employment Survey among others		Structure and distribution of earnings; employment; Interdepartmental Register used for national economic statistics and for other government departments	£23,754,389
Producer Price Subscription Savings		Savings from subscription costs	Producer Prices	£44,497
Wider Economic Benefits		Higher quality economic statistics: better statistics, better decisions	Economic and Social Statistics	£220,153,726
Census			Lower-level income and population statistics	£11,980,839
Data Request Compliance Costs		Compliance costs to businesses and public authorities providing data to ONS		-£25,941,536
Analytical Staff Costs		Additional analytical staff costs encountered by ONS due to additional data sources		-£8,064,357
Total NPV				£236,883,572

Methodology and sources of estimates

87. This analysis identifies the estimated benefits and costs arising from the proposed legislation. Where possible the quantitative effects were calculated using established cost and benefit methodologies (these have been referenced where appropriate in the descriptions below). Otherwise a qualitative assessment was undertaken to ensure all benefit and cost streams had been identified.

88. The UK Statistics Authority has consulted core business areas across ONS to identify the impact of greater access to administrative data facilitated by this legislation. This consultation has provided estimates of the savings to administrative costs and reductions in compliance burdens. Estimates related to economic statistics were provided by experts within the seven divisions[70] of the National Accounts and Economic Statistics directorate (NAES), who work closely with key stakeholders such as the Bank of England, HM Treasury and the Department for Business, Innovation and Skills in compiling and producing core economic statistics, including UK National Accounts, Balance of Payments, Price Indicies, Labour Market and a range of other business statistics.

89. The Census and Social and Analysis directorates[71] provided estimates of savings around the production of a range of social statistics, including population, life events and migration, crime, well-being, health, tourism, pensions, regions and local statistics, and environment and sustainable development statistics.

90. These estimates were supported by the expertise and experience of staff within ONS's Digital Services, Technology and Methodology and Data Collection directorates. These two directorates are responsible for providing technological support to data collection and analysis teams and for delivering ONS's Data Collection Transformation Programme. This involves moving survey data collection online and modernising and rationalising data processing systems to expand and diversify the organisation's capacity to make full use of different data sources. Teams within these directorates provided advice and estimates on a wide range of cost areas, including those concerning methodology, survey design and dispatch, quality control and data security, editing and validation. ONS's Corporate Services teams provided evidence and estimates related to additional staffing costs.

91. Consultations across these directorates revealed three areas of anticipated benefits, captured within this economic assessment:

    i. reduced compliance costs for businesses from fewer and shorter surveys;
    ii. reduced administrative costs on ONS from collecting and processing survey data; and
    iii. improved statistics leading to better policy decisions, such as improved financial management reducing the risk of deep recessions.

92. The main costs are associated with new compliance costs for businesses and public authorities meeting obligations to provide requested data.

Key assumptions

93. The calculations are based on a number of general assumptions, as follows:

    i. The assessment assumes that the legislation is enacted in 2017;
    ii. Where price values have not been provided in 2014 prices they have been rebased to 2014 prices using the Treasury's GDP Deflator, as specified in the Green Book;

[70] These divisions are Labour Market and Households; Prices; National Accounts Co-ordination; Sector and Financial Accounts; Balance of Payments and Trade; Public Sector; and Surveys and Economic Indicators.

[71] The estimates here are based on expertise provided across four divisions: the Well-being, Inequalities, Sustainability and Environment division; the Public Policy division; the Population Statistics division and the Life Events and Population Sources division. They were supported by expertise in the Census directorate focused on the delivery of the design, control and delivery of the Census Transformation Programme.

iii. The discount rate is 3.5 per cent, as recommended in the Green Book;

iv. A 15 per cent optimism bias was consistently applied to all estimates. This was calibrated to take account of the countervailing forces that i) in many areas use of administrative data is a new, innovative challenge, but that ii) ONS has already made headway and gained experience in accessing and using administrative data. Further justification for this figure is provided in the optimism bias section below, along with a sensitivity analysis of the optimism bias at Annex A1.

v. The calculations assume that impacts will occur gradually. Benefits have therefore been downscaled by 80 per cent in the first year. For each following year the benefits are scaled-up by an extra 20 per cent of any calculated benefit. 100 per cent of calculated benefits are accrued from 2021. This recognises that the benefits will be delivered as part of a large and complex change programme with cross-project dependencies. This prudent approach to assessing the benefits of the legislation is supported by the Bean Review, which acknowledges that the transformation "cannot happen overnight, as it will take time to work out how best to exploit such information and to develop the necessary skills and systems. But progress in securing access will be absolutely critical."

vi. Compliance cost figures are taken from the 2015 Online List of Government Statistical Surveys. In some cases, ONS statistical divisions provided estimates based on ongoing practice transformation exercises of the degree to which the length or sample size of specific surveys (and therefore associated validation costs and respondent burdens) could be reduced following the implementation of data access legislation. Where this was not possible, cost savings from the reductions to ONS surveys have been calculated as 10 per cent of the total respondent compliance costs and 10 per cent of ONS's survey running costs for each affected survey. This is a highly conservative figure that reflects the uncertainty; further justification for the use of this figure is provided in the Survey Assumptions section below, along with a sensitivity analysis of these assumptions at Annex A2.

vii. Independently of preparations for the proposed legislation, ONS is currently undertaking work on a number of transformation programmes[72] as part of the modernisation of the organisation's data collection and processing capabilities, including:

- Census Transformation Programme
- Economic Statistics Transformation Programme
- Data Collection Transformation Programme

In consultation with the teams leading these programmes, the Statistics Authority has identified that the costs of providing data infrastructures and staffing to exploit access to new data sources on the anticipated scale will be met within existing budget projections. For instance, within the planning of these programmes there is scope for the redeployment of data processing facilities and analytical staff to accommodate the new data flows envisaged by the proposed legislation. For the purposes of this assessment these costs have therefore for the most part not been included within the assessment of the economic impact of the proposed legislation. This notwithstanding, the assessment builds in a level of staffing costs related to the analysis of new data sources to account for unforeseen staffing needs. This contingency, based on consultations across the key survey and Corporate Services divisions of the organisations, is described in the final stages of this assessment.

viii. Additional assumptions that apply in specific savings / costs areas are described and justified in the sections below.

[72] For an overview see UKSA (2015), *UK Statistics Authority Business Plan – April 2015 to March 2018*, p.11. Available at: http://www.ons.gov.uk/ons/external-links/social-media/about-ons/ons-business-plan-2015-to-2018.html

Optimism bias

94. When estimating the appropriate optimism bias adjustment to apply, the Green Book's supplementary guidance recommends starting at the upper limit of the optimism bias ranges suggested by Mott McDonald. These ranges are widely cited by government guidelines on cost benefit analysis modelling. Although a lose fit, the most relevant range in the guidance for the legislation is that for 'equipment and development projects'. This sets the upper optimism bias limit at 54%.

95. The next step is to reduce this figure based on the extent to which the mitigating factors reduce the risk of over optimism. The lower limit in the McDonald guidance suggests the bias adjustment could be scaled down from 54% to 10%.

96. The table below details the areas of risk to each of the key benefit and cost areas that the ONS has identified. Strong mitigating factors are also listed for each risk area. Many of these mitigating factors apply across the benefits and costs for the data sharing legislation and the relevant mitigating factors for these risks are relatively strong, especially when taken together. As such, a 15% optimism bias has been applied across the benefits and costs. This provides clarity across our calculations and helps facilitate the optimism bias sensitivity analysis detailed in Annex A.1.

Cost/ Benefit Category	Risks	Mitigating Factors
Estimates for survey respondent burden reductions	Some data sources might be less useful than initially expected, meaning the ONS is unable to reduce survey lengths.	Much of the high priority data that ONS would like to access, such as PAYE data, provides actual figures for data that are currently estimated using survey samples. The estimates for the majority of savings to survey burdens were estimated at 10%: very conservative given that access to additional data could obviate the need for some existing surveys. International experiences also suggest that our estimates are conservative.
Estimates for survey running cost reductions	Some data sources might be less useful than initially expected, meaning the ONS is unable to reduce survey lengths, and thus the costs of producing them.	Similar reasoning as above; the strong likelihood that our 10% estimate for survey reductions is conservative mitigates the need for a high level of optimism bias.
Subscription cost savings	Legal issues surrounding existing contracts.	If there are contractual issues with some of our current data sources that the legislation does not overrule, the benefit of accessing data freely would be delayed until those contracts expired. Key assumption v, the benefit delay assumption, is a prudent measure that we've applied to all figures, capturing the consideration that those benefits may only accrue gradually.
Wider economic benefits from statistical quality improvements	The estimation in the economic assessment could be overstating the causal relationship between statistical improvements and marginal improvements to GDP.	This assessment includes evidence from a number of reputable sources to demonstrate the wider economic value of better quality statistics. Additionally, ONS is currently undertaking research to assess the economic effects of improvements to economic statistics. The findings of this research will further inform this debate.

Analytical staff costs	It could take longer than anticipated to integrate new data sources into our key economic and social statistics, resulting in additional staff costs to the ONS.	ONS is initiating a data collection transformation programme that includes funding for additional analytical staff; ONS will to use these staff to clean, analyse and integrate data into our existing systems. The staff costs included in these calculations is additional and thus already contingent on staff needs exceeding estimations made in those programmes.
Data request compliance costs	The cost of compliance for firms and government departments might be higher than expected. The resources invested in the negotiations are hard to predict with certainty.	Businesses have provided a range based on best estimates of costs. The estimates we used here are close to the upper range of those given. Furthermore, these businesses could have an incentive to overestimate incoming compliance costs. The ONS will closely monitor the costs to public authorities and businesses of our data requests to ensure the burdens from data requests are kept as low as possible. It would be entirely possible to reduce the scope of the data requests if the costs greatly exceeded our estimates. This reduces the risks associated with the legislation, and therefore the need for a high level of optimism bias.

Survey cost and burden reduction assumptions

97. Where the Statistics Authority has identified that access to administrative or other sources of data would lead to a reduction or elimination in the need for survey-based data collection, it has applied a percentage saving to survey-based burdens.[73] In some cases it was possible to obtain estimates based on the expertise of the divisions responsible for these surveys.[74] Elsewhere, where consultations with the survey divisions have provided clear indications that greater access to administrative and other sources of data would lead to a reduction in the scale or length of surveys but no precise estimate was provided, the Authority has applied a conservative **10 per cent reduction to the existing survey-based burdens.** This estimate is based on evidence drawn from ONS's extensive experience of using administrative data and its impact on survey data collection practices and on expert opinion beyond ONS.[75]

98. The expectation that greater access to administrative and other sources of data will lead to significant savings in the burdens and costs associated with survey-based data collection is further evidenced by a number of international examples,[76] for instance:

[73] For the purposes of this assessment, 'burdens' or 'compliance costs' are used where the financial costs of surveys are incurred by survey respondents (that is, businesses and other private undertakings, households or individuals), and 'costs' where the costs are incurred by ONS in the process of issuing surveys and validating responses.

[74] A higher reduction level has been maintained for respondents to the Annual Survey of Household Earnings, Short Term Employment Statistics and Business Register Employment Survey, as these surveys will be significantly smaller in the event that the ONS secures access to PAYE data.

[75] In his recent review of the production of economic statistics Sir Charles Bean makes clear at several points that he expects greater access to administrative data to have a number of important benefits, including a reduction in the costs and burdens associated with collecting data through surveys.

[76] For a discussion of the way response burdens are calculated and the central role of improved access to administrative data in reducing these burdens see for example Giesen, D., Bavdaž, M., Löfgren, T., & Raymond-Blaess, V. (2015), 'Response burden in official business surveys: Measurement and reduction practices in National Stastical Institutes',

- In Canada the Unified Enterprise Survey, the goal of which was to improve the consistency, coherence, breadth and depth of business survey data, has reduced the response burden of survey-based data collection 'by almost 20 per cent';[77]
- New Zealand has significantly trimmed sample sizes through the use of administrative data and achieved a 66 per cent reduction in response burden between 2002 and 2015, saving New Zealand businesses approximately 34,000 hours per year;[78]

99. Estimates have been used as it is not possible to determine the precise reduction in the cost of response burden in the absence of legislation providing access to administrative and other data sources. Moreover, the Statistics Authority anticipates savings differing substantially depending on the scale and nature of administrative data it can acquire and to the extent to which those data can replace components of related surveys (or complete surveys). The extremely conservative figure of 10 per cent is therefore a representative figure applied wherever there is a reasonable expectation that access to administrative and other sources of data would lead to significant reductions in the length of surveys, the sample size or an increase in the probability of surveys being replaced in their entirety.

100. The Statistics Authority has used this extremely conservative estimate (based on evidence of international case studies) in recognition of these uncertainties. To further account for uncertainties the economic assessment includes a sensitivity analysis demonstrating the additional savings achievable where the average percentage reduction in the response burden of surveys is higher (see Annex A.2).

101. Table A2.1 in Annex A.2 demonstrates that net savings on the EANDCB are obtainable with a reduction of survey-based compliance burdens of as low as five per cent. NPV and benefit-cost ratios remain above 1.0 for both options even if survey compliance costs do not fall. This is also true for the direct effects of the legislation, as demonstrated in Table A2.2.

Evidence base

EANDCB calculations: direct costs and benefits for option 1

102. The 10-year estimated annual net direct cost to businesses calculation is detailed below. This is the same as the estimated annual net cost to businesses (EANCB) because all of the effects to businesses that have been quantified are direct effects.

The costs and benefits listed below account for **direct business effects** for option 1 on a 'per annum' basis. The final figures have been adjusted to account for the 15 per cent optimism bias and have been rebased to **2014** prices. The total sum of the final figures (bolded), when discounted at 3.5 per cent for each year over 10 years (unless otherwise stated), provides the 10-year expected NPV effects for businesses (£4,782,338, see Figure 2 in the Outputs section). From this the 10-year EANDCB has been calculated using the formula detailed in the Better Regulation Framework Manual.[79] The final 10-year EANDCB figure reflects an expected net benefit of **£555,589** (see Figure 1 in the Outputs section).

Journal of Official Statistics 31(4), pp.559-588. Available at: https://www.blue-ets.istat.it/fileadmin/deliverables/Response_Burden_in_Official_Business_Surveys_jos-2015-0035.pdf

[77] Brodeur, M., & Ravindra, R. (2007), 'Unified Enterprise Survey: New Horizons', New York: United Nations Department of Economic and Social Affairs Statistics Division, p.7. Available at: http://unstats.un.org/unsd/economic_stat/intl%20coop%20and%20workshops%20(bes)_files/AddisOct2007/UNSD%20documents/WS-BES-ECA-136-8-UES-Canada.pdf

[78] Stewart, J., Costa, V., Page, M., Chen, C. (2014), 'Maximising the Use of Administrative Data in Sub-Annual Business Collections'. Available at: http://www.amstat.org/meetings/ices/2012/papers/302186.pdf

[79] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/468831/bis-13-1038-Better-regulation-framework-manual.pdf

Annex A.3 includes a table with the summary details of all of the costs and benefits to businesses for each option.

102.1 *Savings from obtaining scanner data from commercial firms*

- **£66,136 annual compliance (private undertakings) savings (Monthly Business Survey: Retail Sales Index)**

The compliance cost to businesses responding to the Monthly Business Survey (Retail Sales Index) is currently £65,072,[80] at an annual cost of £780,211.

The legislation will enable ONS to seek access to scanner data held by commercial firms, which would include data within the current sample frame of the Monthly Business Survey. It is assumed that this would lead to a reduction in the size of the survey (and consequently the respondent burden) of 10 per cent. This would deliver an annual saving to businesses of £66,136, after adjusting for optimism bias and rebasing to 2014 prices.

102.2 *Savings from obtaining annual HMRC data*

Access to administrative data held by HMRC will enable ONS to make reductions in the length or sample size of a number of business surveys, specifically:

1. Annual Survey into Hours & Earnings (ASHE);
2. Short-term Employment Surveys (STES);
3. Business Register Employment Survey (BRES);
4. Monthly Wages and Salaries Survey;
5. Monthly Business Survey (Construction);
6. Monthly Business Survey (Production & Services);
7. Quarterly Business Survey (Employment);
8. Labour Disputes Survey;
9. Pension Surveys: Pension Funds Transactions in Financial Assets, Pension Funds Income & Expenditure and the Pension Funds Balance Sheet Surveys; and
10. Occupational Pension Schemes Survey (OPSS).

Surveys 1-3:

- **£2,665,983 total annual compliance (private undertakings) savings**

i. ASHE currently has a total annual compliance cost of £4,660,070. The Labour Market and Households division within NAES estimates that these costs could be reduced by approximately 40 per cent as a result of greater access to PAYE data. This has been reduced by an additional 20 per cent to a saving of 32 per cent to the total compliance cost to account for uncertainty.

ii. STES has total annual compliance costs of £3,803,304. The Labour Market and Households division estimates that these costs could be reduced by approximately of 37.5 per cent as a result of access to PAYE data. This has been reduced to a saving of 30 per cent to the total compliance cost to account for uncertainty.

[80] Unless otherwise stated, all compliance costs to business are sourced from the 2015 Online List of Government Statistical Surveys. Available at: https://gss.civilservice.gov.uk/survey-control-unit/online-list-of-government-statistical-surveys/

iii. BRES has total annual compliance costs of £6,538,072. The Labour Market and Households division estimates that these costs could be eliminated as a result of greater access to PAYE data (this has been reduced to 80 per cent to account for uncertainty).

While the legislation will provide access to administrative data, other ONS transformation programmes will be required to obtain the full extent of the potential benefits from the new data sources. For example, ONS will have to imbed appropriate technology platforms, conduct analysis on how to use the data in various calculations and redesign a limited number of surveys that will fill any gaps in data collection. On the basis of estimates provided by the ONS transformation programme teams (see above), it is therefore assumed that only 40 per cent of the cost savings listed above will be a result of the legislation and the remaining 60 per cent will accrue from the work conducted by the relevant ONS transformation programmes. Once adjusted for the 15 per cent optimism bias and rebased to 2014 prices, the final annual estimates for the savings to business compliance costs are:

- **£505,626** for ASHE
- **£386,874** for STES
- **£1,773,483** for BRES

Surveys 4-9:

- **£611,487 total annual compliance (private undertakings) savings**

The table below shows the savings associated with each of these surveys, based on the annual compliance cost of each survey, after adjustments for the survey saving assumption (at 10 per cent, see assumptions, above), inflation and the 15 per cent optimism bias.

Survey number	Survey name	Annual compliance cost (2015)	Estimated saving (2014 prices)
4	Monthly Wages and Salaries Survey	£546,040	£46,286.
5	Monthly Business Survey (Construction)	£2,479,725	£210,199.
6	Monthly Business Survey (Production & Services)	£3,803,304	£322,395
7	Quarterly Business Survey (Employment)	£164,597	£13,952
8	Labour Disputes Survey	£1,201	£102
9	Pension Surveys (measured collectively: Pension Funds Transactions in Financial Assets, Pension Funds Income & Expenditure and the Pension Funds Balance Sheet surveys)	£218,869	£18,553

Survey 10:

- **£106,586 total annual compliance (private undertakings) savings**

Current compliance costs to businesses of the OPSS are £78,588 a month, at an annual cost of £943,051. Applying a 10 per cent survey saving reduction and adjusting for inflation and the 15 per cent optimism bias means that access to HMRC data would deliver an estimated annual saving to businesses of £79,940.

102.3 *New compliance costs*

- **£9,174,792 initial compliance (private undertakings) costs**

On the basis of consultations with a number of large private undertakings of the sort ONS are likely to approach for data under the terms of the new legislation, the Statistics Authority estimates that private undertakings required to provide data will incur initial costs of around £40,000 to cover the discussions needed to finalise data access arrangements and set-up costs (covering infrastructure changes and staff familiarisation where necessary). This represents a cost of £8,000,000 for the first year only for the approximately 200 undertakings within scope of the legislation, adjusted for optimism bias and inflation.

- **£1,146,849 annual compliance (private undertakings) costs**

Consultations identified undertakings will incur an additional £5,000 of costs on an annual basis related to sending ONS the agreed data content. This represents a cost of £1,000,000 for each year for the approximately 200 undertakings within scope of the legislation, adjusted for optimism bias and inflation. The recurrent cost starts from the second year of the legislation.

Quantified benefit calculations: all effects for option 1

103. The benefits listed below account for **all effects** for option 1 on a 'per annum' basis. The final figures (bolded) have been adjusted to account for the 15 per cent optimism bias and have been rebased to **2014** prices. The total sum of the final figures (bolded), when discounted at 3.5 per cent for each year over 10 years (unless otherwise stated), The list is a complete list of all of the quantified benefits of the legislation, **including the benefits to businesses listed in the EANDCB section**. The benefits, along with the costs, are **summarised in Annex A5.** Where quantified benefits are based on specific assumptions not listed in the section above these assumptions are described in the text.

Summary

104. The largest benefits come from the wider economic benefits. As outlined in the Bean Review and the Johnson Review,[81] access to public and private sector data will help to improve the quality of ONS statistics and therefore the evidence base informing the decision-making of a range of Government stakeholders (such as allowing Government and the Bank of England to better optimise tax, spending policy and interest rates decisions to the conditions of the economy) and therefore indirectly supporting increases in economic activity, productivity and the UK's competitiveness. Better statistics will also help to highlight key warning signs, making it easier for fiscal and monetary policy-makers to avoid or reduce the impact of economic crises.

[81] https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/12/images-ukconsumerpricestatisticsarevie_tcm97-44345.pdf

The Statistics Authority anticipates a range of other indirect financial benefits, such as those delivered through policy-making that benefits from improved census data or extended or higher quality population and income data. The Authority also anticipates cost savings from the subscription costs the ONS will pay to external providers to access data it requires (these costs would be saved only under option 1).

104.1 *Savings from obtaining scanner data from commercial firms*

- **£310,813 annual cost (ONS) saving (ONS field force costs)**

Every three years ONS spends £5.5m on staff to collect data on prices from shops across the country. This represents an annual cost of £1.83m per year. Access to scanner data from major retailers could significantly reduce the costs of these activities. Notwithstanding that data would still need to be collected from small and medium-sized retailers the Prices division estimates that access to price data would allow for a 20 per cent reduction in current costs associated with the collection of price data.

- **£21,964 annual cost (ONS) savings (Monthly Business Survey: Retail Sales Index)**

The total cost to the ONS of running the Monthly Business Survey (Retail Sales Index) is £261,746 per annum. New legislation will enable ONS to access data currently collected as part of the Monthly Business Survey, leading to an estimated 10 per cent reduction in the size and corresponding costs of the survey.

- **£66,136 compliance (private undertakings) savings (Monthly Business Survey: Retail Sales Index)**

The compliance cost to businesses of responding to the Monthly Business Survey (Retail Sales Index) is £65,072, representing an annual cost of £780,211.

Access to retailer scanner data enabled by the new legislation will provide ONS access currently collected as part of the Monthly Business Survey, leading to an estimated 10 per cent reduction in the size and corresponding costs of the survey. After adjusted for optimism bias and rebasing to 2014 prices, this represents an annual saving to businesses of £66,136.

104.2 Savings from reduced or eliminated existing data access and subscription costs

The Statistics Authority expects that the proposed legislation will provide opportunities for ONS to eliminate the costs it currently incurs for data provided by public and private data holders, either with the same data providers following the expiration of existing contracts, or as a result of access facilitated by the legislation to the same data from alternative sources.

House price data: the economic assessment accounts for the following specific savings as a direct consequence of the legislation:

i. Options 1 and 2 would enable ONS to access housing data from the Council of Mortgage Lenders (CML), held by the Financial Conduct Authority. ONS currently pays for a sample of property transaction data from the CML, collected via the Regulated Mortgage Survey, which provides information on the purchase price for transacted property, mortgage size and duration, property attributes and buyer attributes. The data is used as a feed into the construction of the UK House Price Index (HPI) but is also used to provide analysis of housing affordability (such as property price to income and property price to mortgage ratios). An additional benefit (captured in the wider economic

benefits estimate) would be having full access to the data that will improve the quality of analysis currently produced and also allow for more detailed analysis of the UK housing market.

ii. Options 1 and 2 would provide ONS final-sale house price data from Land Registry is the main input used in the calculation of the HPI, providing full coverage of all property transactions in England and Wales. This data is invaluable in providing an up-to-date account of movements in the property market. Legislation under option 1 would ensure continuity of supply should the Land Registry be privatised; without option 1 ONS would incur costs associated with obtaining final-sale house price data. Comparable figures are taken from estimates of what the price of this data would be if the ONS had to purchase it commercially. The calculations assume a probability of privatisation of 50 per cent. The 'minimum' estimate assumes this benefit is zero (for the event that the Land Registry is not privatised). The 'maximum' estimate captures 100 per cent of this benefit (for the event that the Land Registry is privatised).

iii. ONS currently pays subscription costs for access to demographic data provided through CACI's market research tool ACORN. The ACORN dataset segments postcodes into categories that define the type of neighbourhood they represent, and represents an important explanatory characteristic used in the modelling of house prices in the UK HPI. ACORN data could be linked with microdata from the Valuation Office Agency to support analysis of the housing rental market.

Producer price subscription costs: ONS currently incurs subscription costs from a range of private data providers and market research and data analytic firms, including the Investment Property Bank, the international Tea Committee. The economic assessment includes these costs as savings as a consequence of the reasonable expectation that legislation under option 1 would allow ONS cost-free access to this data, either through these existing or alternative sources.

104.3 *Savings related to the costs of the production of 'flow of funds' statistics*

- **£419,224 annual cost (ONS) savings (UK National Accounts statistics)**

ONS is currently working in partnership with the Bank of England to identify balance sheet exposures between different institutional sectors, with a focus on improving the range and quality of current statistics related to financial flows between and within sectors.

The Balance of Payment and Trade division estimate that access to data held by a range of financial institutions would save ONS approximately £500,000 that would otherwise be spent on purchasing this data. This is a conservative estimate, and the potential costs could be much higher; for instance the Balance of Payment and Trade team have recently consulted with a large professional services firm with a view to developing a bespoke system to access and analyse derivatives data, at an estimated cost of between £1 and 2 million.

104.4 *Savings on the existing costs of social and financial surveys*

- **£689,860 total annual cost (ONS) saving**

The Statistics Authority expects the legislation to deliver a range of other cost savings associated with the collection of data feeding into the following surveys:

- Labour Force Survey (LFS);
- International Passenger Survey (IPS);
- Family Resources Survey (FRS);

- Living Costs and Food Survey;
- Survey of Income and Living Conditions (SLC); and
- Wealth and Assets Survey.

Cost savings to the affected surveys were measured collectively. ONS's Data Collection directorate estimates that greater access to administrative and other data would lead to a reduction in survey household interview lengths of 50 per cent and a 25 per cent reduction in field and telephone data collection costs (savings of £838,000 and £371,000 respectively). With an estimated reduction of £820,000 from the fixed costs of the surveys, the total potential savings achieved through increased access to administrative and other data sources are £2,029,000.

ONS will likely still require a small number of social and business surveys to fill in information gaps in the new data sources opened up by the legislation. These surveys will be significantly smaller in size, as well as number, than the current portfolio of surveys. The economic assessment takes a conservative view as to the extent to which the legislation will allow the ONS to achieve these savings, applying a 40 per cent reduction to the achievable reduction in total survey costs.

The Data Collection directorate estimates that approximately 80 per cent of these savings would be delivered as a result of increased access to data held by Government departments. Legislation would provide ONS with access to datasets held by HMRC and the Department for Work and Pensions (DWP) and qualification and education data from the Department for Business, Innovation and Skills (BIS) and the Department for Education (DfE). The Social Survey division estimates that these savings will be split 60/40 (£331,133 / £220,755) between ONS and the Government departments that currently partly fund some of the ONS surveys.

The Social Survey division estimates that approximately 20 per cent of the savings would be delivered as a result of increased access to data held by private undertakings (benefit to option 1 only), such as retailer scanner data providing details on household expenditure, and small area data on mobile populations provided by phone operators. This equates to an estimated £82,783 of savings for ONS and £55,189 savings to other Government departments.

- **£697,399 compliance (households) savings**

All of these surveys are completed by households. Currently the compliance costs for household surveys are calculated as time costs (total number of minutes). For the purpose of this assessment the Statistics Authority has calculated that one hour of respondent's time is worth £6.71, based on adjusted 2010 estimates by the Department for Transport (DfT).[82] This has been multiplied by the estimated time savings, adjusted in accordance with the 10 per cent savings assumption and the 15 per cent optimism bias, to determine an approximate value for leisure time related savings households would enjoy as a result of a reduction of the burden associated with survey completion.

As for the savings discussed above, the Social Survey team estimate that 80 per cent of these savings will occur as a result of ONS obtaining access to administrative data held by public authorities (both options), with an additional 20 per cent of the saving directly related to data held by private undertakings (and therefore attributable to option 1 only).

[82] The DfT 2015 WebTAG value estimate one hour of leisure time at £6.23 in 2010 prices, which after inflating to 2014 prices gives £6.71 per hour. See table M 2.1 within https://www.gov.uk/government/publications/webtag-tag-data-book-december-2015"

104.5 *Savings from obtaining HMRC data*

Access to administrative data held by HMRC will enable ONS to make reductions in the length or sample size of a number of business surveys, specifically:

1. Annual Survey into Hours & Earnings (ASHE);
2. Short-term Employment Surveys (STES);
3. Business Register Employment Survey (BRES);
4. Monthly Wages and Salaries Survey;
5. Monthly Business Survey (Construction);
6. Monthly Business Survey (Production & Services);
7. Quarterly Business Survey (Employment);
8. Labour Disputes Survey;
9. Pension Surveys: Pension Funds Transactions in Financial Assets, Pension Funds Income & Expenditure and the Pension Funds Balance Sheet Surveys; and
10. Occupational Pension Schemes Survey (OPSS).

Surveys 1-3:

- **£101,721 total annual cost (ONS) savings**

i. ASHE: the Labour Market and Households division estimates that PAYE data will save ONS £135,000 per annum associated with the cost of running the ASHE. However, due to anticipated variance in the level of detail and quality of PAYE data and the difficulty in identifying this variance in advance of legislation to provide access to the data the Labour Market and Households division estimate these savings could also range from a minimum of £30,000 to a maximum of £240,000. This range has been incorporated into the minimum and maximum cost/benefit calculations.

ii. STES: the Labour Market and Households division estimates that a maximum of £180,000 could be saved per annum from running the STES by access to HMRC-held employment and PAYE data, assuming these data would replace the need for the survey. As many of the surveys used here also collect turnover the potential savings could be greater if turnover can be sourced from administrative data. As these potential additional savings cannot be quantified the estimated maximum saving has been capped at £180,000. The anticipated savings have been reduced by 50 per cent (£90,000) to account for uncertainty.

iii. BRES: the Labour Market and Households division estimates savings to ONS of £75,000. However, due to anticipated variance in the level of detail and quality of the administrative data and the difficulty in identifying this variance in advance of legislation to provide access to the data the Labour Market and Households division estimate these savings could also range from a minimum of £20,000 to a maximum of £130,000.

ONS will likely still require a small number of social and business surveys to fill in information gaps in the new data sources opened up by the legislation. These surveys will be significantly smaller in size, as well as number, than the current portfolio of surveys. The economic assessment takes a conservative view as to the extent to which the legislation will allow the ONS to achieve these savings, applying a 40 per cent reduction to the achievable reduction in total survey costs. Once adjusted for the 15 per cent optimism bias and rebased to 2014 prices, the final annual estimates for the savings to business compliance costs are:

- £45,774 for ASHE
- £30,516 for STES
- £25,430 for BRES

➢ **£2,665,983 total annual compliance (private undertakings) savings**

i. ASHE currently has a total annual compliance cost of £4,660,070. The Labour Market and Households division within NAES estimates that these costs could be reduced by approximately 40 per cent as a result of greater access to HMRC administrative data. This has been reduced by an additional 20 per cent to a saving of 32 per cent to the total compliance cost to account for uncertainty.

ii. STES has total annual compliance costs of £3,803,304. The Labour Market and Households division estimates that these costs could be reduced by approximately of 37.5 per cent as a result of greater access to administrative data. This has been reduced to a saving of 30 per cent to the total compliance cost to account for uncertainty.

iii. BRES has total annual compliance costs of £6,538,072. The Labour Market and Households division estimates that these costs could be eliminated as a result of greater access to HMRC administrative data (this has been reduced to 80 per cent to account for uncertainty).

While the legislation will provide access to administrative data, other ONS transformation programmes will be required to obtain the full extent of the potential benefits from the new data sources. For example, ONS will have to imbed appropriate technology platforms, conduct analysis on how to use the data in various calculations and redesign a limited number of surveys that will fill any gaps in data collection. On the basis of estimates provided by the ONS transformation programme teams (see above), it is therefore assumed that only 40 per cent of the cost savings listed above will be a result of the legislation and the remaining 60 per cent will accrue from the work conducted by the relevant ONS transformation programmes. Once adjusted for the 15 per cent optimism bias and rebased to 2014 prices, the final annual estimates for the savings to business compliance costs are:

- £505,626 for ASHE
- £386,874 for STES
- £1,773,483 for BRES

Surveys 4-9:

➢ **£214,728 total annual cost (ONS) savings**

The Statistics Authority has identified potential savings associated with reductions in the length of sample size of a number of other surveys as a result of ONS gaining access to PAYE data. The table below shows the cost savings associated with each of these surveys, based on the annual administration costs of each survey, after adjustments for the survey saving assumption (at 10 per cent, see assumptions, above), inflation and the 15 per cent optimism bias.

Survey Number	Survey Name	Annual ONS Running Cost (2016 forecast)	Estimated Saving (2014 prices)
4	Monthly Wages and Salaries	£560,842	£47,024

	Survey		
5	Monthly Business Survey (Construction)	£862,583	£72,323.
6	Monthly Business Survey (Production & Services)	£1,029,610	£86,327
7	Quarterly Business Survey (Employment)	£33,589	£2,816
8	Labour Disputes Survey	£-	£-
9	Pension Surveys (measured collectively: Pension Funds Transactions in Financial Assets, Pension Funds Income & Expenditure and the Pension Funds Balance Sheet surveys)	£74,399	£6,238

- **£611,487 total annual compliance (private undertakings) savings**

The table below shows the compliance savings associated with each of these surveys, based on the annual compliance cost of each survey, after adjustments for the survey saving assumption (at 10 per cent, see assumptions, above), inflation and the 15 per cent optimism bias.

Survey Number	Survey Name	Annual Compliance Cost (2015)	Estimated Saving (2014 prices)
4	Monthly Wages and Salaries Survey	£546,040	£46,286.
5	Monthly Business Survey (Construction)	£2,479,725	£210,199.
6	Monthly Business Survey (Production & Services)	£3,803,304	£322,395
7	Quarterly Business Survey (Employment)	£164,597	£13,952
8	Labour Disputes Survey	£1,201	£102.
9	Pension Surveys (measured collectively: Pension Funds Transactions in Financial Assets, Pension Funds Income & Expenditure and the Pension Funds Balance Sheet surveys)	£218,869	£18,553

Survey 10:

- **£9,856 annual cost (ONS) savings**

The current administration costs to ONS of the OPSS are £117,550 per annum. Applying a 10 per cent survey saving reduction and adjusting for inflation and the 15 per cent optimism bias means that access to HMRC pension data would deliver an estimated annual saving to ONS of £9,856.

- **£79,940 annual compliance (private undertakings) savings**

The current compliance costs to business of the OPSS are £78,588 per month, at a cost per annum of £943,051. Applying a 10 per cent survey saving reduction and adjusting for inflation and the 15 per cent optimism bias means that access to HMRC pension data would deliver an estimated annual compliance saving to business of £79,940.

104.6 *Wider economic benefits*

In 2004, then president of the European Central Bank told a conference of statisticians and economic policy makers that "the availability of trustworthy and timely statistical time-series is a prerequisite for an effective and correct assessment of the monetary and economic situation and future prospects. Moreover, economic agents also use these statistics for their own decisions, which then drive the developments of financial and other economic markets."[83] Sir Charles Bean reiterated this point in his recent review when noting that "timely and relevant economic statistics are key to effective policy making", and that reliable economic statistics are "central to business planning and to the electorate's ability to hold decision makers to account".

The Statistics Authority anticipates a number of positive indirect impacts for UK GDP due to the improved evidence base available to public and economic policy-makers as a consequence of improved statistics. For example, the Bank of England Monetary Policy Committee relies heavily on ONS inflation (CPI) data in forming opinions and exercising monetary policy instruments. The principal of these – adjustments of the base rate of interest – have by definition considerable impacts on GDP. The ONS published GDP values also provides vital information for the Committee when balancing the trade-off between inflation and economic growth.

For the government, GDP levels will determine its ability to pay off its debt. The ONS GDP figures also indicate whether the economy is overheating or has spare capacity. If the GDP figure suggests the economy is overheating, but there is actually spare capacity in the economy, this could lead to policies such as tax increases that would cause output to fall further from its potential, and potentially lead to a recession. Many policy decisions are based on forecasts of GDP, so an improvement in the quality of GDP statistics, which might be best observed by a decrease in the number of revisions to economic statistics, would lead to a higher accuracy of economic forecasts. This could be significant, because important decisions over the level of government spending and interest rates are partially based on expectations of the future directions of the economy.

The Statistics Authority recognises the difficulty of identifying the monetary value of the link between improved economic statistics and better economic decision-making. Nevertheless, it

[83] Trichet, J (2004), 'Euro area statistics and their use for ECB policy-making: opening address', in *Statistics and their Use for Monetary and Economic Policy-Making*, p.29. European Central Bank: Second ECB Conference on Statistics, 22 and 23 April 2004.

is also clear that the relationship between economic statistics and sound fiscal and monetary decision-making goes to the heart of the public value of NSIs and official economic statistics. This value, suitably caveated and modestly estimated to account for the complexity of the causal relationship between economic decision-making and the evidence-base that informs those decisions, should therefore nonetheless be reflected in any assessment of the impact of measures seeking to improve the quality of the statistical evidence-base that informs critical economic decisions.

Two examples of these effects include:

Retail effects: the Investment Property Forum calculated that the total value of UK commercial property in 2013 was approximately £647bn. Retail accounts for 45 per cent of this, and is equivalent to 5.7 per cent of GDP.[84] Granular statistics based on sources of administrative data (such as lower-level population data and income statistics) could help retailers make marginally better decisions about how best to use and locate their retail floor space. The results would be an increase in the value of retail floor space to businesses. As the value of retail floor space is £647bn, a marginal affect could lead to significant gains to businesses. If retail floor space was marginally better used, there could also be a marginal increase in the quantity of goods and services sold, resulting in improvements to GDP.

Scanner data: the Johnson Review recommended that "ONS should give priority to developing the use of point of sale scanner data" on the basis that scanner data systems "have the potential greatly to improve the quality of consumer price statistics". Scanner data is collected by supermarkets and other large retailers that record the sale of all of their goods to consumers (see Annex B for further examples). The UK currently lags a number of its international partners in the exploitation of scanner data; the NSIs of Australia, the Netherlands, Norway, Sweden and Switzerland all make extensive use of scanner data, using actual data on prices and volumes collected by retailers. Scanner data has the potential to significantly raise the quality of ONS price statistics, with clear impacts on the quality of the evidence base available to economic decision-makers and therefore indirect impacts on the decisions that influence the health of the UK's economy. Only option 1 of the legislation provides the ONS the opportunity the use the scanner data of UK retailers.

Gross Domestic Product:

- **£15,800,545 for improved statistical quality leading to higher GDP (data held by public authorities)**

- **£15,800,545 for improved statistical quality leading to higher GDP (data held by private undertakings)**

The calculated NPV includes an extremely modest estimation of the monetary impact of the improved economic decision-making as a consequence of the improved economic statistics the legislation would support. The figures above are calculated using a conservative multiplier of 0.001 per cent improvement in 2015 GDP (£1,863,995,000,000), assume GDP will grow by an additional 0.001 per cent each year and adjust for optimism bias and inflation.

It should be noted that the impact of the legislation is still positive without these wider economic benefits (refer to 'direct effects' in Figure 1 in the Outputs section). In addition, where all benefits are set to zero GDP need only grow by an additional 0.0001 per cent (one tenth of the estimate used here) to deliver a positive 10 year NPV. It is therefore reasonable

[84] http://www.ipf.org.uk/resourceLibrary/the-size-and-structure-of-the-uk-property-market-2013--a-decade-of-change--march-2014-.html

to assume that the positive economic policy impact of improved statistics will lead to a positive NPV resulting from the proposed new legislation, even without the additional benefits described here. The Statistics Authority anticipates this wider economic impact to be far higher; it is currently undertaking research to provide further analytical evidence in support of this position.

Recession effects:

- **£1,273,129 for improved statistical quality reducing the probability of a recession (data held by public authorities)**

- **£1,273,129 for improved statistical quality reducing the probability of a recession (data held by private undertakings)**

The Statistics Authority also anticipates that better economic policy decisions as a consequence of an improved statistical evidence base are likely to marginally reduce the impact of future economic downturns. GDP lost in the past three recessions (1979, 1990, 2008; each lasting five quarters) averaged approximately 8.04 per cent over five quarters, compared to an average five-month trend growth rate of 3.67 per cent during economic growth periods since the 1979 recession. At 2014 figures a recession of equal duration and depth would cost the UK an estimated £147,799m (£1,863,995m x 8.04%). Based on an extremely modest estimate that improved economic statistics would reduce the probability of a recession by 0.001 per cent, the Statistics Authority calculates that access to data held by public authorities would deliver an adjusted benefit of £1,273,129 per annum. For option 1 this estimate has been doubled to £2.5m to account for the additional growth in the quality of statistics. In particular, access to scanner and pricing data will have a significant effect on the accuracy of inflation estimates, which will allow the Monetary Policy Committee at the Bank of England to more accurately set the most influential price in the economy: the rate of interest. This will result in far more accurate interest rates on savings accounts and on loans that will improve the efficient allocation of capital in the UK economy.

104.7 *Census*

- **£11,980,839 NPV (10 years)**

- **£41,838,185 NPV (20 years)**

The Statistics Authority anticipates that legislation to provide ONS with greater access to administrative data will drive significant improvements in the quality and usability of the decennial census. These are discussed in more detail at Annex B, and have been quantified where possible. As part of the Census Transformation Programme, ONS has conducted an analysis of potential sources of administrative data and the extent to which these sources would drive improvements and efficiencies in the production of future censuses.

The anticipated benefits of these new sources of data have been quantified by the CTP team as part of the Programme's scoping work. However, these benefit calculations had been reduced due to the risk of non-delivery of these admin data; specifically a failure to obtain the data on a consistent, ongoing, timely basis. The value of this risk (shown in Annex A.4) recognises that the risk of non-delivery is higher for the Census than for other ONS surveys because the Census is a once every 10 years-event, so if ONS were unable to claim the benefits of non-survey data in time for the Census, the opportunity would be missed for a decade.

The benefits become more significant where they are scaled over 20 years rather than 10. This is because the lengthy census planning cycle means that most of the anticipated benefits for census will only be realised from 2021 onwards. The benefits (cost savings to the census) vary significantly each year as the costs of the census occur unevenly across a 10 year cycle. The delay to the benefit to the census is why the 20 year NPV is approximately double the 10 year NPV despite discounting effects.

Other Non-quantifiable benefits: both options

105. The Statistics Authority anticipates the legislation is likely to deliver a range of benefits that it has not been able to monetise and so have not been included in the cost and benefits calculations. These benefits relate to unquantifiable policy impacts of higher quality and more timely statistics, as well as potential reductions in the costs and compliance burdens associated with reductions in the sample-size or length of existing surveys (as described elsewhere). Qualitative evidence of these benefits are discussed at Annex B.

Cost calculations: all effects for option 1

106. Specific assumptions are listed here, along with breakdowns of each of the costs. All cost figures have been provided on a per annum basis. The final figures (in bold) have been adjusted for optimism bias and rebased to **2014** prices. The list is a complete list of all of the quantified benefits of the legislation, **including the costs to businesses listed in the EANDCB section**. The benefits, along with the costs, are **summarised in Annex A5.**

106.1 *New compliance costs*

- **£9,174,792 initial compliance (private undertakings) costs**

  On the basis of consultations with a number of large private undertakings of the sort ONS are likely to approach for data under the terms of the new legislation, the Statistics Authority estimates that private undertakings required to provide data will incur initial costs of around £40,000 to cover the discussions needed to finalise data access arrangements and set-up costs (covering infrastructure changes and staff familiarisation where necessary). This represents a cost of £8,000,000 for the first year only for the approximately 200 undertakings within scope of the legislation, adjusted for optimism bias.

- **£1,146,849 annual compliance (private undertakings) costs**

  Consultations identified undertakings will incur an additional £5,000 of costs on an annual basis related to sending ONS the agreed data. This represents a cost of £1,000,000 for each year for the approximately 200 undertakings within scope of the legislation, adjusted for optimism bias and inflation. The recurrent cost starts from the second year of the legislation.

- **£4,587,396 initial compliance (public authorities) costs**

  The Statistics Authority expects to receive data from up to 50 public authorities. For the purpose of this economic assessment the compliance costs for public authorities have been estimated at twice those of the costs for private undertakings. This estimation is based on a generally accepted understanding that the public sector is less efficient than the private sector as a result of differing incentive structures; the private sector aims to maximise profit, so it is incentivised to lower costs relative to revenue, whereas the public sector aims to maximise social benefits. Because the private sector is likely to be more efficient in lowering its compliance costs, we have conservatively doubled the compliance costs that the public sector will face due to this data sharing legislation.

The Statistics Authority therefore estimates that public authorities required to provide data will incur initial costs of around of approximately £80,000 to cover the discussions needed to finalise data access arrangements and set-up costs (covering infrastructure changes and staff familiarisation where necessary). The Statistics Authority expects to receive data from up to 50 public authorities, representing a cost of £4,000,000 for the first year only, adjusted for optimism bias.

- **£573,425 annual compliance (public authorities) costs**

Public authorities will incur an additional £10,000 of costs on an annual basis related to sending ONS the agreed data, representing a cost of £500,000 per annum (starting from the year after the legislation's commencement), adjusted for optimism bias. The recurrent cost starts from the second year of the legislation.

106.2 *ONS transformation costs*

- **£484,835 costs (ONS) (data held by private undertakings)**

- **£484,835 costs (ONS) (data held by public authorities**)

The Statistics Authority has identified small potential areas of costs to ONS associated with the transition to access to new sources of administrative and other data. These include, for instance, costs associated with transforming the ONS workforce to enable full use of new data sources, including costs associated with the analysis, validation and quality assurance of administrative data. For the most part these costs have been captured within the budget projections of the various transformation programmes currently underway within ONS (see section on assumptions, above). In addition to ongoing work through the Big Data Project, these organisation-wide transformations are developing ONS's data infrastructures and analytical capacities to position the organisation to take advantage of new and more diverse sources of data. The Statistics Authority expects that the existing and projected investment of resources into the delivery and transform elements of its budget,[85] including these programmes, will account for the vast majority of the capacity-strengthening costs that might be incurred as a consequence of new data access legislation.

Analytical staff costs: this expectation notwithstanding, however, the Statistics Authority has included an estimate to account for *unforeseen* staffing costs related to accessing, formatting and validating the new sources of data to which ONS expects to have access under the terms of the new legislation. Following consultations across the survey divisions within ONS the Statistics Authority has identified a reasonable staffing contingency plan to reflect these uncertainties, consisting of two Grade 7 teams (one Grade 7 manager and four Higher Executive Officers). The total cost of two Grade 7 teams at current prices is £427,404, which after applying the optimism bias and deflating to 2014 prices creates a cost of £484,835. This has been doubled under option 1 to reflect the additional data flows under the expectation that it would provide ONS with access to data held by private undertakings.

Additional unquantified costs: the Statistics Authority has identified a number of additional potential costs that have not been included in the economic assessment either because these have not been possible to quantify, are considered 'business as usual expenses', or are considered to have been sufficiently accounted for within one or more of the transformation programmes described in the baselines and assumptions section above.

[85] See details of current UKSA/ONS settlement and projected expenditure at *UK Statistics Authority Business Plan – April 2016 to March 2020,* p.19. Available at: https://www.statisticsauthority.gov.uk/wp-content/uploads/2016/04/UKSA-Business-Plan-0416-0320.pdf

These include:

- **Data scoping:** on the basis of internal consultations the Statistics Authority anticipates that data scoping costs will be consumed within ONS' 'business as usual costs'; this assumption is built into these calculations.
- **Data validation:** data validation will be undertaken by analytical staff. As noted above, an element of these analytical staff costs is accounted for in the impact assessment and additional costs will be covered within the transformation programmes.
- **Data integration:** as ONS secures access to new data sources it will need to integrate these data with its systems, data from other sources and ultimately with key statistical outputs. This process will potentially incur two kinds of costs:
  i. staff costs of integrating this data. This task will be undertaken within the transformation programmes where they have allocated budgets to account for additional analytical staff; and
  ii. reputational costs associated with possible revisions to key economic statistics. This represents a risk that ONS can manage; ONS will fully assess the best approaches to integrating data and communicating any subsequent revisions. Such costs are not possible to accurately measure.

  Conversely, as noted above there are also likely to be significant reputational benefits from improving our statistics. These benefits are also difficult to measure.
- **Systems integration and data storage**: ONS has a long-standing capacity and expertise in handling large amounts of sensitive, identifiable data, including census and commercially-sensitive data.[86] Access to new sources of administrative and other data will increase the scale of the data ONS will collect. However, ONS is currently upgrading its systems, and consultations with the survey divisions indicate that business areas will be able to reuse the systems for the purpose of collecting, storing and processing new data under the terms of the new legislation without incurring significant additional costs.

[86] See ONS, *Beyond 2011: Safeguarding Data for Research: Our Policy*.

Other impacts

Competition

107. The UK Statistics Authority anticipates that the legislation will have no negative impacts on competition vis-à-vis the ability of private undertakings to enter, operate competitively within, or exit markets. Specifically:

i. The legislation will not restrict the number of suppliers in the ways conceived either by competition regulators or UK or EU competition law.

ii. The legislation would not influence the principal means by which suppliers compete with one another. There is, for instance, no reason to anticipate the requirement to provide ONS with data will have any direct impact on the price or quality of products and / or services, production, administration or marketing processes, the nature, size and amount of sales channels or the level of innovation of suppliers.

iii. Similarly, there is no reason to anticipate the proposed legislation would dis-incentivise competition, because ONS statistical outputs based on new data sources accessed through the provisions of the proposed legislation would be freely and publicly available, and would be sufficiently anonymised to prevent identification of any individual-level characteristics. Data made available under new legislation would be subject to the same strict controls and safeguards as existing data in order to ensure confidentiality is fully protected.

iv. The proposed legislation will place no restrictions on consumers or information available to consumers. Indeed by facilitating the production of richer, more timely and more accurate aggregate official statistics, the legislation is likely to help empower consumers by allowing for better informed choices around consumer access to and consumption of services and goods.

108. The Authority nonetheless recognises the potential for competition issues to arise where the legislation leads to disproportionate compliance burdens. Compliance burdens may fall disproportionately where companies under the scope of the legislation are directly competing with those who are not. This may, for instance, mean that particular business models become more or less competitive within the regulatory context envisaged by the proposed legislation. This may occur, for example, where data is required under the terms of the legislation that has a comparatively high commercial value, such as the data collected by data brokers, or market research and data analytic firms. The Authority will seek to assess these potential issues and impacts through collaboration with data owners, and will identify appropriate mitigation principles and strategies to minimise impacts through the development of principles and procedures in the accompanying statement and code of practice provided for in the proposed legislation.

109. The Authority anticipates a number of positive indirect impacts on competition. More granular population data, for example, might allow private undertakings to make more informed, and ultimately more profitable, decisions around locating services or retail branches. As ONS statistics are freely accessible and widely published, this benefit will apply equally to all undertakings, regardless of size or function. It is also reasonable to anticipate that a shift towards a richer data landscape, in which all private undertakings can draw on a wider range of freely-available reliable and timely statistical outputs, would reduce the advantages enjoyed by established firms with large-scale and efficient market-research facilities and well-established commercial networks.

110. The Authority's estimation of the positive competition impacts associated with the legislation is supported by research into the economic value of big data. The Centre for Economics and Business Research has estimated the value of big data analytics for small and

micro businesses at £42bn over a five year period.[87] By sourcing data directly from large and medium businesses the Authority anticipates the proposed legislation would directly support ONS's work to reduce and eliminate disproportionate or excessive compliance burdens (particularly those on small businesses). Additionally, the Authority anticipates the proposed legislation would lower the barriers to entry in three ways:

- The existence of better and more varied sources of data will improve customer intelligence, providing opportunities for market-entrants to more effectively challenge the domination of established firms;
- by supporting improvements in supply chain intelligence, performance, quality and risk management and fraud detection, access to greater market and customer information will help minimise the disproportionate advantages enjoyed by large firms with established economies of scale; and
- the combination of increased efficiencies and greater access to market information will signal that "there is room for more firms to find profitability in a given marketplace", therefore incentivising entrepreneurship and eventual market entrance.[88]

Other considerations

111. The legislation does not include small and micro-businesses in scope. Therefore a **Small and Micro-Business Assessment** is not necessary. The UK Statistics Authority further anticipates that the legislation will have a number of direct and indirect benefits for small and micro undertakings, to include competition benefits as a consequence of improvements in the quality and scale of official statistics (see above).

112. The Authority is of the view that there will be no significant additional impacts on the number of cases brought before the justice system as a result of the proposed legislation, and that therefore no **Justice Impact Assessment** is necessary. While the new legislation technically creates a new offence, it is only replicating the existing offences under the *Statistics of Trade Act 1947* (specifically, failing to provide a return or providing false information in response to the Notice). These offences will be dealt with by the same courts and carry the same, or in the case of providing false information, lesser penalties.

113. The number of public authorities and private undertakings that are likely to be prosecuted under this offence will be extremely small. In the past decade a maximum of 13 businesses per annum have been prosecuted under existing legislation, out of the more than 350,000 businesses that are legally required to return survey data each year. The Authority anticipates around 250 organisations will fall within the scope of the new legislation; if the current proportion of the number of prosecutions to overall compliance scope applies the number of prosecutions under new legislation is likely to be fractionally small.

114. Moreover, the Authority anticipates that securing data from a much smaller pool of organisations under the terms of the new legislation will result in a significant reduction in the scale of surveys collected from businesses, and therefore in the number of businesses potentially liable to prosecution under existing regulations. The Authority therefore estimates that the total number of cases taken to court will either remain constant or, given that new legislation facilitates the obtaining of richer data from fewer sources, decrease.

115. The Authority considers the proposed legislation to be out of scope of the following impact assessments:

i. the **Family Test**;
ii. the **Health Impact Assessment**;

[87] CEBR, *Data Equity: Unlocking the Value of Big Data*, p.35.
[88] See Geissler, Jahn, Loebel and Zanger (2011), *From Business Opportunity to Action: What Lies In Between?*, Proceedings of 56th Annual ICSB World Conference, Stockholm, Sweden, 15-18 June 2011.

iii. the **Environmental Impact Assessment**;
iv. the **Sustainable Development Impact Assessment**; and
v. the **Rural Proofing Test**.

ANNEX A: Economic calculations

Annex A.1: Optimism bias and sensitivity analysis of the optimism bias

Sensitivity analysis of the optimism bias figure accounting for the impact on 'all effects' calculations of a range of optimism bias figures:

Table A1.1 10 Year All Effect Totals	**0%**	**5%**	**10%**	**15%**	**20%**	**25%**	**30%**	**40%**	**50%**	**60%**
Option 1 NPV	£289,123,146	£271,709,955	£254,296,763	£236,883,572	£219,470,380	£202,057,189	£184,643,997	£149,817,614	£114,991,231	£80,164,849
Option 1 Benefit-Cost Ratio	10.78	9.75	8.82	7.97	7.18	6.47	5.80	4.62	3.59	2.69
Option 1 EANCB	-£1,270,261	-£1,032,037	-£793,813	-£555,589	-£317,365	-£79,141	£159,083	£635,531	£1,111,979	£1,588,427
Option 2 NPV	£168,903,399	£159,355,676	£149,807,954	£140,260,231	£130,712,508	£121,164,785	£111,617,063	£92,521,617	£73,426,172	£54,330,726
Option 2 Benefit-Cost Ratio	16.32	14.77	13.35	12.06	10.88	9.79	8.79	6.99	5.44	4.08
Option 2 EANCB	-£2,959,081	-£2,811,127	-£2,663,173	-£2,515,219	-£2,367,265	-£2,219,311	-£2,071,357	-£1,775,449	-£1,479,541	-£1,183,632

Table A1.2 repeats this process for the direct effects:

10 Year Direct Effect Totals	**0%**	**5%**	**10%**	**15%**	**20%**	**25%**	**30%**	**40%**	**50%**	**60%**
Option 1 NPV	£30,118,763	£25,655,791	£21,192,819	£16,729,846	£12,266,874	£7,803,902	£3,340,929	-£5,585,015	-£14,510,960	-£23,436,905
Option 1 Benefit-Cost Ratio	2.02	1.83	1.65	1.49	1.35	1.21	1.09	0.87	0.67	0.50
Option 1 EANDCB	-£1,270,261	-£1,032,037	-£793,813	-£555,589	-£317,365	-£79,141	£159,083	£635,531	£1,111,979	£1,588,427
Option 2 NPV	£39,401,208	£36,328,594	£33,255,981	£30,183,368	£27,110,755	£24,038,142	£20,965,529	£14,820,302	£8,675,076	£2,529,849
Option 2 Benefit-Cost Ratio	4.57	4.14	3.74	3.38	3.05	2.74	2.46	1.96	1.52	1.14
Option 2 EANDCB	-£2,959,081	-£2,811,127	-£2,663,173	-£2,515,219	-£2,367,265	-£2,219,311	-£2,071,357	-£1,775,449	-£1,479,541	-£1,183,632

Annex A.2: Sensitivity analysis capturing impacts of differential reductions in compliance burden

Sensitivity analysis accounting for the impact on 'all effects' calculations of a range of compliance burden reduction figures:

Table A2.1 Survey Sensitivity Analysis: All Effect Totals	**0%**	**5%**	**10%**	**15%**	**20%**	**50%**
Option 1 NPV	£225,911,520	£231,397,546	£236,883,572	£242,369,598	£247,855,624	£267,280,281
Option 1 Benefit-Cost Ratio	7.64	7.80	7.97	8.13	8.29	8.86
Option 1 EANCB	£11,943	-£271,823	-£555,589	-£839,355	-£1,123,121	-£2,825,717
Option 2 NPV	£131,221,984	£135,741,107	£140,260,231	£144,779,354	£149,298,478	£162,921,719
Option 2 Benefit-Cost Ratio	11.35	11.71	12.06	12.42	12.77	13.85
Option 2 EANCB	-£1,997,233	-£2,256,226	-£2,515,219	-£2,774,212	-£3,033,205	-£4,587,162

Sensitivity analysis accounting for the impact on 'direct effects' calculations of a range of compliance burden reduction figures:

Survey Sensitivity Analysis: Direct Effect Totals	**0%**	**5%**	**10%**	**15%**	**20%**	**50%**
Option 1 NPV	£5,757,794	£11,243,820	£16,729,846	£22,215,872	£27,701,899	£47,126,555
Option 1 Benefit-Cost Ratio	1.17	1.33	1.49	1.65	1.81	2.39
Option 1 EANDCB	£11,943	-£271,823	-£555,589	-£839,355	-£1,123,121	-£2,825,717
Option 2 NPV	£21,145,121	£25,664,245	£30,183,368	£34,702,492	£39,221,615	£52,844,856
Option 2 Benefit-Cost Ratio	2.67	3.02	3.38	3.74	4.09	5.17
Option 2 EANDCB	-£1,997,233	-£2,256,226	-£2,515,219	-£2,774,212	-£3,033,205	-£4,587,162

Annex A.3: Business effects

Category	Data	Impact	Recipient	Option	Input Calculations	Base Value	Fraction received by recipient	Optimism bias	Output	Price Year of Output	2014 Value	End Point	10 Year NPV
Obtaining Scanner Data from commercial firms	Business Survey (Retail Sales Index) compliance cost reduction	Direct	Business	1	65017.58*12	£780,211	10%	15%	£66,318	2015	£66,136	2037	£426,479
Obtaining HMRC PAYE data: compliance cost reduction (ASHE, STES and BRES)	Annual Survey into Hours & Earnings (ASHE)	Direct	Business	2	4,660,070*0.32	£1,491,222	40%	15%	£507,016	2015	£505,626	2037	£3,260,525
	Short-term employment surveys (STES) - listed as Business Survey (Production & Services) in compliance costs sheet	Direct	Business	2	316,942*12*0.3	£1,140,991	40%	15%	£387,937	2015	£386,874	2037	£2,494,752
	Business Register Employment Survey (BRES)	Direct	Business	2	6,538,072*0.8	£5,230,458	40%	15%	£1,778,356	2015	£1,773,483	2037	£11,436,280
Obtaining HMRC PAYE data: compliance cost reduction	Monthly Wages and Salaries Survey	Direct	Business	2	45503.3*12	£546,040	10%	15%	£46,413	2015	£46,286	2037	£298,476
	Monthly Business Survey (Construction)	Direct	Business	2	206643.74*12	£2,479,725	10%	15%	£210,777	2015	£210,199	2037	£1,355,466
	Monthly Business Survey (Production & Services)	Direct	Business	2	316942.03*12	£3,803,304	10%	15%	£323,281	2015	£322,395	2037	£2,078,960
	Quarterly Business Survey (employment)	Direct	Business	2	41149.21*4	£164,597	10%	15%	£13,991	2015	£13,952	2037	£89,972
	Labour Disputes Survey	Direct	Business	2	300.22*4	£1,201	10%	15%	£102	2015	£102	2037	£656
	Pension Funds Transactions in Financial Assets	Direct	Business	2	23418.99*4	£93,676	10%	15%	£7,962	2015	£7,941	2037	£51,205
	Pension Funds Income & Expenditure	Direct	Business	2	23119.69*4	£92,479	10%	15%	£7,861	2015	£7,839	2037	£50,551

	Pension Funds Balance Sheet	Direct	Business	2		£32,715	10%	15%	£2,781	2015	£2,773	2037	£17,882
Other HMRC Data	Occupational Pension Schemes Survey	Direct	Business	2		£943,051	10%	15%	£80,159	2015	£79,940	2037	£515,490
Data Transferring Compliance Costs	Private sector compliance costs - start-up and negotiation	Direct	Business	1	-40000*200	-£8,000,000	100%	-15%	-£9,200,000	2015	-£9,174,792	2018	-£8,864,533
	Private sector compliance costs - recurrent	Direct	Business	1	-5000*200	-£1,000,000	100%	-15%	-£1,150,000	2015	-£1,146,849	2037	-£8,429,824
					Figures may differ slightly due to rounding effects						Option 1 Total		£4,782,338
											Option 2 Total		£21,650,216

Annex A.4: Census effects

The increasing benefit of admin data to the census:

	Census Calculations	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	10 year total (full figures)	20 Year total (full figures)
1	Expected benefit of admin data WITHOUT legislation (£m)	£16.4	£45.6	£43.9	£48.1	£46.5	£44.7	£43.2	£41.5	£39.9	£38.2	£53.0	£51.4	£49.8	£48.2	£46.6	£200,598,210	£657,033,352
2	Expected benefit of admin data WITH legislation (£m)	£19.2	£53.3	£51.2	£54.4	£52.5	£50.6	£48.7	£46.8	£44.9	£43.0	£60.3	£58.6	£56.4	£54.7	£52.6	£230,604,065	£747,185,749
3	**Expected benefit of legislation (the difference, £m)**	**£2.8**	**£7.6**	**£7.3**	**£6.3**	**£6.0**	**£5.9**	**£5.5**	**£5.4**	**£5.0**	**£4.8**	**£7.3**	**£7.1**	**£6.6**	**£6.5**	**£6.1**	**£30,005,856**	**£90,152,398**
4	Expected benefit of legislation (£m deflated to 2014)	£2.8	£7.6	£7.3	£6.3	£6.0	£5.9	£5.5	£5.3	£5.0	£4.8	£7.3	£7.1	£6.6	£6.4	£6.1	£29,923,640	£89,905,380
5	Expected benefit of legislation (£m discounted from 2016)	£2.2	£6.0	£5.5	£4.6	£4.2	£4.0	£3.6	£3.4	£3.1	£2.9	£4.2	£4.0	£3.5	£3.3	£3.0	£22,611,805	£57,738,093
6	Optimism bias adjustment (15%)	£1.9	£5.1	£4.7	£3.9	£3.6	£3.4	£3.1	£2.9	£2.6	£2.4	£3.6	£3.4	£3.0	£2.8	£2.6	£19,220,034	£49,077,379
7	**Totals, with discounting, deflation, bias and benefit delay**	**£0.4**	**£2.0**	**£2.8**	**£3.1**	**£3.6**	**£3.4**	**£3.1**	**£2.9**	**£2.6**	**£2.4**	**£3.6**	**£3.4**	**£3.0**	**£2.8**	**£2.6**	**£11,980,839**	**£41,838,185**

Explanation:

- Row 1: This is the expected benefit of administrative data to the census including a valuation of the risk of ONS not being able to obtain administrative data.
- Row 2: This is the expected benefit of administrative data to the census with the risk cost removed; because the legislation ensures ONS would be able to obtain administrative data.
- Row 3: Row 2 minus row 1: capturing the value of the risk of ONS not being able to obtain administrative data. This is the direct benefit of the legislation.
- Row 4: Row 3, but deflating from 2015 to 2014 prices using the HM Treasury GDP deflator.
- Row 5: Row 4, but discounting each year at 3.5%, in accordance with the Green Book guidance.
- Row 6: Row 5, adjusting for optimism bias at 15%, in accordance with Key Assumption iv.
- Row 7: Row 6, adjusting for the expectation that benefits will only accrue gradually, in accordance with Key Assumption: v.

Annex A.5: Full breakdown of all effects

1. The table below provides a full breakdown of quantifiable costs and benefits associated with the legislation that have been identified during the economic assessment. While the Statistics Authority believes these are a fair and reasonably complete representation of the costs and benefits, they should not be considered entirely exhaustive. In addition to the costs and benefits that have not be quantified (and are addressed in the text above), the Authority expects that the legislation will, in particular, support the development of additional statistical outputs in the future that have not been anticipated at this stage (and therefore will support additional unanticipated benefits).

2. In reading the following table the following should be noted:
   - All impacts are categorised as either direct or indirect, in accordance with the Better Regulation Framework Manual.
   - All impacts are labelled according to whether they are captured by option 1 (and by default, also option 2) or by **option 1 only**.
   - The 'recipient' refers to the stakeholders that are expected to be impacted by each cost and benefit. Five recipient categories have been identified: ONS, Government (this incorporates all areas of the Government with the exception of ONS), households, businesses and wider society (a broad category used to describe benefits with wide-ranging impacts that are not specific to, but might include, the other types of recipients).
   - 'Input calculations' are the calculations based on the evidence that has been gathered for the economic assessment.
   - 'Base values' refer either to numbers derived from the input calculations or to evidence-based numbers. These are adjusted on the basis of the 'fraction received' and 'optimism bias' assumptions.
   - 'Fraction received' refers to the proportion of the benefit that the recipient is expected to receive.
   - 'Output' figures are the results after the 'fraction received' and 'optimism bias' functions are applied to the 'base values'.
   - 'End point' refers to the year that the the cost or benefit is expected to end. In most cases this is 2037, as the effects of the legislation have been modelled for up to 20 years from 2017.