1. I am Professor of Constitutional Justice at Essex Law School, University of Essex. Some of my understanding of the legislative process stems from my stint as the Legal Adviser to the Constitution Committee 2006-09. I make this submission in my individual capacity.

2. My submission relates to technological developments within government and the impact of these on Parliament and the legislative process. There are implications for all aspects of the Committee’s inquiry, including delegation of powers. This memorandum summarises and draws directly on research contained in my essay “Robot Government: Automated Decision-making and its Implications for Parliament” chapter 9 in A. Horne and A. Le Sueur, Parliament: Legislation and Accountability (Hart Publishing, 2016).

3. When Parliament legislates to confer executive power on a public authority (e.g. the Secretary of State, a local authority or other government body) there is – insofar as any thought is given to the matter – an assumption that the ultimate decision-maker will be a human being (a minister, councillor, civil servant, local government officer, etc). Now, and to an increasing extent in the future, we need to be aware that decision-making will be carried out by automated systems in which the involvement of human officials are minimised or eliminated.

4. An individual decision may be fully automated (or “zero touch”) where a citizen initiates the decision-making process through a self-service online tool, submitting all information online and the outcome is reached and communicated without any human official participation. An example of this is the Employment Status Indicator (ESI) tool on the HM Revenue and Customs website, which definitively determines whether a worker is an employee or a self-employed contractor based on answers given online to a series of questions. Automated systems such as this use algorithms to break down a decision into a set of “if/then” rules and criteria (here, drawing on rules contained in legislation and case law). Advances in artificial intelligence technologies will facilitate automation of a wider range of types of decision.

5. The statute book says little about automated decision-making. The first reference to the phenomenon is in section 2 of the Social Security Act 1998 on “Use of Computers”. It provides that any decision falling to be made by the Secretary of State “may be made or issued not only by an officer of his acting under his authority” but also “by a computer for whose operation an officer is responsible”. This appears to draw a distinction between a computer as a mere tool for decision-making and a computer as the decision-maker itself. Similar provisions are contained in the section 50A of the Child Support Act 1998 and in Northern Ireland secondary legislation on social security.

6. There are several constitutional and legal questions that your Lordships’ Committee may wish to consider during your inquiry.

7. **Can automation enhance compliance with the rule of law?** Empirical socio-legal studies show that human officials may fail to operate in complete conformity with rules laid down in legislation when making decisions about individuals. There are various possible reasons for this, including lack of awareness of relevant rules or misunderstanding what they require, professional administrative cultures in which legal rules are only one of several competing pressures, and uncertainties built into the legal rules being applied. Automated decision-making may achieve more consistent implementation of the formal rules approved by Parliament than can be offered by human officials. Requiring automated decision-making systems to provide explanations for their outcomes (reasons) would also be a positive contribution to the rule of law.

8. **Will automation lead to a shift from administrative discretion and judgement to rule-bound decision-making?** Most fields of administration have, over the years, included a mix of
hard-edged rules leading to legal entitlements (e.g. no licence may be issued to a person who has an unspent criminal conviction) and issues on which professional judgement or discretion needs to be brought to bear because the power conferred on the decision-maker is flexible or open-textured (e.g. a licensee must be a “fit and proper person”). One hypothesis about automated decision-making is that it will provide an incentive for decision-making systems to be based on rules rather than judgement/discretion. While this may enhance compliance with the rule of law (see above) this may reduce or eliminate the capacity of officials to provide personalised solutions.

9. **What is the legal basis for automated decision-making?** Section 2 of the Social Security Act 1998 seems to recognise that, at least in some situations, there is a legal and constitutional need for an express legal basis for automation. In Australia, a distinction has been drawn between different forms of automation: “The use of an expert system to make a decision – as opposed to helping a decision-maker to make a decision – should be legislatively sanctioned to ensure that it is compatible with the legal principles of automated decision-making” (Australian Government, *Automated Assistance in Administrative Decision-making: Better Practice Guide*, 2007). Your Lordships’ Committee may want to consider what the position is and should be in the United Kingdom.

10. **Does automation involve the delegation of executive power to a computer?** A further complexity that needs to be considered is the rule against delegation of statutory functions to somebody other than the person specified in the legislation (*delegata potestas non potest delegari*). The legal presumption is that “when a power has been conferred on a person in circumstances indicating that trust is being placed in his individual judgement and discretion, he must exercise that power personally unless he has been expressly empowered to delegate it to another (H. Woolf, J. Jowell, A. Le Sueur et al, *de Smith’s Judicial Review* 7th edn, Sweet & Maxwell, 2013). Under the Carltona principle, human civil servants acting in the name of the Secretary of State are not regarded as exercising delegated powers. The thinking behind section 2 of the Social Security Act 1998, discussed above, may suggest a distinction between: (a) a situation where there is complete automation so the computer should be regarded as the decision-maker; and (b) one where there is automation of only part of the decision-making process and the person named in the Act (the Secretary of State, the local authority, etc) retains control over the outcome. In (b), the presumption against delegation does not apply because there is no delegation. But in relation to (a), the prudent conclusion is that express legislative authorisation is needed where a computer decides.

11. **Should there be a right to know about or object to government decision-making by automated means?** Another issue that has received little or no attention is the desirability of a right to be told that a government decision has been automated and a right to opt out of that process. In relation to private sector decision-making, section 12 of the Data Protection Act 1998 creates a special regime in respect of wholly automated decisions using personal data, where the decision will have a significant effect on the individual concerned. A person has three rights: (a) to give notice to an organisation not to make a wholly automated decision; (b) if no notice is given, the organisation must inform the individual that automated decision-making has taken place; and (c) a right to ask, within 21 days of a wholly automated decision, for the decision to be taken on a different basis. An example would be an individual who has an exemplary history of managing his or her financial affairs responsibly, but who is denied a loan because his or her circumstances do not fit an automated credit-scoring system. This regime does not, however, apply to most government decision-making because decisions “authorised or required by or under any enactment” are exempt under section 12(6)(b). A question that your Lordships’ Committee may want to consider is whether this distinction between private and public sectors is justified.
12. **Should there be No-Go areas for automation?** Another constitutional issue is whether there should be no-go areas, where government is forbidden from operating fully automated decision-making and decisive human involvement is preserved. A future (still distant in 2017) in which all government decisions affecting citizens are taken by computers feels like a dehumanised dystopia. But some automation seems uncontroversial. We do not, for example, expect officials in HMRC to work out each taxpayer’s liability using pen and paper to make mathematical calculations. Are we equally sanguine about a computer making or significantly contributing to a decision as to whether the Parole Board should recommend release a murderer? In the USA, at least 15 states use risk assessment computer programs to determine whether a prisoner should be released, a decision-making process that is reported to be changing outcomes. Various criteria could be used to demarcate computer-reduced or computer-free zones. One approach might be to focus on the impact of decisions: for example, decisions that impinge on the most fundamental rights, such as liberty of the person. This may, however, be a blunderbuss method if computers can help government make better decisions, which may be advantageous to the individual (as in the case of parole boards). A different approach would be to focus on the dividing lines between what is appropriately rule-based and what requires professional human judgement. Three principles have been adopted in Australia that would provide a basis for developing a framework in the UK (see Australian Government, *Automated Assistance in Administrative Decision-making: Better Practice Guide*, 2007, Appendix B: ARC Best-Practice Principles):

a. Automated systems that make a decision—as opposed to helping a decision-maker make a decision—would generally be suitable only for decisions involving non-discretionary elements.

b. Automated systems should not automate the exercise of discretion.

c. Automated systems can be used as an administrative tool to assist an officer in exercising his or her discretion. In these cases, the systems should be designed so that they do not fetter the decision-maker in the exercise of his or her power by recommending or guiding the decision-maker to a particular outcome.

13. **Is there a need for standards?** The questions about automated decision-making posed above, which may not be exhaustive, seem to me to call for further inquiry by Parliament and the elaboration of constitutional standards (as has been achieved in Australia). The standards could either be in the form of a good practice guide (for designers and operators of automated systems) or a statutory framework to regulate automated systems, or both.

14. **Does Parliament need to provide better scrutiny of automated decision-making?** Whether an overarching legal framework is created for automated decision-making or good practice standards are adopted, Parliament should also consider automation issues when Bills and draft statutory instruments are scrutinised during the legislative process. The following questions could usefully be asked—perhaps by a new specialist committee in the House of Lords—of any executive power-granting provision:

(a) Does the Secretary of State (or other decision-maker) intend to automate some or all the decision-making process?

(b) Is there express legal authority to do so if the decision is in effect going to be made by a computer rather than a human? (See the example of section 2 of the Social Security Act 1998 discussed above.)

(c) The automated process will rely on rules rather than discretion or professional judgement: is this appropriate in the circumstances? Is it preferable to preserve discretion and scope for professional judgement or other human intervention? If so, how could this best be achieved? Is
there a method for identifying “hard cases” in which the application of clear rules may lead to unfairness in individual circumstances?

(d) What data will the automated decision-maker draw from across government? Is data sharing acceptable in the circumstances? (For instance, it will almost never be appropriate to draw on an individual’s NHS personal medical records on issues about health, but would it be acceptable to draw on data about the frequency of a person’s visits to a GP or hospital for the purposes of verifying a need to have accommodation conveniently situated for such visits? This would arise if there were proposals to automate decision-making under the Homelessness (Suitability of Accommodation)(England) Order 2012).

(e) Can the committee preview the app that will be used to make the decision? How many questions does it ask? Is this an acceptable number or does it put an undue burden on the citizen? How closely are the questions based on the legislation creating the executive power? Do they properly implement the intention of Parliament? Will the questions be intelligible to self-service users? What is the source of each question—primary legislation, secondary legislation, case law, departmental policy etc? In relation to policy, what mechanisms will prevent the computer from fettering its discretion by the overly rigid application of policy?

(f) Will the system generate a reasoned explanation of the decision? Is the type of reasons given appropriate to the specific context?

(g) What steps are being taken by the Secretary of State to ensure digital equality? An automated decision-making app for elderly people, people with learning difficulties or people who do not read English proficiently will pose a range of challenges.

(h) Does the citizen have a right to opt out of the automated decision-making process to discuss his or her case with a human official? If so, at what point does that occur?

(i) How can the citizen appeal against the decision of the automated decision-maker?

15. Will the digital revolution be catalyst to organisational change in Parliament? UK Government policy on the digital transformation, of which automated decision-making is one aspect, has since 2011 been led by the Government Digital Service (GDS), a unit in the Cabinet Office with a staff of 500. The overarching goal is “making public services digital by default, and simpler, clearer and faster to use”. The GDS is working with departments to redesign services, based on its “number one design principle: ‘User needs, not government needs’” (www.gov.uk/transformation). This involves “dismantling silos” and focusing on transactions from the citizen’s perspective (so “buying a house” rather than “HM Land Registry”). There is a vision of “Government as a Platform”, enabling different parts of government to share “digital systems, technology and processes”. The GDS uses ideas and language that stand in stark contrast to the formalities of the legislative process in Parliament (it is, perhaps, like comparing Google HQ with The Athenaeum). This challenges traditional thinking and practices around Parliament’s role in the legislative process. Three of the GDS’s interconnected exhortations merit closer attention: “service patterns”, “user focus” and “breaking down silos”.

16. Current parliamentary scrutiny during the legislative process focuses on text, not the experience of end-users of the legislation. This stands in stark contrast to the thinking of the GDS. Louise Downe, Head of Service Design writing on the GDS blog, says that one of the important things that the GDS is focusing on is: “Creating standards for ‘what good looks like’ for certain types of services e.g. getting permission to do something, exchanging the ownership of a thing, or delegating responsibility to someone etc. We’re calling these ‘service patterns’—consistent (but not uniform) standards for the way that a repeated activity (like getting permission) should work both for users and government”.

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17. In the GDS, traditional organisational structures are pejoratively labelled “silos”, which need to be “broken”. In an exercise to develop a graphic representation of the criminal justice “landscape”, specific organisations disappear: “...you might notice that the map doesn’t name any organisations or government departments. That’s because that’s not how users see the system. They talk about going to court, rather than dealing with ‘HM Courts and Tribunals Service’; they talk about going to prison, rather than being part of a “National Offender Management Service” process. Also, this is a living map, something that can be maintained and updated as the team learns more” (https://gds.blog.gov.uk/2015/08/18/mapping-new-ideas-for-the-digital-justice-system-2).

18. A world of “service patterns” and “landscapes” sits uneasily with the experience of parliamentarians scrutinising primary and secondary legislation. The distinction between primary and secondary legislation is a “silo” par excellence. MPs and peers have before them mere fragments of decision-making design ripped out of context and set out as legal text. The use of framework Bills, where all detail is left to be developed in secondary legislation, makes their task of making real sense of the design of the decision-making system even more difficult. “Christmas tree Bills”, where proposals for unconnected policy areas are hung on the same Bill for political convenience, can further muddy the waters. Often a Bill or draft statutory instrument is amending an existing and usually already complex decision-making process. Parliamentarians are normally told little or nothing about how the rules they are asked to approve will be implemented. Nor are they usually told about relevant case law that may impinge on the decision-makers. Even the most assiduous parliamentarian is likely to struggle to get any real understanding of how officials (or computers) will implement the legislative words or how this will impact on citizens.

19. Parliament needs to bridge the gap between the established procedures for legislative scrutiny and the new ways of thinking about government decision-making brought in by the digital revolution. One step forward would be a House of Lords Committee on Government Service Standards Design. This cross-cutting committee would complement the work of the other specialist committee such as the Constitution Committee, the Committee on Delegated Powers and Regulatory Reform, the Joint Committee on Statutory Instruments and the Joint Committee on Human Rights. The new committee would break down the silos between primary and secondary legislation with a remit of reviewing Bills and draft statutory instruments against a template of “what good looks like”. A programme of work for the committee would include sampling the experience of citizens as they navigate their way through interactions with government (claiming benefits, starting a small business, buying a house and so on). They would carry out post-legislative scrutiny of all relevant legislation (and pre-legislative scrutiny on any proposed changes), consider judicial engagements with the legislation, and hear from academic experts, representative groups, users and the department(s) concerned with the service pattern under scrutiny.

20. Is there a need to recognise “fourth-generation law”? A final, and most fundamental, proposal is that automated decision-making requires us to reconsider what we regard as “the law”. In conventional thinking, the whole legislative process in Parliament focuses on the text of the Bill or draft statutory instrument. Without a text, there is nothing to process. Once enacted, the text is “the law”. Automated decision-making challenges this orthodox model. Taking a long historical view of forms of law, four generations of law can be postulated. The most ancient form was spoken law: law declared orally by judges. Then came writing, which enabled law to be recorded and systematised. Then came the printing press, through which “the law became an instrument of bureaucracy”. The fourth generation, digital law, “provides essentially new options as well” (see De Mulder and van Noortwijk, ‘More Science than Art: Law in the 21st Century’, 12th BILETA Conference, The Future of Legal Education and Practice, 24–25 March 1997).
21. The notion of digital law calls into question the role of parliamentarians in the current legislative process. Writing in 2002 about the Netherlands, Svensson forecast “a development towards legislation that is directly formulated to fit into decision-making systems” and a trend “to make legislation as unified, straightforward and cheap to execute as possible” (J Svensson, “The Use of Legal Expert Systems in Administrative Decision Making” in Å Grönlund (ed), Electronic Government: Design, Applications and Management: Design, Applications and Management (Idea Group, 2001) 156). When an MP or peer scrutinises a decision-making power in a Bill, or considers a similar power in a piece of delegated legislation, he or she is looking at text that may or will be used by the code writers for an automated decision-making app—the series of machine-readable questions or selection of variables that will determine the outcome of individual cases. Across the UK statute book, there may already be tell-tale signs of “legislation for automation” (for example, in rules relating to Universal Credit). Parliamentarians are therefore left scrutinising something (the Bill or draft statutory instrument) that sits between the policy design and the rules that will apply to individuals.

22. My radical proposal is that we should treat “the app” (the computer programs that will produce individual decisions) as “the law”. It is this app, not the text of legislation, that will regulate the legal relationship between citizen and state in automated decision-making. Apps should, like other forms of legislation, be brought under democratic control. They should in principle be subject to parliamentary oversight, perhaps like secondary legislation on an affirmative (it requires the express approval of Parliament to become valid) and negative procedure (it becomes valid unless annulled by Parliament within a set time).

14 January 2017