Responses from Government Chief Scientists regarding research integrity

(RES0048)

The Committee Chair wrote to Departmental Chief Scientific Advisers on 20 December regarding the Committee’s work on research integrity. This document collates the responses received.

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Dear

Research integrity, ethics and governance

The Science and Technology Committee is currently holding an inquiry into research integrity. The Committee has been exploring the roles of employers of researchers, funders and publishers in relation to research integrity, including the processes they follow when problems with research are identified.

Many Government departments are significant funders of research themselves, and I have written to each of the Departmental Chief Scientific Advisers to ask them about their Department’s governance and integrity processes. I would be grateful if you could set out for the Committee:

- What policies the Department has in place to ensure research integrity;
- Who takes overall responsibility for research governance and integrity within the Department;
- What processes the Department follows when problems with research are identified; and
- How problems with research integrity in the Department are catalogued and reported.

The Committee will be interested to see whether Government departments have similar policies and processes to other major research funders, and will appreciate a submission from you on these points.

It would be helpful if your response on these points could be emailed to the Committee in Word format via scitechcom@parliament.uk, by 23 January so that it can be published and fed into the inquiry.

Rt Hon Norman Lamb MP
Chair
Response from the Department for Business, Energy and Industrial Strategy

Dear Mr Lamb

Re. Research integrity, ethics and governance

Further to your letter dated 19 December seeking information about my Department's research integrity and governance processes, please find responses to the specific questions you ask below. I am writing in relation to the research funding the Department manages directly. This does not relate to funding through BEIS Partner Organisations, including the Research Councils and Innovate UK.

1) What policies the Department has in place to ensure research integrity

BEIS has several policies in place to ensure research integrity:

i) The Investment Gateway (IG)
All BEIS fiscal event bids to HMT are scrutinised and quality assured by the Investment Gateway (IG), a sub-committee of the Performance, Finance and Risk Committee. The IG is chaired by the Director General of Finance and Corporate Services, with the directors of Analysis, Finance and Policy Delivery making up the full membership. The IG is supported by a cross-disciplinary team of departmental experts, whom provide advice to the IG members. The IG scrutinises BEIS fiscal event bids and provides advice to the Permanent Secretary and Secretary of State.

ii) Projects and Investment Committee (PIC)
All BEIS expenditure, which is novel or contentious or in excess of £20m are scrutinised and quality assured by the Projects and Investment Committee (PIC). The PIC is co-chaired by the Directors General of Energy and Security, and Business and Science. It is supported by the Directors of: Analysis, Commercial, Research and Innovation Transformation, Home Energy, Finance, the head of Portfolio Office, project director of Smart Meters, Executive Director of UK Government Investments and the CEO of Low Carbon Contracts Company. The PIC is supported by the pre-PIC, a group made up of departmental experts, whom provide advice to the PIC. The PIC scrutinises BEIS business cases and provides advice to the Accounting Officer who informs the Secretary of State and where necessary obtains ministerial direction.

iii) The Evidence Board
The Evidence Board is an overarching governance mechanism set up to ensure good quality, robust evidence is used to inform policy decisions across all of BEIS. The board brings together all professions in a single forum to allow examination of all BEIS' policies at any point in their development, implementation and evaluation. In relation to research
integrity, the Board provides assurance that evidence used in BEIS is of an appropriate quality and is developed using the standards and processes using the Evidence Framework (see below). It also ensures that the department has a clear and robust approach to communication and publication of research and analysis; building on the Government Social Research protocols and with due regard to stakeholders.

iv) Research Committee

The BEIS Research Committee approves all research and consultancy business cases commissioned within the department with a value greater than £50,000 (cases under £50k but greater than £10k are presented to sub-committees). The Committee reviews individual business case proposals and tests bidders on the strategic fit, aims, methodologies, quality assurance and internal governance procedures outlined for each project. Bidders cannot proceed to the procurement stage until clearance from the committee (or sub-committee) has been obtained. These sign-off processes ensure research projects are fit-for-purpose, provide value for money to the Department and will have their results appropriately disseminated. It also covers ethics and data protection. The composition of the Committee – with the analytical Heads of Profession as permanent members and a rotating list of senior analysts in attendance - also facilitates a cross-disciplinary assessment of the projects and raises awareness of the entire portfolio of projects being undertaken across BEIS to build its evidence base. Once approval has been obtained, the procurement process can begin, usually through the Research Framework of approved suppliers maintained by UK SBS who oversee the Invitation to Tender (ITT), evaluation of submissions and contractual arrangements for the winning bidders.

v) Peer Review

BEIS has an external peer review group (PRG) consisting of external experts in different aspects of research. Peer reviewers provide advice on the design and implementation of specific projects and on the research methods required to develop a robust evidence base. As such, all substantial research and evaluation publications that make claims about policy or value for money are reviewed by the Expert Peer Review Panel or other qualified experts.

In addition, external academics and researchers provide peer review to influence and provide advice on the development of the evidence-base across a range of high-profile policy areas, including: Innovation, Business Support, Employment, Consumer and Competition Policy, Industrial Policy, Energy and Climate Change.
Consultation with expert peer reviewers is undertaken mainly with a view to receiving advisory input at key stages of commissioned projects, including:

- Advice at the early stages of the design of a specific policy or pilot so that requirements for a robust evaluation can be included in relation to decisions over policy or pilot implementation;
- Advice on the design and content of research specifications in support of existing quality assurance structures within BEIS;
- Advice and a technical/scientific steer for external research contractors and/or BEIS analysts around specific aspects of an evaluative project once underway; and
- Advice, where relevant, to external research contractors and/or BEIS analysts on key methodological developments that could impact on both the design and conduct of specific evaluations.

vi) The Evidence Framework
The Evidence Framework is a set of tools and principles that allows BEIS to have a coherent end-to-end process for:

- Planning, collecting, using and reviewing evidence;
- Undertaking quality assurance; and
- Communicating these all effectively.

The framework is supported by a range of guidance documents and templates to help improve the decision making process. In addition, BEIS is a supporter of the Universities UK ‘Concordant to support research integrity’ and agrees to the principals of Research Integrity as set out in the concordat.

2) Who takes overall responsibility for research governance and integrity within the Department
The Department’s governance structure can be seen below. All committees are chaired by senior officials.
3. What processes the Department follows when problems with research are identified; and

4. How problems with research integrity in the Department are catalogued and reported

Specialists in each team within BEIS are responsible for monitoring the delivery of research contracts by the winning supplier in line with the governance and quality assurance procedures as cleared at the Research Committee stage, and described in the Evidence Framework.

Each commissioned project will have a steering group or other form of governance as appropriate to oversee and monitor progress across key stages. The steering group will be composed of team members and other stakeholder representatives as necessary, to peer review how each defined stage and/or product associated with the project is being delivered.

Any problems identified with deliverables, whether through delays, cost overruns or quality issues, will be escalated as appropriate to the central team and UK SBS. Negotiations with the supplier will be entered into on how to resolve problems arising. If necessary advice will be sought from internal or external experts and legal representatives may be brought in to brief on our options for restitution (such as withholding or reducing payments pro rata).

On project closure a review is conducted on supplier performance. The Research Committee keeps a record of all projects and has just started keeping records of whether the research was used for the policy or whether the policy has changed or even closed.
I trust this sufficiently answers your query, however if I can provide any further information or clarification please do get in touch.

Yours faithfully,

Professor John Loughhead

Chief Scientific Adviser, Department for Business, Energy & Industrial Strategy
Response from the Department for Digital, Culture, Media and Sport

What policies the Department has in place to ensure research integrity?
Research that is externally commissioned uses a rigorous procurement process. DCMS procurement rules and policies ensure value for money as well as fairness, transparency and proportionality in the procurement of services including research. These processes also ensure there is no conflict of interest when the department contracts out to external bodies. External suppliers are assessed against prescribed criteria which include the adequacy of methodological proposals and project management and assurance procedures including the ability to deliver to time and quality. In-house and externally commissioned research is expected to meet the requirements of the Government Social Research (GSR) Profession Ethical Assurance for Social Research in Government [1]. This requirement forms part of the contractual arrangements between DCMS and external service providers.

Publication of research: The use of peer review prior to publication is considered on a case by case basis and used to independently assess the level of methodological risk involved when assuring government research and analysis. DCMS follows the GSR Publication Protocol [2] which states that Government research products should be released promptly. Evidence from research findings can also be made available on request under the Freedom of Information Act 2000, subject to certain exemptions.

Who takes overall responsibility for research governance and integrity within the Department?
Governance for research: Ultimate responsibility for research integrity sits with the Chief Economist and Analyst who is responsible for sign-off of major research projects undertaken by the DCMS Evidence and Analysis Unit. Whilst each research project undertaken within the department will be unique, where possible, all research in DCMS should be managed in a project-based way to monitor progress, mitigate risk and ensure effective delivery. All externally commissioned and in-house research has a project or contract manager. For larger projects, there may be a Steering Board responsible for the project’s success and this will often include representatives from other Departments to provide additional scrutiny.

DCMS Chief Scientific Adviser: DCMS is in the process of expanding, both in terms of its policy responsibilities and staff numbers, and we are refreshing and bolstering our science/technical capabilities in parallel. The growth of our policy responsibilities in the digital space in particular has led to a need for greater internal technical capability and leadership. The increase in size and importance of the department also means there are new opportunities for collaborating with, and leveraging the budgets of, UK Research and Innovation and the wider academic community. As a result, we have decided to pilot a Chief Scientific Adviser (CSA) post for six months, working across the Department. This interim post will allow the department to scope out the role with a decision next Financial Year on whether to make it a permanent position, subject to funding.

What processes the Department follows when problems with research are identified?
DCMS has a risk management policy. Whether in-house or externally commissioned, monitoring project risk is a regular part of managing research to identify risks and ways to mitigate against them. The precise way in which the risk is managed will depend on the nature of the risk and the governance arrangements agreed for the project. Action to mitigate risk may be taken by the project team, larger or more complex risks may need to be escalated and arrangements for mitigating risk agreed by the Steering Board and the Senior Responsible Owner for the project who is accountable for its successful delivery. DCMS has an established DCMS ‘Anti-Fraud Policy’ and a departmental response plan to fraud setting out the steps that should be taken when there is suspicion of fraud that can be applied in response to allegations of research misconduct (e.g. falsification of research findings). How an actual or suspected fraud is investigated will be decided by the Finance Director, who will take advice from the Head of Internal Audit, Head of Finance and Head of Human Resources as appropriate. The Head of Finance is responsible for managing the investigation and will liaise closely with the Head of HR. The investigation itself will be carried out by Internal Audit.

How problems with research integrity in the Department are catalogued and reported
Risks and issues which may impact on research integrity with individual projects are catalogued as part of usual project management practice and recorded using standard project management tools such as a the project initiation document. Research bids from external suppliers must identify project risks as part of their tender response and are assessed on their strategy for overcoming any methodological challenges. Given the increasing demand for research and our growing research community we are currently formalising our approach to monitoring and reporting analytical risks and are liaising with GSR ethics leads in larger Government departments to share best practice and embed processes to ensure safe and effective use and analysis of research within DCMS.

References:
Response from the Department for Education

Dear Mr Lamb,

RESEARCH INTEGRITY, ETHICS AND GOVERNANCE

Thank you for your letter of 20 December 2017 raising queries on behalf of the Science and Technology Committee.

In response to your questions:

1. All research that the department commissions (through open tendering, direct award or our Associate Pool Academic framework) is scrutinised for quality, policy relevance, appropriateness of methods and value for money. Lower value research is signed off by senior civil servants and the DfE Head of Profession for Social Research. Research valued at over £15,000 is scrutinised by the internal DfE Research Board (members are lead analysts, heads of the analytical professions and the chief analyst). Where the board has concerns about research design or value for money, commissions are reviewed and refined. The board can advise to stop projects if they have significant concern. Ministers sign off all research valued at over £100,000 and are regularly sighted on research of any value where officials want input or advice.

Research is commissioned via a two-stage procurement process, beginning with an open Expression of Interest via the government’s portal—Contracts Finder—which is then filtered to chosen suppliers that are Invited to Tender. Qualification and Evaluation criteria are detailed at this stage of the process, before a preferred bidder is awarded based on a predetermined weighted combination of price and quality. The Evaluation Team usually contains relevant expert researchers.

Research advisory or steering groups are established, comprised of internal and external experts, for most high value projects. These groups provide independent challenge and advice throughout the research contract period.

The department reviews all commissioned research is reviewed to ensure ethical issues are identified and mitigated when necessary. We do not systematically peer review research but DfE has processes in place to do so if needed.

DfE publishes all commissioned research to ensure transparency.

2. The overall integrity of the research we commission sits with the Head of Profession for Social Research and the Chief Analyst. Policy directors and deputy directors have oversight of their areas of business.
3. Policy areas take different approaches to monitoring social research. Each project contracted has a project lead who manages the contract and works closely with the contracted organisation (via a named individual) at every stage of the work. This enables us to track progress and monitor risk. If a risk is identified that cannot be sufficiently mitigated it is escalated to the Head of Profession for Social Research for advice, or to the Chief Analyst. The most contentious issues are escalated to the Permanent Secretary (for example, research decisions made during the pre-election period, contractor disputes or publication postponements). Ministers are consulted on significant integrity issues.

4. DfE has a central repository of all research contracts and a governance team catalogue and note issues. The Head of Profession for Social Research is fully aware of mitigation activity.

The Department is carrying out a review of analysis, which is considering how evidence, data and analysis can more effectively inform the department’s policy and delivery decisions. In particular, it is exploring how to improve standards and governance of analysis, and what is the most appropriate staff structure to deliver that. We are considering whether the department requires a Chief Scientific Adviser in addition to a Chief Analyst as part of this review. I can assure you that issues of research integrity, ethics and governance continue to be part of the work of the Chief Analyst and our central research team.

Best wishes,

JONATHAN SLATER
PERMANENT SECRETARY
Response from the Department for the Environment, Food and Rural Affairs

January 2018.

Office of Defra’s Chief Scientific Adviser

Response to the House of Commons Science and Technology Committee on research integrity in Defra.

Defra has been asked to provide a response to the House of Commons Science and Technology Committee to support its inquiry into research integrity. The Science and Technology Committee is seeking information on the following:

1. Who takes overall responsibility for research governance and integrity within the Department;
2. What policies the Department has in place to ensure research integrity;
3. What processes the Department follows when problems with research are identified; and,
4. How problems with research integrity in the Department are catalogued and reported.

1. Who takes overall responsibility for research governance and integrity within the Department?

Role of Defra Chief Scientific Adviser

The Defra Chief Scientific Adviser (CSA) is the Head of Profession for the Government Science and Engineering Profession (HoSEP) in Defra. As HoSEP the CSA is responsible for the development of Scientists and Engineers both within the core Department but also across the Defra Group. The HoSEP sits on the Government Science and Engineering Profession Board which brings together heads of profession from across government to oversee the implementation of the GSE Strategy.

The strategy seeks to increase the impact of science and engineering and to support the development of high quality scientific and engineering advice and operations. The HoSEP is supported by a profession lead. GSE membership is optional for scientists, however there has been a steady increase in membership across the Defra group following the refresh of the GSE strategy in 2016. We anticipate that the review and refresh of the GSE Competencies, the development of core curriculum and increased sharing of expertise across the profession will be significant in driving forward the profession in Defra. GSE members from Defra are actively engaged in cross government working groups as well as a group of ‘GSE champions’ who take forward common issues across the department (for example, access to library and research services).
The CSA is supported by the CSA’s Office team (CSA-O), which leads on all cross cutting and corporate science and engineering activities for Defra. The CSA-O portfolio includes: leading on science governance for Defra, bringing together the lead scientists and analytical heads of profession in Defra and its Arm’s Length Bodies; science and evidence budgets; independent expert advisory committees; research partnerships with other funders nationally and internationally; Science and Engineering Profession for Defra; and, emerging technologies including Earth Observation. The CSA also provides direct quality assurance on research outputs, sometimes on an ad hoc basis, or sometimes directly on request. For example, the Defra CSA ran an ad hoc QA process, involving external reviewers, for the analysis underpinning the Air Quality Plan.

**Role of the Defra Group Evidence, Science and Analysis Committee**

The Group Evidence, Science and Analysis Committee (GESAC) is a sub-committee of Defra’s Executive Committee (ExCo) and chaired by the CSA. GESAC’s role is to provide strategic oversight and leadership for evidence, science and analysis across the Defra group and comprises of the lead scientists and analytical heads of profession in Defra and its Arm’s Length Bodies (including Natural England, the Environment Agency, Defra’s laboratory agencies and the Marine Management Organisation). GESAC has responsibility for research integrity and oversight across the whole Defra Group. This is exercised through one of its work streams. Its role is to advise on science and evidence priorities and allied resources, including short and long-term science and analysis capabilities.

A number of key activities support research quality and integrity across the Defra group. GESAC is currently undertaking an assessment of Defra group science and evidence processes and capabilities, including its research. This assessment focusses on resource and prioritisation, capabilities, quality assurance, and use and impact. The purpose is to ensure and enhance the sustainability of scientific capabilities; to ensure that the procedures and processes for assuring the quality and use of science and evidence are fit for purpose; and, to ensure we make the best use of resources and capabilities. In addition, Defra’s laboratory agencies routinely undertake quinquennial reviews of their scientific activity.

**Internal processes and practices to ensure integrity**

Within Defra, scientific and analytical staff embedded within policy teams are responsible for ensuring the day-to-day appropriate level of quality assurance is undertaken for individual projects, using guidance on roles and responsibilities on the Defra staff intranet, and supported by Defra CSA where required. In addition, staff guidance exists to support Defra’s scientists who commission, procure, deliver and report on research of the highest standards of rigour and integrity.

Guidance is also provided on Defra’s peer review policy. Peer review can take place at any time during a project but is most common at proposal or final report stage,
dependent on scale of a project and applied in a risk-based and proportionate way. Moreover, the guidance states that research proposals for projects costing over £250k, and/or with a high profile, or where there could be a high impact on Defra policy, must also be peer reviewed.

Defra also uses a network of external expert groups to provide advice and assurance on specific areas of evidence, including, Defra’s Science Advisory Council and expert groups on specific areas of Defra’s remit, e.g. Air Quality Expert Group.

Defra strongly encourages researchers working within Defra or who work under contract or on research grants to publish their work in the peer-reviewed scientific literature. Defra’s main research support institutions, including CEFAS, APHA and FERA all have strong track records in this regard. Publication in this way requires compliance with high standards of ethics and best practice because most of the scientific journals involved have their own policies concerning research integrity.

In addition to the above, across the Defra group, there are specific governance arrangements in place within each Defra Arm’s Length Bodies, which, where appropriate will also have their own guidance for quality assurance and peer review, including in a number of case accreditation and certification to international standards e.g. ISO 9001 (quality management) and ISO17025.

Importantly, any research Defra or its agencies carry out or fund which has the potential to use animals must rigorously and demonstrably apply the 3Rs principles (reduce, refine, replace). All Defra funded R&D which uses animals will need to confirm compliance with these guidelines, as they involve appropriate external scrutiny of the of the research being carried out; and high standards of experimental design. All animal research is licenced under the Animals (Scientific Procedures) Act. As an example of how this is applied in practice, APHA has its own Ethics Committee which must review and approve all experiments involving the use of animals for a scientific purpose before they begin. The committee members include vets, animal care staff, a biostatistician, scientists and non-scientists from across the agency. There are also external lay members of the committee, recruited from the local community, who bring an independent view to the proceedings. The Ethics Committee ensures that the 3 Rs have been applied to the study proposal. The Ethics Committee and those involved with the work also complete retrospective analyses of the experiments to ensure benefits are achieved, and to continually improve the refinement of experiments. APHA is a signatory to the Concordat on Openness on Animal Research - Understanding Animal Research.

Modelling is essential to the work of Defra. It is therefore vital that these models are fit-for-purpose. Following recommendations made by HMT’s Macpherson review of quality assurance of government models, Defra reviews and publishes a list of its business critical models (BCMs) on an annual basis. The reviews are coordinated by the CSA and the resulting list of BCMs published on Gov.uk as an annex to Defra’s Annual Report.

2. What policies the Department has in place to ensure research integrity
Defra is committed to comply with various Codes of Practice. Defra’s scientists and analysts, as well as making full use of Departmental guidance, also apply relevant professional guidance and conform to all ethical, legal and professional obligations incumbent on their work. In all cases, staff are aware of, and are expected to use, transparent, robust and fair processes to handle allegations of misconduct.

This includes:


- Government Statisticians must ensure they follow Code of Practice for Official Statistics. Ethical guidance on data and release of statistics is also covered.

- Ethical assurance guidance for social research in Government sets out ethical principles underpinning the conduct of social researchers, and the roles of departments, individuals and the central Government Social Research Team. Defra analysts undertaking social research are expected to follow these principles and raise issues with the Head of Profession where they arise. (https://www.gov.uk/government/publications/ethical-assurance-guidance-for-social-research-in-government)

- Other Codes of practice are also important to other scientists in the Defra group, for example, Joint Code of Practice on Research. The guidance and codes for each science project should be documented in the initial project plan along with any other requirements such as confidentiality, handling of personal data requirements relevant legislation (such as health and safety requirements, use of animals in research), or specific accreditations or certifications (such as ISO standards or specific laboratory science standards).

- The Aqua Book: guidance on producing quality analysis for government is a good practice guide to those working with analysis and analytical models. It was produced by a cross-departmental working group on analytical quality assurance.

3. **What processes the Department follows when problems with research are identified; and, How problems with research integrity in the Department are catalogued and reported.**

Defra’s Principles of evidence quality set out steps to ensure evidence quality. Defra has a number of assurance processes which are employed during the evidence commissioning and reporting cycle, as discussed above. Prior to commissioning, during projects, and at reporting stage, staff are encouraged to use peer review and expert groups as appropriate. Where necessary, there is escalation to the CSA as appropriate.
Prior to publication, final scientific reports are approved by the Evidence Publications Assurance Panel. The panel provides assurance that Defra publishes evidence that is of sufficient quality and that potential reputational risks are identified and managed appropriately. Where problems are identified, the panel will request that reports are subject to additional assurance processes. Panel decisions are catalogued by the Chief Scientific Adviser’s Office and reported to Ministers.

Final reports (unless confidential) from Defra funded research projects are published on the Defra search science website. Defra funded research is also regularly published in peer-reviewed academic journals.
Response from the Department for Exiting the European Union

Dear Mr Lamb

Research integrity, ethics and governance

Thank you for your letter on 19 December on research integrity, ethics and governance.

The work of the Committee in this area is an important step in ensuring that the Government has access to high quality research. I am committed, in my role as Chief Scientific Adviser (CSA), to support these principles in the work of our Department.

The Committee requested information relating to specific policies within the Department for Exiting the European Union (DExEU) to ensure research integrity. This is a unique, time-limited department with a coordinating function covering the full range of government business on exiting the EU. As Chief Scientific Adviser, my role is to ensure that departmental decisions are informed by the best science and engineering advice. Part of my role as CSA is to ensure that the Department takes account of relevant scientific evidence and research. In doing so, I work closely with the Government's Chief Scientific Adviser and other CSAs across government.

However, the Department looks to other government departments to lead on commissioning and funding scientific research where necessary to support policy development for exiting the EU. DExEU relies on the internal processes of the commissioning department to ensure that research has integrity. To date, in line with this context, DExEU has not directly commissioned and funded any scientific research.

The questions asked by the Committee are therefore not directly relevant to DExEU at the present time. We do not have in place the necessary policies and procedures to ensure research integrity because this is not currently required given the nature of our role. However, I will continue to monitor the situation and will ensure that the proper processes are in place to ensure good governance and research integrity if we begin commissioning and funding our own research rather than relying on other government departments.

Chris Jones
Chief Scientific Adviser
Department for Exiting the European Union
For the purposes of clarity DFID uses the Parliamentary Office of Science and technology definition of research integrity as behaviors and values that result in 'high-quality, ethical and valuable research'.

Who takes overall responsibility on governance and integrity within the Department?

The overall responsibility for research governance and integrity is held by the Department’s Chief Scientific Adviser (CSA). Within DFID the CSA also holds the position of Director of Research and Evidence Division (RED) and is responsible for DFID central research budget (3% of the departmental budget plus an additional £357m for the Ross Fund) and for the delivery of central research activity.

The DFID CSA is an external academic appointment seconded for 3-6 year period into the Department. The CSA function is also supported by a Deputy CSA who is also seconded from academia. This approach allows DFID to access high-quality up-to-date research experts to oversee DFID’s research activities, drive up standards around research practice, commissioning and quality.

The current CSA is Professor Charlotte Watts seconded in October 2015 from the London School of Hygiene and Tropical Medicine, where she holds the position of Professor of Social and Mathematical Epidemiology.

The Deputy CSA is Professor Alastair Ager seconded in April 2017 from Queen Margaret University, where he holds the position Director of the Institute for Global Health and Development. He is also Professor of Population and Family Health at Columbia University.

What policies the Department has in place to ensure research integrity?

DFID has strong procedures to ensure its research integrity, and continues to review and strengthen its practices around research integrity, ethics and governance.

DFID’s approach to commissioning and managing the delivery of high-quality research

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DFID is an important funder and commissioner of research, focused on providing evidence and new options to tackle major challenges of development. As detailed in DFID’s 2016 Research Review, its research priorities are informed by detailed assessments and consultation to identify key evidence gaps, using the following four questions guided its prioritisation:

- **Impact**: Does the research focus on a practical development challenge?
- **Additionality**: Does DFID support address a gap in research funding?
- **Quality**: Will the commissioned research be of quality?
- **Deliverability**: Will the research deliver benefits in a short to medium timeframe?

Some of DFID’s research commissioning is with other research funders to deliver its research that is nationally and internationally respected. This includes UK Research Councils (now under UK Research and Innovation), Wellcome Trust, Royal Society, UK and science and research organisations such as the Bill and Melinda Gates Foundation.

The majority of research funding is awarded through open, internationally competitions. DFID uses independent expert peer-review panels to assess potential bids. Bids are judged against several criteria including research quality and (where necessary) the ethical process the research will follow. Only applicants meeting DFID requirements on both these areas are taken forward for further consideration for funding.

DFID research programmes use an output-based contracting model. This approach ensures that DFID payments are made on the base of quality of programme outputs. DFID is currently considering ways to further strengthen its wording around research quality, integrity and ethics in its contracts and accountable grants.

As with all DFID programmes, research programmes have a dedicated Senior Responsible Owner (SRO) responsible for overall delivery of the programme. The majority of SROs leading research programmes have technical or research expertise relevant to the programme. All research programmes are reviewed annually by the SRO. This process allows DFID to assess how the programme is progressing and meeting DFID’s expectation as detailed in the programme log-frame. The process assesses programme risks and identifies issues that require further actions (which include quality of research and ethical considerations). Reviews are quality assured at Deputy-Director level and any high-risk issues are escalated to RED senior management by SRO. In compliance with DFID’s transparency requirements all annual reviews are published on DFID’s public Development Tracker site.

**Publication of research and peer-review**

DFID has a robust approach to open access and publication of its research findings. DFID’s Research Open and Enhanced Access Policy² gives irrevocable and free online access to scientific and scholarly material produced through our research.

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policy aims to increase the uptake and use of DFID’s research by removing price barriers and increasing its availability and visibility globally. All DFID funded research must be compliant with this open access policy.

DFID **strongly encourages the publication of independent peer-review articles in high-quality academic journals** from its research programmes. All research outputs (journals, reports, policy papers and other) are made available through DFID Research4Development (R4D) portal.

**Governance, Oversight and Learning**

Overall the Department has robust processes in place for governance and independent oversight of its research activities.

DFID has an internal **Research Committee** chaired by the Director-General for Policy and Programmes. The Committee performs a strategic oversight role for DFID ensuring DFID research priorities and activities meet DFID’s needs. The Committee involves key Directors across DFID and the CSA, Deputy CSA and the Chief Economist to ensure DFID has coherent approach to identifying its research priorities.

Independent external scrutiny, quality assurance and challenge of DFID’s research portfolio is provided by DFID’s Independent expert **Research Advisory Group (RAG)**. The RAG’s primary aims are to provide independent science and research advice to DFID and help assure the quality and appropriateness of RED’s research portfolio in meeting DFID’s objectives. It plays a crucial role in providing **reassurance to DFID’s Permanent Secretary on the significance, quality, impact of DFID funded research**.

The DFID RAG is considered across Government and has been cited by several Parliamentary Science and Technology Committee’s as a **strong example good practice of independent departmental science**. The RAG meets 3 times per year and is Chair by Professor Sir Ian Diamond from the University of Aberdeen.

**DFID’s approach to driving up standards for research across DFID**

Within DFID the Research and Evidence Division (RED) is working to drive up standards across DFID around research. Key ways in which RED is doing this include:

a. The development and implementation of a **Standard Operating Procedure (SOP) for Research**. This SOP ensures that DFID has a robust, coherent, and transparent approach to defining, documenting and reporting its research spend. This includes DFID developing an **agreed definition of its research**\(^3\), which is consistent and compliant with **HMG and international standards for public research**. This SOP has been **quality assured** by the DFID CSA and independently by the DFID’s external expert Science and Research Advisory.

\(^3\) Annex 2 of this paper
Group (RAG), and cited as exemplar of best practise by the Government Chief Scientific Adviser and Government Office for Science for other departments with a research budget.

b. The development and dissemination of detailed definitions and guidance for DFID staff to assess the quality of research studies commissioned by the Department. In 2014, DFID published a How to Note to enable consistent judgements to be made about the quality of individual research studies and the strengths of bodies of evidence. This guidance is available for external suppliers to determine how DFID judges research quality. It was updated in 2016 to a more user-friendly internal document for DFID staff to enable them to make more informed assessments about the strengths and weaknesses of research evidence.

c. Lesson Learning through Audit Meetings: Regular Audit Meetings to learn lessons from existing and past research programmes. These meetings allow a robust and open discussion on a board range of issues related to DFID research. This mechanism allows divisional wide-learning that helps informs current research management and future research activities.

What processes does the Department follow when problems with research are identified?

Problems identified within research programmes are escalated to the SRO. The SRO will then take appropriate action, which may include discussions with the supplier or escalation of issue to more senior RED management (including the CSA and Deputy CSA), for action. Any concern of fraud is referred to DFID’s internal anti-fraud team. Issues emerging are routinely identified, logged and actioned as a part of the annual review process for all research programmes.

How are problems with research integrity in the Department are catalogued and reported?

DFID has developed and published its 10 Ethics Principles⁴ to guide their research and evaluation programmes. These principles are made available to suppliers are available on the DFID external website.

DFID also requires all externally commissioned evaluations to have their terms of reference and output reports to be independently quality assured and assessed by its Evaluation Quality Assurance and Learning Service (EQuALS). EQuALS reviews the quality, relevance and rigour of the evaluation. This includes an assessment of if and how it adheres to appropriate ethical standards set out by the institutions delivering the evaluations and meets DFID’s ethical principles. All ethical issues that are identified by this service are logged and raised with the relevant SRO who takes forward any required actions.

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DFID annual review process also allows SROs to review any emerging issues in the evaluations including ethical considerations. Relevant actions are then taken forward by SROs.

Annex 2

DFID Standard Operating Procedure (SOP) for Research Summary

1. As in the UK Government Research Excellence Framework, DFID defines research to be a rigorous process of investigation leading to new insights, effectively shared.

2. Research includes the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction.

3. Research must be world class high quality research that is commissioned using a competitive process, implemented using rigorous and robust research methodologies, including adherence to internationally recognised ethical standards, and whose outputs are disseminated publically, following a robust process of peer review.

4. The emphasis on 'effectively shared' emphasises the general need for research to be published, disseminated or made publicly available in the form of open access research outputs. It does however include confidential reports, where open access publication is not appropriate.

5. This definition of research is compliant with the UK funding bodies’ definition of research in the HMG Research Excellence Framework (REF) and described in REF Assessment framework and guidance on submissions background papers.

6. As in the REF, the definition is intentionally inclusive, with the aim of capturing many different types of research method and output, whilst excluding some areas which clearly are not research, and where claiming an investment as research spend would not stand up to scrutiny.

7. This research definition and criteria is compliant with HMG and international standards for public research. This includes compliance with:

   i. HMG Research Excellence Framework (REF) for all public research;
   ii. 2002 OECDs Frascati manual R&D definition and the European System of Accounts (ESA) 2010 definition of R&D;

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iii. *HMG Government Office for Science’s Principles and Standards for Government Research*;

iv. *European System of Accounts 2010 (ESA10) changes to public research and development funding*;

v. *Office for National Statistics definition for public research*. 
Response from the Department for Transport

Dear Rt Hon Norman Lamb,

Research integrity, ethics and governance

Many thanks for your enquiry into the Department for Transport’s governance and integrity processes. I have worked with DfT’s Chief Analyst, Amanda Rowlatt, and answer each of your four bullets in turn below. The research we refer to below is all research commissioned by DfT and our internally conducted work for publication.

What policies DfT has in place to ensure research integrity

DfT’s principles and processes for assuring research and analysis are set out in our Strength in Numbers (SiN) framework. This contains guidance on practice regarding the specification, production and use of analysis including appropriate governance arrangements.

Annually, each policy area needs to identify their research needs and how these might be met – called the Analytical Strategies in the SiN, but typically addressed by our annual ‘Evidence and Research Summary (ERS) process in practice. The ERSs set out the proposed programme of research and analysis in each policy area against their business needs and ensure governance structures are integrated with that of the policy programme. The ERSs are then scrutinised and challenged by the Chief Scientific Adviser, the Chief Analyst, the Director General for each area and responsible Ministers. Ultimately, the whole programme is signed off by the Secretary of State. Once the research programme is agreed by DGs and Ministers, it is summarised and published as our annual ‘Area of Research Interest’ and aids our discussions with the external research community and other research funders.

Projects in the ERS to be commissioned must have Project Approval prior to work commencing. Project managers complete a Project Approval template which requires information on the strategic goals of the proposed project, the evidence needs it will fill, the likely impacts, the proposed methods and whether these have been discussed with experts, the risks, the costs, and the proposed procurement methods. This template is then signed off by the Director and the budget holder, who is typically the analytical Deputy Director for that area.

Accountability for research programmes sits with the Deputy Directors and senior officials within each business area. Governance of the research programmes is typically provided at a high level by the Policy or Programme Board and at a more granular level by an Analytical Board that operates within the business area. SiN provides guidance on how roles and responsibilities should be allocated and on approval mechanisms.
In a number of areas we conduct scoping / planning work prior to projects commencing, to ensure the resulting commission is fully understood and well specified. This is particularly common on our evaluation work, where we have a call-off contract with an external research provider to conduct such scoping work.

During project delivery, research projects are usually overseen by a steering group who receive regular updates on progress and discuss emerging findings and any issues with research delivery. However, establishing and running a steering group is at the discretion of the project manager. As part of our contract terms and conditions, regular updates of progress between the contractor and the research manager are built in. This ensures issues are identified early, and emerging findings and conclusions are communicated on an ongoing basis.

SiN sets out the governance processes that should be followed when using research, analysis and evidence to inform decision-making. All submissions to Ministers or Investment Boards in which analysis is used to aid decision making must include an Analytical Assurance Statement that articulates the strengths, risks and limitations in the way that the analysis has been conducted and the uncertainty in the analytical advice. Analytical Assurance Statements should be reviewed and cleared by an independent Centre of Excellence within DfT. This second line of defence aims to provide decision-makers with confidence in the information presented to them and its implications for the decision at hand. Beyond this, we also employ peer review. There is always internal peer review, conducted by DfTs community of analytical experts from six professions: Government Science and Engineering profession (GSE); Government Social Research profession (GSR); Government Statistical Service (GSS); Government Economic Service (GES); Government Operational Research Service (GORS); and our cadre of transport modellers. For high-profile, complex pieces of research and analysis, we also commission external peer review at the discretion of the project manager and/or steering group. External peer reviewers are chosen because of their subject/methodological expertise.

SiN contains specific information about the governance of business critical models – those models that drive essential financial and funding decisions; are essential to the achievement of business plan actions and priorities; and or could pose a serious risk to the department if errors occur. SiN sets out formal governance procedures, including the need to designate accountability for each model to a senior analyst or official who will oversee the specification, development, use and ongoing management of the model. This includes ensuring individuals responsible for day-to-day management of the model are employing effective quality assurance measures and ensuring model outputs are used appropriately.

To monitor the effectiveness of DfT policy and processes regarding analytical assurance and research management, the department enlists the assistance of the Government Internal Audit Agency (GIAA). Over the past 4 years GIAA have undertaken three reviews of practice regarding quality assurance of business critical
models and a review of research procurement. Findings and recommendations from these reviews have been used to shape the work programme for teams responsible for maintaining and strengthening policy in these areas and to improve practice. We are also in the process of commissioning research to review our approach to Analytical Assurance to understand how SiN is being applied in practice and identify any required improvements to ensure the Framework remains fit-for-purpose.

We have two external bodies which provide external scrutiny to our overall research plans and specific subject areas. The first is our Science Advisory Council, made up of academic and industry experts. This meets once a quarter to discuss areas of scientific interest, for example recent topics for discussion have been hyperloop, the future of flight, AI and machine-learning. The papers that result from these discussions are published.

Our second group is the Joint Analysis Development Panel (JADP) which aims to provide strategic comment and recommendations on the Department’s approach to developing its transport modelling, appraisal and evaluation guidance and methods. It brings together academic and professional experts with senior departmental analysts six times a year to discuss the overall direction and technical merit of the Department’s work. In its first year, JADP has helped to shape priorities for improving our modelling and forecasts of road travel and our research to strengthen the links between appraisal and evaluation. It has provided input to, and challenge on, our work on long term forecasting and uncertainty and cross modal analysis and also highlighted some of the main challenges associated with modelling and forecasting the long term impact of new technologies on travel demand.

Who takes overall responsibility for research governance and integrity within DfT?

For individual projects, accountability for the quality and integrity of the work lies with the Deputy Director responsible for the research in question. It is their responsibility to ensure that internal processes have been followed, quality has been assured and the conclusions do not go beyond the findings.

Responsibility for the day-to-day management of a project lies with the project manager, typically one of DfT’s analytical community. They are responsible for specifying the work; organising the steering and oversight of the project; establishing ethical scrutiny where necessary (we follow GSR ethical good practice), quality assurance, quality of reporting and publication.

There is a community of ‘Research Programme Managers’ (RPMs) who are the research leads in each policy area. The RPM Network was established to enable DfT to share updates on research programmes, identify synergies and provide updates on research procurement and share good practice. They tend to be the leads in the development of ERSs.

Overall, responsibility for the research governance process lies in the Analysis and Science Directorate (ASD) and is the joint responsibility of the Chief Scientific
Adviser and the Chief Analyst. We are currently reviewing the work of ASD, including our systems and processes around research governance.

**What processes DfT follows when problems with research are identified**

There are no formal processes to follow when problems are identified. However, the close working relationship between research contractors and DfT Project Managers that is built into contracts means that any issues with a research project should be identified and flagged early. Indeed, with our social research and evaluation contracts, unexpected issues with sampling, gaining appropriate response rates etc are relatively common. These are tackled through discussion, examining options and agreeing a way forward. Issues identified at peer review stage typically result in discussion and revisions of the report to ensure the conclusions are backed by the findings. Contractually, DfT typically own any data produced through research contracts, and these data can be examined and further exploited by DfT researchers and analysts or through further work by external researchers. In this way, DfT’s analysts can check the data and identify any issues with data quality where any concern about data quality exists.

**How problems with research integrity in the DfT are catalogued and reported**

This is not a common occurrence in DfT. Previous incidents have been identified and tackled on a case-by-case basis. We would welcome recommendations on how best to formalise these in the future and look forward to the conclusions of your enquiry.

I would be happy to respond to any clarifications or elaborations you might have.

Yours sincerely,

**Professor Phil Blythe**
Response from the Department for Work and Pensions

Dear Rt Hon Norman Lamb MP,

You wrote to the Department in your capacity as Chair of the Science and Technology Committee on the 19th December 2017, requesting information on:

- What policies the Department has in place to ensure research integrity;
- Who takes overall responsibility for research governance and integrity within the Department;
- What processes the Department follows when problems with research are identified; and
- How problems with research integrity in the Department are catalogued and reported.

Scope of this response

The Department undertakes a major Social Research programme which is delivered and quality-assured through the Government Social Research (GSR) profession and in line with its protocols. This accounts for the significant majority of all DWP research activity. Much of this work is contracted out to external research organisations through an open, competitive process detailed below.

Other government scientists and analysts (psychologists, medics, economists, statisticians, data scientists, operational researchers) systematically provide expert advice and input across a wide range of areas within the Department but the majority of this expert input is not within scope for this request.

The Department does not run a competitive academic research funding process akin to a Research Council, but directly supports Research Councils’ strategic investments (such as national social surveys) through co-funding arrangements. The Department strategically engages with the Research Councils to co-produce and make active use of evidence generated by academics and the wider research community. The Department actively feeds into Research Councils’ priority-setting processes to ensure they are supporting impactful research which will address DWP’s evidence requirements. The quality of the independently-produced academic research used by DWP is therefore subject to the assurance and governance processes undertaken by the Research Councils, Universities and scientific journals.

Responsibility for research governance and integrity

The Department’s Head of Profession (HoP) for social research, and the Chief Scientific Adviser (CSA), are jointly responsible for safeguarding the quality, integrity and objectivity of research. The HoP has day-to-day responsibility for social research, achieved by:

• Ensuring systems are in place to monitor the quality of research as outlined in the sections below, to ensure appropriate methods of data collection, analysis and presentation are used
• Maintaining oversight of research capacity and capability and intervening where these are inadequate or are being used inappropriately in the Department.
• Working with the Permanent Secretary and CSA to ensure the organisation is committed to the GSR Code and the GSR Publication Protocol, in full.
• Ensuring GSR staff are familiar with the guidance on professional and ethical standards accepted within social research as described in the GSR Code.
• Upholding good practice and intervening when professional standards are threatened.

Policies for Ensuring Research Integrity

The Department ensures research integrity by ensuring all commissioned social research is governed by the Department’s strict social research protocols. All research proposals must be approved by the relevant senior policy and analytical officials, and ultimately the CSA and HoP, to ensure the work represents value for money, as assessed by its cost and its robust methodological design.

All research proposals, as signed-off by the CSA and HoP, must comply with wider Departmental and professional policy, as follows:
• All research commissioned by the Department must adhere to strict ethical guidelines as detailed in the profession’s guidance on ethical assurance.
• All research conducted on behalf of the Department must demonstrate that it is in line with the Data Protection Act and the Department’s own data security protocols for accessing and processing data.

Ministerial sign-off is then sought from both our dedicated Minister for Research as well as the Minister with the relevant policy portfolio. This sign-off includes up-front acknowledgement that all research projects are published.

Research suppliers are then selected, typically on a project-by-project basis, following open competition using a thorough assessment of their technical and topic expertise and experience. This takes into account the quality of their proposal and previous work as evidenced in their bids. Currently the majority of our research projects are procured from a research framework, which lists approved organisations who have previously been assessed as meeting technical capability requirements.

Once contracted, all social research is pro-actively managed by GSR professionals. This can include the establishment of steering groups consisting of internal and external stakeholders, including academic experts, who regularly review the project, including the methodology. In addition to this, project managers:
• Periodically perform checks of the supplier’s data collection approach through attending interviewer briefing and observing interviews;

Conduct a thorough quality assurance of research report outputs to confirm interpretation and presentation of findings is accurate and not misleading; Where appropriate, datasets are received into the Department to enable the quality assurance of external analysis internally.

All externally commissioned social research is published as part of the Department’s research report series, unless seriously flawed, wherever possible within 12 weeks of a final report being agreed.

Departmental processes to address problems with research

It is a condition of the contract that if the contractor has concerns with research robustness these are raised with the project lead immediately to explore solutions. Where concerns are raised, these will be discussed with the project Senior Responsible Officer (SRO) to decide upon a solution.

If there are serious methodological flaws, these are escalated by the SRO to the HoP to determine the appropriate response; for instance whether to continue the work and whether it is suitable for publication.

If during the course of a research project a participant raises a complaint, the contractor is obliged to raise this with the Department. The project lead will discuss with the contractor to understand the nature of the complaint and subsequently raise with the HoP, who will draft a response to the complainant, for the contractor to feedback to the complainant.

Cataloguing and reporting problems with research integrity

If problems are identified with social research these are escalated to the HoP to advise on the steps to resolve, as outlined above. We do not catalogue issues with research integrity as any concerns are handled and addressed on a case by case basis. The HoP would take wider action where any systemic issues are identified, but this has not happened to date.

Yours Sincerely,

Trevor Huddleston

Department for Work and Pensions, Chief Scientific Adviser and Chief Analyst

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8 https://www.gov.uk/government/publications/government-social-research-publication-protocols

9 Typically a Senior Civil Servant belonging to one of the 4 analytical professions
Response from the Department of Health and Social Care

Response from Professor Chris Whitty, on behalf of the Department of Health and Social Care, to the 19th December request from the Rt Hon Norman Lamb MP, as Chair of the House of Commons Science and Technology Committee, seeking a submission on research integrity, ethics and governance.

Introduction

1. The Secretary of State for Health and Social Care has a legal duty to promote research and the use of research evidence in the NHS10. The National Institute for Health Research (NIHR11) is the key instrument through which this legal duty is discharged. As such, this introductory section provides background information about the NIHR to contextualise our responses to the questions posed in the 19th December 2017 letter from the Chair of the Science and Technology Committee.

2. The objectives of the NIHR are to:
   - fund high quality research to improve health
   - train and support health researchers
   - provide world-class research facilities
   - work with the life sciences industry and charities to benefit all
   - involve patients and the public at every step

3. To achieve these objectives, the NIHR commissions research under three main funding lines:
   - NIHR Programmes – NIHR research programmes fund high priority research across health, public health and social care using a wide range of study designs, including evidence synthesis, pilot and feasibility studies, randomised controlled trials and both quantitative and qualitative methods.

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10 (Section 6 of The Health and Social Care Act 2012 - http://www.legislation.gov.uk/ukpga/2012/7/part/1/enacted)
11 - https://www.nihr.ac.uk/
• NIHR Infrastructure – NIHR invests in the research fabric of the nation to support research in health, public health and social care by funding NHS and research active organisations to provide research infrastructure or support.
• NIHR Training – NIHR training programmes provide a unique opportunity for professionals to improve the quality of the health and care that they deliver through research.

4. Table 1 sets out NIHR spend since 2012/13 and the projected budget for NIHR over the remainder of the current Spending Review period.

<table>
<thead>
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<th>Actual NIHR spend £m</th>
<th>Forecast Spend £m</th>
<th>Expected budget based on 2015 Spending Review £m*</th>
</tr>
</thead>
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<td>1013.6</td>
<td>1034.8</td>
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<tr>
<td>NIHR ODA</td>
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<td>65.6</td>
<td>93.0</td>
</tr>
<tr>
<td>Total NIHR</td>
<td>963.0</td>
<td>1079.2</td>
<td>1040.8</td>
</tr>
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</table>

5. The NIHR currently supports 2386 research contracts between DHSC and organisations hosting research across the UK. The NIHR uses a suite of ‘standard contracts’, which are the legal cornerstones underpinning the integrity of research commissioned by NIHR on behalf of DHSC. The suite of NIHR standard contracts can be accessed here: [https://www.nihr.ac.uk/funding-and-support/funding-for-research-studies/manage-my-study/contracts-and-intellectual-property.htm](https://www.nihr.ac.uk/funding-and-support/funding-for-research-studies/manage-my-study/contracts-and-intellectual-property.htm).

6. DHSC has commissioned a number of ‘Co-ordinating Centres’ (CCs) which undertake the day-to-day management of these research contracts. The largest Co-ordinating Centres (listed below) are therefore responsible for commissioning, managing and monitoring research on behalf of DHSC.
• The NIHR Central Commissioning Facility (CCF) is based within LGC Limited and manages research programmes and infrastructure including Programme Grants for Applied Research, Invention for Innovation
Programme, Research for Patient Benefit Programme, Bio-medical Research Centres and Clinical Research Facilitates for Experimental medicine.

- The NIHR Evaluation, Trials and Studies Coordinating Centre (NETSCC) is based at the University of Southampton and manages the following research programmes: Efficacy and Mechanism Evaluation Programme, Health Services and Delivery Research Programme, Health Technology Assessment Programme, Public Health Research Programme and the Systematic Reviews Programme.

- The NIHR Trainees Coordinating Centre is hosted by the Leeds Teaching Hospitals NHS Trust and manages a range of NIHR training and career development awards available at different levels and accessible by individuals with different professional backgrounds.

- The NIHR Clinical Research Network Coordinating Centre (CRNCC) is hosted jointly by Guy’s and St Thomas’ NHS Foundation Trust and the University of Leeds, supported by a wider partnership which also includes King’s College London, Imperial College London, Newcastle University, and the University of Liverpool. The CRNCC enables the Clinical Research Network to support around 5000 clinical research studies each year.

7. The CCs are accountable to Senior Civil Servants in the Science Research and Evidence (SRE) Directorate of DHSC. Ultimate accountability for NIHR research rests, at Director General level, with the DHSC Chief Scientific Adviser, Professor Chris Whitty.

What policies does the Department have in place to ensure research integrity?

8. All NIHR research is governed by a number of frameworks, discussed below, which safeguard the integrity of DHSC commissioned research. There are specific clauses in the standard NIHR contract covering research integrity and associated frameworks (see Annex A). These frameworks are:
The Concordat to Support Research Integrity: NIHR is a signatory to this Concordat, which helps to ensure that research produced by or in collaboration with the UK research community is underpinned by the highest standards of rigour and integrity. Developed by Universities UK in collaboration with the funding and research councils, NIHR, Wellcome Trust and various government departments, the Concordat seeks to provide a comprehensive national framework for good research conduct and its governance. Signatories to and supporters of the concordat to support research integrity are committed to:

- maintaining the highest standards of rigour and integrity in all aspects of research
- ensuring that research is conducted according to appropriate ethical, legal and professional frameworks, obligations and standards
- supporting a research environment that is underpinned by a culture of integrity and based on good governance, best practice and support for the development of researchers
- using transparent, robust and fair processes to deal with allegations of research misconduct should they arise
- working together to strengthen the integrity of research and to reviewing progress regularly and openly

The UK Policy Framework for Health and Social Care Research: The Health Research Authority (HRA) and the health departments in Northern Ireland, Scotland and Wales have developed this policy framework following public consultation. It replaces separate research governance frameworks in each UK country with a single, modern set of principles for the whole UK. The Framework sets out the principles of good practice in the management and conduct of health and social care research in the UK. They are designed to protect and promote the interests of patients, service users and the public by describing ethical conduct and proportionate, assurance-based management of health
and social care research, so as to support and facilitate high-quality research in the UK that has the confidence of patients, service users and the public. One of the Framework’s key principles is that ‘Research is designed, reviewed, managed and undertaken in a way that ensures integrity, quality and transparency’ (Principle 5). It also states that employers (organisations employing the chief investigator and members of the research team) are expected to encourage a high-quality research culture, including ensuring employees are supported in and held to account for conducting research in a professional manner, including research integrity. Employers are also responsible for taking proportionate, effective action in the event of errors and breaches or if misconduct or fraud are suspected. The Framework is available on HRA’s website: https://www.hra.nhs.uk/planning-and-improving-research/policies-standards-legislation/uk-policy-framework-health-social-care-research/

- Governance Arrangements for Research Ethics Committees (GAfREC): This policy covers the principles, requirements and standards for research ethics committees operating in the UK, including their remit, composition, functions, management and accountability. GAfREC is available on HRA’s website: https://www.hra.nhs.uk/planning-and-improving-research/policies-standards-legislation/governance-arrangement-research-ethics-committees/

9. NIHR research contracts require the contractors (ie, the organisations hosting NIHR-funded research and employing researchers) to ensure that research is conducted in accordance with the above frameworks and policies which set expectations of the research system with respect to research integrity. Employers are responsible for ensuring that research is conducted in accordance with all relevant legislation and in accordance with the Concordat to Support Research Integrity and guidance issued by the Department and HRA, including GAfREC and the UK Policy Framework for Health and Social Care Research. Employers
are responsible for ensuring that researchers are trained and managed to acceptable standards and must take primary responsibility for the integrity of their employees' research. They should also investigate any reported failures. Many researchers are also members of registered professions. For them, the employer’s responsibilities are supplemented by already established regulatory arrangements codes of conduct, such as those set by the General Medical Council and Health and Social Care Professions Council.

10. In addition, a number of statutory requirements are relevant to the integrity of research commissioned by NIHR on behalf of DHSC:

- For research involving clinical trials, full legal compliance is required with regard to The Medicines for Human Use (Clinical Trials) Regulations (SI2004/1031) as Amended.


- GCP Good Clinical Practice (GCP) is the international ethical, scientific and practical standard to which all clinical research is conducted. Compliance with GCP provides public assurance that the rights, safety and wellbeing of research participants are protected and that research data are reliable. Everyone involved in the conduct of clinical research must be competent to perform their tasks, qualified by education, training and experience. GCP is a requirement in law (SI 2004/1031, Schedule 1, Part 2, 8) for those people working on clinical trials. NIHR Clinical Research network (CRN) GCP courses are available free of charge to the NHS, UK universities, and other publicly funded organisations conducting and supporting clinical research. To
ensure compliance with GCP, MHRA carries out inspections of organisations that are involved in clinical trials, mostly based on a risk assessment score, but also in response to a specific trigger if there is a suspicion that the law has been broken.

Other assurances of NIHR research integrity

11. All of the NIHR CCs operate to standard procedures which provide DHSC with further assurance regarding the integrity of research management. These Standard Operating Procedures (SOPs) are included in contract compliance arrangements and are subject to regular audit by DHSC officials (see Annex B for further information).

12. Anyone wishing to raise concerns regarding the declaration of and/or management of potential conflicts of interest in relation to NIHR research or raise whistleblowing concerns can contact the relevant part of NIHR, who will deal with this in a confidential manner (https://www.nihr.ac.uk/about-us/contact-us/). NIHR’s conflict of interest policy is published on its website https://www.nihr.ac.uk/about-us/documents/conflicts-of-interest-policy.pdf.

13. There are a number of elements of NIHR standard procedures which are key to upholding the integrity of research commissioned on behalf of DHSC. These are contained within the NIHR Adding Value in Research policy imperative (https://www.nihr.ac.uk/about-us/our-purpose/principles/adding-value-in-research.htm). The NIHR is committed to adding value in research to maximise the potential impact of research that it funds for patients and the public. This means ensuring that the research commissioned by NIHR on behalf of DHSC answers the right questions, delivers the research efficiently and that results are published in full in an accessible and unbiased way.

14. There is potential to make better use of the data collected by the NHS and social care to drive research to improve care and treatment for patients and the public. However, our ability to unlock these benefits relies on the public having confidence in the integrity of the systems used to collect, store, use and protect
data for a range of uses, including research. The Department of Health and Social Care is now working with NHS Digital, NHS England, and other partners and stakeholders on a range of programmes, summarised below, to provide this confidence to the public.

- **Patient control** - In May this year, new data protection legislation comes into force (which includes the General Data Protection Regulation) to give people more control and protections over their personal data in all sectors, including health. In addition, through a new ‘National Opt-out’, individuals will be given the chance to say if they do not want their identifiable patient data to be used for research purposes or purposes other than their individual care. If patients choose to share their data, it will be subject to strict legal safeguards and will only be shared with approved and trusted organisations.

- **Reassurance that data will be held securely** - Local organisations are required to implement the 10 data security standards recommended by the National Data Guardian for Health and Care. The data security standards are designed to help local organisations ensure cyber preparedness and resilience; address the causes of data breaches; protect systems against potential future breaches to digital data; and provide organisations with assurance tools to help ensure they are implementing the standards effectively.

- **Local Health and Care Record Exemplars** - The aim of this programme is to create and design the architectures and standards needed to enable local health and care data to be appropriately and safely accessed.

**Who takes overall responsibility for research governance and integrity within the Department?**

15. The SRE Senior Civil Servants who constitute the SRE Senior Management Team are responsible for research governance and integrity policy within the Department. Responsibility aligns from the SRE Deputy Directors, to the SRE Director, to the DHSC Chief Scientific Adviser and then to the DHSC Permanent Secretary. At Ministerial level, responsibility for the DHSC research agenda is
What processes does the Department follow when problems with research are identified?

16. The NIHR CCs have clear procedures to formally manage any issues which arise around research integrity and non-compliance with research contracts generally. In the event that an issue requires escalation from a CC to DHSC, the relevant CC Director or a member of their executive team raises the issue with their link DHSC Science Research and Evidence (SRE) Directorate Senior Civil Servant. The relevant SRE SCS representative discusses the issue with the relevant CC representatives and a course of action is agreed and implemented. This may involve escalation within the DHSC SRE Directorate to a joint discussion within the SRE Senior Management Team, composed of the Directorate’s Deputy Directors, Director and the DHSC Chief Scientist Advisor. The DHSC Chief Scientific Advisor can escalate any issues further to the DHSC Permanent Secretary and, ultimately, to DHSC Ministers for direction/decision.

How problems with research integrity in the Department are catalogued and reported.

17. Any issues with the integrity of research commissioned by NIHR on behalf of DHSC are catalogued by NIHR Co-ordinating Centres on their information systems. All of this information is available to DHSC on request.

18. Any issues relating to integrity which are escalated to DHSC by Coordinating Centres are catalogued on the DHSC information systems (‘IWS’). In the event that any issue requires a discussion amongst the Science, Research and Evidence Directorate Senior Management Team (SMT), the minutes of SMT meetings on the matter are formally recorded and, again, catalogued on the DHSC IWS information system.
Adding value in research.

19. In addition, NIHR has a specific ‘Adding Value in Research’ programme which aims to ensure that research funded by the NIHR addresses questions that are relevant to clinicians, patients and the public; uses appropriate design and methods; is delivered efficiently; results in accessible full publication; and produces unbiased and useable reports.

20. This dedication to adding value in research has been recognised by external parties, for example:

- A 2017 Lancet article [www.thelancet.com/series/research](http://www.thelancet.com/series/research) considered how funders are reducing waste and securing best value for taxpayers. The research team behind the study assessed 11 national research funders which distribute public funds in the UK, Australia, Canada, USA, Germany, France, The Netherlands, Denmark and Norway. They looked at how funders decide what to fund and how they ensure that what they do fund represents value for money and found that:
  - the National Institute for Health Research (NIHR) and the Netherlands Organisation for Health Research and Development (ZonMW) had the most extensive involvement of members of the public.
  - of the 11 funders, only NIHR requires reference to relevant systematic reviews in all funding applications for new research.
  - all funding agencies require registration of clinical trials before recruitment of patients. NIHR also requires registration of other study types, for example, registration of systematic reviews in the PROSPERO database.
  - NIHR is the only funder that emphasises the importance of publishing protocols.

- In 2017, the NIHR won the Cochrane-REWARD first prize for its work in reducing waste in research. [http://www.nihr.ac.uk/news/nihr-receives-prestigious-international-award/6430](http://www.nihr.ac.uk/news/nihr-receives-prestigious-international-award/6430)
12 RESEARCH PRACTICE AND ETHICS

12.1 The Contractor will ensure that research in any way connected with this Contract is conducted in accordance with the Health Research Authority guidance “UK Policy Framework For Health and Social Care Research”, with “The Concordat to support Research Integrity” and, if relevant, in accordance with the Department of Health and Social Care guidance “Governance Arrangements for Research Ethics Committees” (GAfREC) or such other guidelines as may be issued from time to time by the Department of Health and Social Care or the Health Research Authority and copies of which are made available to the Contractor.

12.2 The Contractor shall comply with all relevant legislation including but not limited to:

12.2.1 The Medicines for Human Use (Clinical Trials) Regulations (SI2004/1031) as Amended;

12.2.2 The Human Tissue Act 2004; and

12.2.3 The Mental Capacity Act 2005.

12.3 Unless any of the exceptions or other exclusions described in GAfREC apply, the Contractor will submit the Research for review by a Research Ethics Committee recognised by the Authority if the Research proposed involves:

12.3.1 potential research participants (including those who have died within the last 100 years) identified from, or because of, their past or present use of the Care Services (including Care Services provided under contract with the private or voluntary sectors), including participants recruited through these Care Services as healthy controls;

12.3.2 potential research participants (including those who have died within the last 100 years) identified because of their status as relatives or carers of past or present users of Care Services;

12.3.3 collection of tissue (i.e. any material consisting of or including human cells) or information from users of Care Services;

12.3.4 use of previously collected tissue or information from which individual past or present users of Care Services could be identified, either directly from that tissue or information, or from its combination with other tissue or information in, or likely to come into, the possession of someone to whom the tissue or information is made available;
12.3.5 xenotransplantation;

12.3.6 prisoners; or

12.3.7 social care;

with a view to obtaining the Research Ethics Committee’s favourable opinion of the Research and will inform the Authority’s Representative when such favourable opinion has been given (whether unconditionally or subject to conditions) or withheld.

12.4 Research activity requiring ethical approval shall not commence until such favourable opinion is given.

12.5 [FOR ALL EXCEPT TCC]: In the event of any animals being used in research, all requirements of the Animals (Scientific Procedures) Act 1986 must be followed. In addition, the Department of Health and Social Care’s mission statement and Home Office advice on ethical review process in relation to this Act must be effective and in operation.]
Annex B – DHSC auditing of NIHR Coordinating Centre operations

All of the NIHR Coordinating Centres (CCs) involved in research commissioning and management on behalf of DHSC operate to standard procedures which provide DHSC with assurance regarding the integrity of research management by the CCs. These Standard Operating Procedures (SOPs) are included in contract compliance arrangements and are subject to rigorous process audit by DHSC officials twice a year. DHSC internal audit advises on these audits and periodically reviews both the process and the findings.

Process Audits assessing SOPs cover the end to end NIHR research commissioning and management process including assessing the sufficiency of evidence on the following:

- Topic Identification
- Evidence of PPI [Patient and Public Involvement] in topic identification
- Evidence of peer review including number of peer reviewers
- Evidence of Commissioning Board approval
- Approvals (including research ethics) sign off
- Full Contract Sign off
- Evidence of checks for delivering PPI against the original bid.

Background information about NIHR CC operating procedures

Research Prioritisation and Commissioning

Applications to all NIHR research programmes are assessed via an independent and transparent process of peer review. Details of the assessment processes for all NIHR programmes and awards are contained in the relevant guidance notes for that programme and are made available on the NIHR website.

Patients and the public are involved in all stages of decision making. For example, the NIHR’s Health Technology Assessment (HTA) programme which funds research looking primarily at the clinical and cost effectiveness of interventions has prioritisation panels and commissioning boards which include patients and members of the public as well as clinicians, methodologists, statisticians and health economists. Together they assess applications based on relevance and scientific
merit and ensure that the applicants proposed approach will enable them to address the knowledge gap identified.

Programme Directors and other representatives, including patients and the public, who are invited to join NIHR review Panels, are recruited in line with the Nolan principles, which form the basis of the ethical standards expected of public office holders. They are recruited in an open and transparent way, and once recruited to a Panel are required to agree to a Code of Conduct and comply with published Conflicts of Interest policies.

**Programme and Project Monitoring**

Once funding has been approved and a contract has been awarded, progress against research milestones is monitored through routine reporting. Research contract managers with appropriate expertise monitor progress against milestones and take remedial action where necessary. Where ethical approvals are required to conduct research, research contract managers ensure that these are in place.

**Reporting**

The research contract issued by the Department encourages publication in peer review journals which are independent of Government. In addition NIHR has a journal where outputs from NIHR prioritised research programmes are published in full. [https://www.journalslibrary.nihr.ac.uk/#/](https://www.journalslibrary.nihr.ac.uk/#/)
Response from the Foreign and Commonwealth Office

RESEARCH INTEGRITY, ETHICS AND GOVERNANCE

Thank you for your letter of 19 December seeking information on what policies and processes the FCO follows when problems with research are identified.

Because the FCO neither funds nor conducts original research, there has been no need develop and introduce measures to address the research issues set out in your letter.

Yours ever,

Professor Robin Grimes
Chief Scientific Adviser
Response from HM Treasury

Dear Mr Lamb,

Thank you for your letter dated 19 December concerning your Committee’s current inquiry.

While the Department conducts a significant amount of analytical work internally, the Treasury does not directly commission scientific research. However, we work closely with relevant departments and with the Government Office for Science to ensure that we have access and can input into the evidence base they develop and maintain across the Government’s policy agenda.

We do of course have a strong interest in ensuring the Government’s wider policy programme is informed by high quality science commissioned by individual departments and bodies, and produced by the wider government science estate. Integrity and assurance of evidence is vital, and so I will look forward with interest to the outcome of your inquiry.

Yours sincerely,

Philip Duffy
Director
Enterprise and Growth
Dear Chair,  

Thank you for your letter dated 19 December 2017. Research integrity is a prominent issue at the moment, and I am happy to outline the Home Office’s policies and procedures to ensure integrity in the research that is commissioned by the Home Office.

The Home Office commissions research through three main areas: the Centre for Applied Science and Technology (CAST); Home Office Analysis and Insights Directorate (HOAI); and the Office for Security and Counter Terrorism Science and Technology Team (OSCT S&T). Additionally the Animals in Science Regulation Unit (ASRU) is involved in research regulation, and I will also detail their involvement in ensuring research integrity.

I will now give specific responses to your four questions:

- **What policies does the department have in place to ensure research integrity?**

The department maintains a culture where scientific research is subject to peer review. This is primarily done via academia, but on occasion, should there be wider implications, for example around security, other government departments might be used. Review is additionally carried out by senior scientists within the Home Office. In areas of CAST responsibility, for example, it has a well-established quality procedure to ISO9001/ISO17025 standards for all reports/outputs that are delivered, and this procedure includes peer review.

In social science areas, the Home Office will seek to fund social research via competitive tendering whenever possible. As part of procuring any social research, technical criteria on methodology and methodological expertise are evaluated by professional social researchers while commercial colleagues will evaluate the value for money. Any ethical issues will also be assessed as part of the procurement process. During the research, there will generally be a steering group comprised of policy stakeholders, other professional analysts and possibly independent academics to scrutinise proposed methods as well as progress. Any output from the research due for publication will be subject to peer review from at least two independent academic peer reviewers who have relevant topic area or methodological expertise.

OSCT S&T research is commissioned through a number of well-established mechanisms. For example, within government research is delivered via CAST and the Defence Science & Technology Laboratory (DSTL). Additionally OSCT S&T work closely with the Joint Security & Resilience Centre (JSaRC) and the Defence & Security Accelerator to engage with academia and industry through research calls. OSCT relies on each of the organisations it works with to uphold research integrity (professional standards and practices) whilst OSCT provides oversight of projects. Specification and contracts are placed with clear requirements on the activity and
outputs required of the supplier. These are then monitored closely by a portfolio office within the OSCT S&T Team.

The scientific advisory committees sponsored by the Home Office and the crosscutting Home Office Science Advisory Council (HOSAC) are significant sources of expert and quality advice that are an important part of informing our research development. The Advisory Council on the Misuse of Drugs, the Animals in Science Committee, the Biometrics and Forensics Ethics Group, and the Migration Advisory Committee are all independent and are able to commission their own independent research. HOSAC members are often involved at an early stage to offer their advice and to support good quality research across the Home Office.

Who takes overall responsibility for research governance and integrity within the department?

The Senior Civil Service (SCS) Head of Unit provides the first level of responsibility for ensuring research integrity of commissioned research. Further responsibility lies with either the Director of Science, Security and Innovation (for CAST) or Director of Analysis and Insights (for HOAI). The OSCT STAR Board takes strategic responsibility for research commissioned by the Home Office relevant to counter terrorism and serious & organised crime (CT/SOC). The board is co-chaired by the policy Director responsible for S&T and the Home Office Chief Scientific Adviser. The Chief Scientific Advisor ensures that Home Office systems for the management and use of science and engineering are of high quality and fit for purpose. Ministerial responsibility for science within the Home Office rests with the Security Minister.

It is worth noting that the department also contributes directly to more general research integrity governance. The Animals (Scientific Procedures) Act 1986 (2012 as amended) (ASPA) is administered and enforced by the Home Office through a robust delivery framework. This supports high standards of scientific integrity and ensures that research using animals is conducted according to appropriate ethical, legal and professional frameworks, obligations and standards. Under ASPA, transparent, robust and fair processes are applied to deal with allegations of non-compliance should they arise. The regulatory framework requires demonstrable planning, competence and capability to be provided to the Home Office.

What processes does the Department follows when problems with research are identified?

This is not a frequent occurrence so issues are evaluated on a case-by-case basis. However, we follow a process of review and identification of the issue(s), and then implement lessons-learned.

In the case of CAST, when errors have been identified in a research method and/or results, CAST would issue a new report. Social researchers in the Department adhere to the GSR guidance on ethics, which ensures that any complaints raised during the research process are thoroughly investigated.
In the case of research in CT/SOC, where issues with research are found, these are tackled locally between the department and supplier and where necessary, legal and commercial support is used on matters of contractual compliance. Where discovered, they are raised as an issue to the relevant governance board for awareness and are documented as part of Project & Programme Management processes.

How are problems with research integrity in the department catalogued and reported?

Professional Codes of Conduct for scientists and researchers require the reporting of issues related to research integrity. These would initially be reported to Senior Civil Service (SCS) Head of Unit, and subsequently to the appropriate Director and finally the Chief Scientific Adviser, if required. They would also be reported to the appropriate governance board. Serious issues would also be reported to the appropriate parties within the commissioned organisation, and if necessary, to the appropriate professional bodies.

Post-delivery complaints and any subsequent changes to output are logged on the appropriate project file via the processes explained in answer to question three above. When associated with ISO17025 accreditation, problems with research and any work conducted are logged as non-conformities, internally investigated and closed out. ISO 17025 has clear guidelines on notifying customers and rectifying non-conforming work, and all of these occurrences are logged within the appropriate quality system. Cataloguing will also occur through the appropriate governance boards.

As I mentioned when I appeared before your committee, considerable damage is done by misrepresentation of research, not only to those specific instances, but to general public trust of science, and I welcome your interest in this subject.

Yours sincerely,

John Aston
Home Office Chief Scientific Adviser
Response from the Ministry of Defence

Introduction

1. This paper constitutes the Ministry of Defence’s evidence to the House of Commons Science and Technology Committee’s inquiry into Research Integrity. It addresses the four questions set by the Committee’s Chairman in his letter to MOD’s Chief Scientific Adviser (CSA) of 19 December 2017, describing the policies, procedures and governance mechanisms applied within Defence to ensure that scientific research is necessary, of high quality, ethical and value for money.

2. The Committee should note that, within MOD’s operating model, responsibility for commissioning and assuring research is delegated to the organisation undertaking that work, with appropriate central oversight. The overwhelming majority of the MOD’s science and technology (S&T) research is undertaken through the MOD’s core research programme, and delivered by or through the Defence Science and Technology Laboratory (Dstl). This note therefore focuses on Dstl’s systematic quality control framework.

Policies the Department has in place to ensure research integrity

3. The Ministry of Defence is committed to the highest national and international research standards. All bodies that sponsor or undertake research are required to comply with MOD and wider government policy, regulatory, ethical and legal requirements. Heightened controls are applied where research involves potentially contentious ethical issues (e.g. research involving human participants or animals) or hazardous materials.

The Core Research Programme:

4. As noted, most Defence S&T research is delivered through the CSA’s core research programme, commissioned by the directorate of Defence Science and Technology (DST) and delivered by Dstl (in house or through suppliers in industry and academia). In essence, DST establishes research priorities, specifies the overarching policy framework and holds Dstl to account for delivery; Dstl operates to stringent quality standards governing all aspects of its business; and assurance is provided through a joint assurance framework (including internal audit and independent peer review).

5. DST defines policies and procedures that apply to the Core Research Programme through the MOD S&T Portfolio Framework, from initiation – through a clear business case articulating benefits, potential risks and capability requirements – to project closure. Technical quality, ethical compliance and assurance are assessed and managed at project, programme, and portfolio levels using the internationally recognised Portfolio, Programmes, and Projects (P3M) Management
system. Each P3M level is held to account for delivery progress and quality through Portfolio and Capability Progress Groups, which report to the Defence S&T Management Group (chaired by the Director of DST, who oversees the S&T Portfolio on behalf of the CSA).

6. Within Dstl, an overarching Quality Policy applies to all aspects of business and all products, services and advice delivered to customers. A Quality Management System (certified to ISO 9001:2015) describes the policies and business processes required to deliver customer and stakeholder requirements and enhance customer satisfaction. This includes specific S&T Technical Quality Policy and guidance (and associated S&T Delivery Policy and processes) to ensure that S&T outputs delivered by Dstl, and by its external suppliers/partners, are of acceptable technical quality, and comply with ethical, legal and regulatory requirements. It also covers ensuring the competence of staff to undertake the work assigned.

7. Where enhanced controls are required, the relevant parts of Dstl are certified to additional relevant standards (e.g. ISO17025 - the standard for testing laboratories). Additional control frameworks may also be mandated in some research areas in line with national and international standards. For example, any clinical and non-clinical research involving human participants that is undertaken, funded by, or sponsored by MOD must comply with relevant legal and regulatory standards as well as ethical policy requirements set by the Surgeon General and detailed in Joint Service Publication 536 (JSP536). This includes review by an independent MOD Research Ethics Committee (MODREC), drawing on best practice guidelines set by the Health Research Authority (HRA).

8. DST and Dstl jointly operate an integrated assurance framework to assure the health of key S&T capabilities and the technical quality of research.

- Within Dstl, the ‘3 Lines of Defence Assurance’ model provides confidence that research outputs (by Dstl or its external suppliers) are of the required quality. This includes a robust schedule of internal and independent audits – including audits for ISO 9001 certification and Defence Internal Audit (DIA) audits for specific areas of Defence risk/interest – that enables the Dstl Chief Executive to monitor corporate governance and control systems.

- Independent peer review of capability health and the technical quality of the MOD S&T is coordinated through a DST/Dstl Joint Assurance Plan, overseen by the Portfolio and Capability Progress Groups. Audits may include expertise from the Defence Science Expert Committee (DSEC), the Independent Scientific and Technical Advice (ISTA) register, other Science Advisory Councils (SACs) or externally from industry, academia and internationally.
9. A range of other organisations within Defence may also undertake (or contract for) S&T research, including the Front Line Commands, Defence Academy, Surgeon General, Defence Personnel and Defence Intelligence. Where additional research and spending is conducted by other Defence organisations, discrete management processes are undertaken as part of the Departmental review framework explained above.

**Overall responsibility for research governance and integrity within the Department**

10. The Research, Technology and Innovation Board (RTIB), chaired by the Minister for Defence Procurement, is the senior MOD board with responsibility for S&T research. Its remit includes supporting the MOD CSA in his role as senior adviser to Ministers on S&T matters, and holding DST and Dstl to account for delivery of the Defence S&T Strategy and S&T outputs (including technical quality and value for money).

11. As noted above, under the strategic direction of the RTIB, DST is responsible for commissioning and governance of the core research programme that is delivered by or through Dstl.

12. Within Dstl, the Executive takes overall responsibility for research governance and integrity to ensure that the quality objectives are established and are compatible with Dstl’s context and strategic direction. The Executive also reviews, endorses, promotes and achieves the aims of the Quality Policy, and reviews the effectiveness of Dstl's Quality Management System in meeting the needs of customers and stakeholders. The independent Audit Committee supports the Dstl Chief Executive in monitoring the organisation’s corporate governance and control systems.

13. The Committee may also wish to note that the MOD CSA is responsible for professional standards and capacity-building as the Department’s Head of Profession for Science and Engineering.

14. The Senior Responsible Owner (SRO) for MOD Ethics Procedures for Research Involving Human Participants is the Surgeon General, accountable directly to the Defence Board. This includes ensuring proper governance, assurance, programme management and reporting arrangements are in place to ensure appropriate oversight and scrutiny.

15. At an individual level, all Defence staff are held to ‘standards in public life’ and required to uphold the Civil Service Values (integrity, honesty, objectivity, and impartiality) as set out in the Civil Service Code.
Processes the Department follows when problems with research are identified; and cataloguing and reporting problems with research integrity

16. The policies, processes and governance arrangements noted above (including the P3M framework, Dstl’s Quality Management System and joint integrated assurance) provide an effective and proportionate framework to identify, assess and address or escalate problems in the S&T research commissioned by MOD. Similar processes are in place for research undertaken elsewhere in the department, with cross-cutting assurance for high risk or contentious research (e.g. human participant research overseen by MODREC, which may remove ethical approval from projects at any point).

17. Under the P3M model, each S&T programme must have an Independent Review Plan identifying appropriate points in the lifecycle to review key activities and assure technical quality control (including of outputs produced by external suppliers). The level of technical review should be commensurate with the complexity, size and risk associated with the output being delivered. Key oversight activities include monthly reviews of Dstl programme reports, programme boards, monthly Portfolio Progress Group meetings, and reviews of product and Programme-level Customer Satisfaction. Risks and issues are actively managed throughout and escalated, if appropriate, to the Defence S&T Management Group.

18. Recommendations from internal auditors or independent peer review audits are addressed through action plans, with implementation monitored through the relevant governance boards. These may then be escalated to the Defence S&T Management Group or higher within the central oversight structure if necessary.

19. Both DST and Dstl proactively monitor customer satisfaction to support continuous improvement and identify issues. This includes through questionnaires at the project and programme levels. Customer complaints, when received, are managed through the S&T delivery policy and processes. Complaints could come directly from the customer to Dstl Project and Programme Managers, via DST-led Programme Boards, or through direct engagement with DST.

20. Within Dstl, concerns about research integrity, ethics and governance can be raised and escalated at any time by Dstl staff through the Dstl Standards in Public Life (Whistleblowing) Process written in line with the Public Interest Disclosure Act 1998 (PIDA), the Fraud Act 2006, and the Bribery Act 2010.
Response from the Ministry for Housing, Communities and Local Government

Dear Sir/Madam,

Research Integrity, Ethics and Governance Inquiry

I am writing in response to the request for information from Rt. Hon. Norman Lamb MP in relation to the Science and technology Committee’s enquiry into Research Integrity, Ethics and Governance, in his letter dated 19th December 2017.

The Department’s responses to the four questions posed are as follows:

What policies the Department has in place to ensure research integrity?

The department has strong policies and procedures in place to ensure research integrity. All commissioned physical and social science research projects costing less than £10,000 must be approved by the Chief Analyst.

Any commissioned projects costing over £10,000 must be approved by Ministers and scrutinised by the Research Gateway committee, comprising the Chief Analyst, senior analysts from each of the professions (Government Economic Service (GES), Government Statistical Service (GSS), Government Social Research (GSR), and Government Operational Research Service (GORS)), and representatives from procurement and finance in order to ensure that any proposal’s approach, methods and commissioning procedures are appropriate, feasible and proportionate.

Any projects costing over £250,000 must also be scrutinised by the Department’s Investment Sub-Committee (ISC).

Who takes overall responsibility for research governance and integrity within the Department?

The Director of Analysis and Data Directorate and Chief Analyst, Stephen Aldridge takes overall responsibility for research governance and integrity in the Department.

What processes the Department follows when problems with research are identified?

The Department has a pro-active approach to guard against the risks of such problems occurring and developing. In addition to the Research Gateway scrutiny processes, projects are commissioned and managed by professional analysts with appropriate training and experience in the topics concerned. Further support is provided by senior analysts and steering and advisory groups where appropriate. In addition, a number of the Department’s key statistical outputs are produced in accordance with National Statistics guidelines, and research studies are conducted in accordance with Government Social Research protocols.
The Research Gateway committee also review projects at key stages, and review progress and outputs to ensure that the projects are subject to the appropriate scrutiny, and that recommendations for remedial action are made where necessary.

**How problems with research integrity in the Department are catalogued and reported?**

In the rare event that problems are identified or complaints received, these will be referred to the relevant Head of Profession and or the Chief Analyst to review and take action.

Yours faithfully

**Stephen Aldridge,**

**Director of Analysis and Data and Chief Economist**

Department for Communities and Local Government