

An aerial photograph of a rural farm. A large, rectangular field with a brown, textured surface, possibly a harvested crop field, occupies the upper left portion. A paved road curves along the right side of this field. To the right of the road is a lush green area with several trees, some showing yellow autumn foliage. In the lower right, there is a smaller, rectangular field with a similar brown texture. The overall scene is a mix of agricultural land and natural vegetation.

Farm Inspection & Regulation review

July 2018
Interim report

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Foreword



For four decades, British farming has been shaped – and subsidised – by European Common Agricultural Policy (CAP). The way farmers and landowners are regulated has been similarly influenced by CAP considerations. A series of independent reviews over the last decade have concluded that our regulatory arrangements do not deliver sufficient value to the taxpayer, and need significant reform. The need to change is so pressing now, to meet government’s enhanced aspirations for farming and the environment and at the same time, clear the way for farmers to trade and price their produce competitively in future.

Farmers experience regulation most directly through inspection. They generally find it a bugbear, with what seem sporadic inspections from local authorities and government agencies, and other inspections for farm assurance schemes. Inspection could change materially to help deliver new environmental ambitions and be of value to farmers as well, by changing more profoundly the way English farming is regulated.

Brexit provides an unprecedented opportunity to do just that. CAP payments and their withholding have been used to promote compliance, but the expectations imposed by regulation on farmers are often pernicky, disjointed and inflexible, with no room to recognise context, innovation or good intent. Instead we want flexible, adaptive regulation to *enhance* plant and animal health and animal welfare, *enhance* good management of farmed land and the natural environment, underpin agricultural trade *and keep these aims in proper balance as well*.

With EU exit, cross compliance requirements will go, but of course significant disease and environmental risks remain, and are held locally by land owners and farmers. They must be regulated firmly and fairly, with suitably onerous sanctions and much better enforcement – but the broader outcomes government wants can be nurtured by simpler and more nuanced, integrated, proportionate and coherent regulatory arrangements overall.

This is an interim report. We appreciate it comes at a time when the extent and nature of future financial support for the industry is uncertain, and that the ever-present market risks are more of a worry, with EU exit. We think a regulatory approach that manages national farming risks without compromise, but is otherwise exceptionally adaptive, able to reward innovation and tolerate occasional failure is right for the future. We must change the way we regulate, and the way we are set up to regulate, in the interests of good farming outcomes overall. In that way, we can support and promote farming while also delivering government’s wider ambitions for farming and the countryside. We believe this is possible through independent regulation, as we explain, but it requires government to grasp the nettle now.

A handwritten signature in black ink, appearing to be 'Glenys Stacey'. The signature is fluid and cursive, with a long horizontal line extending to the right.

Dame Glenys Stacey

Chair, Farm Inspection and Regulation Review

1. Executive summary

This independent review of farming inspection and regulation was commissioned by the government in February 2018. Our terms of reference ask us to identify ways in which regulation can improve, to reduce burdens on farmers, while maintaining and enhancing our animal, environmental and plant health standards. The review applies only to England. We are to report with our recommendations by the end of the calendar year. This interim report summarises our work so far.

1.1 Why we regulate

The scale and nature of the industry and the risks associated with farming make regulation necessary. There are enduring risks that underpin why we regulate farming. We argue that it is important to understand the purpose of regulation sufficiently well, because purpose should shape how we regulate, whereas the way we regulate now is not attuned to government's aims for farming.

The purpose of regulation

Government's aims are changing, with a greater emphasis on enhancing our environment, improving animal health and developing a more dynamic and self-reliant agriculture industry. We surmise that government sees that the purpose of regulating farming in future is to:

- safeguard, maintain and *enhance* plant and animal health and animal welfare
- secure, maintain and *enhance* good management of farmed land and the natural environment
- facilitate agricultural trade

With EU exit, that third purpose – to facilitate agricultural trade – is especially important, if our agricultural industry is to be sustained. The way we regulate in future should not only reflect the government's ambitious agenda, but it must also recognise responsible farmers' core business, as they produce and market food through an uncertain and potentially turbulent period, not just as we leave the EU but also in the context of volatile world markets.

We have identified three broad government aims for the farming sector that underpin our proposed purpose of regulation:

Firstly, government wants a better and richer environment. It has expressed a renewed and noticeably stronger intent to improve environmental outcomes, and is taking a wide view of what it means by our 'environment'. For example, as well as the usual considerations, it is interested in the iconic and architectural features of farms that contribute to our green and pleasant land.

Secondly, government wants us to continue to compete internationally, supplying products of the highest standards to the domestic market and increasing exports.

Thirdly it wants better animal health and welfare. It wishes to reduce endemic disease substantially, and maintain high animal welfare standards, incentivising better standards in some sectors. The commitment to reducing endemic disease substantially is significant, as we consider how best to regulate to achieve government aims.

Overall, government also wants to make the most of the opportunities afforded by EU exit, in two ways. It wants a more dynamic, more self-reliant agriculture industry and a different regulatory culture, a new way of regulating farming.

UK farming has been shaped in recent decades by the Common Agricultural Policy. CAP payments represent a notable proportion of average farm income. Government argues that CAP has imposed unnecessary regulatory burdens. To implement its aims, government proposes to develop a new Environmental Land Management System - underpinned by natural capital principles, so that the benefits are properly valued and used to inform decisions. It aims to deliver benefits such as improved air, water and soil quality, increased biodiversity, climate change mitigation and adaptation. It is to be effective as from the end of the agricultural transition period (date not yet specified). Government wishes to *better incentivise* methods of farming most likely to meet its aims.

During the agricultural transition period, government wants to *change the regulatory culture* and provide a more integrated, appropriate and targeted enforcement system. With greater regulatory simplification at its heart, the new system is to achieve environmental, animal health and welfare objectives and *support* farmers to uphold standards.

EU exit clearly provides opportunities to improve and rationalise regulation, and regulatory approaches. As government aims to design 'a more rational and sensitive agricultural policy which promotes environmental enhancement, supports profitable food production and contributes to a healthier society'¹, it wishes to regulate better for that policy.

The way we regulate now exasperates responsible farmers and regulators alike. Some of our regulations are unduly precise and inflexible. Tightly-drawn European regulation can have adverse consequences for farm businesses and lead to a lack of transparency in the food chain. It inevitably sours relationships between the farmer and the regulatory authority. Inflexible regulation can lead farmers to hide their mistakes and naturally, that undermines any trust between the regulating authority and the farmer.

We argue that a range of regulatory approaches are needed. At one end of the spectrum, there are serious harms (such as exotic animal disease) that need firm measures to minimise the risk of such harms materialising and enable a swift and effective response if they do. At the other, there are things desirable to promote through incentives and in other ways (for example, by providing access to specialist advice). Mid-spectrum, there are areas (such as pollution control) where flexible and adaptive regulation can drive improvement. The mid-spectrum is wide.

1.2 How we regulate now

Our initial evaluations of how we regulate farming show a dispiriting picture and common themes have emerged.

There are many Acts of Parliament, Statutory Instruments and other regulatory instruments, making it difficult for farmers and landowners to be sure of what they must do. Farming legislation has evolved and accreted in a piecemeal way over many years. Farmers face an unduly extensive and complex array of regulatory requirements. Some of those requirements seem illogical as well as inflexible, bringing farming regulation into disrepute.

There appears to be a wealth of guidance on regulation. We have still to consider this guidance, and to find out more from farmers about how they know what is expected of them.

Farming is heterogeneous. Our hypothesis is that large, commercial, sectoral farmers generally know what is required and know the weak points in regulation as well – whereas small or new

¹*Health and Harmony: the future for food, farming and the environment in a green Brexit*, CM9577, Feb 2018.

farmers may struggle to perceive all the requirements across the gamut of relevant legislation, especially general rather than specific requirements.

The current regime of incentives consists of payment schemes that have led farmers to seek discrete payments for doing specific things rather than ensuring key outcomes or addressing underlying issues. This leads to disaggregated efforts, and it is less likely to achieve desired outcomes either locally or nationally. Government recognises this, and questions whether some of the current schemes have delivered the intended outcomes.

Inspection

Farmers' concerns about inspection are well-known. Defra group and local authority visits/inspections appear to the farmer to be sporadic and poorly co-ordinated². Farmers tell us that government inspectors do not generally use judgement or exercise discretion. In fact, they are unable to do that for the most part, because the way we regulate now is shaped by strict requirements associated with CAP.

We argue that these farm visits are not inspections as we know it. Inspection in other sectors tends to be comprehensive. It usually identifies good practice, and areas for improvement or priority action. Over time an inspection programme provides information about the overall state of compliance, nationally. Here in farming, inspection tends to involve individual and (generally) single purpose visits to farms, to check one thing or another. That can lead to follow up action, but not much more.

Defra's arms-length bodies have been working together to reduce the frequency of farm visits, with limited success. A recent mapping exercise shows notable overlaps and inefficiencies.

Fifty-eight percent of all farm visits are to do with animal, plant or bee health³. Of these, the majority are bovine TB tests that must be carried out for disease surveillance and control. Indeed nearly 45% of *all* so-called inspections are for bovine TB surveillance or control. About 95% of these are contracted out to private veterinarians.

We find the data on inspections fragmented and unreliable in parts, but at first glimpse, government and local authorities do not inspect excessively. As farmers are increasingly inspected for farm assurance schemes, there is an opportunity to join up farm assurance, producer assurance and regulation better. There are international examples to consider.

The use of other surveillance techniques is limited, yet technology developments now hold so much promise.

On a more positive note, we welcome the Livestock Information Programme and the prospect of a world-leading, multi-species livestock traceability service. It certainly has its place in future regulatory arrangements. It is important in our view that the future regulatory regime can properly underpin and sustain innovative programmes such as this one.

² National Farmers' Union review (2015) reported farmers' fear of financial penalties that could be imposed primarily by the RPA through cross compliance, and that they thought financial penalties through single farm payment were disproportionate, especially for tagging breaches.

³ We have excluded border post inspections from our figures, but included checks on imported animals (in quarantine, for example)

Enforcement

As things stand, responsible farmers complain that others get away with things. Government is not able to say how compliant or not the industry is with most regulatory requirements.

Enforcement is nowhere near effective. Farmers are frustrated by a lack of enforcement on the one hand, and disproportionate penalties on the other. Defra's arms-length bodies tell us they are not resourced to check compliance sufficiently or do not have the range of powers they need. There is no doubt that a good deal of non-compliance remains unchecked.

Enforcement is skewed by CAP scheme requirements. A farmers' most common experience of enforcement will be CAP scheme inspections and deductions made to payments for failure to comply in one way or another with requirements that can themselves be exact and inflexible.

The Environment Agency and Natural England have some civil sanction powers for a range of environmental offences. However, Defra's arms-length bodies do not all have a full enough range of enforcement powers overall. Some (e.g. the Animal and Plant Health Agency) are still unduly reliant on criminal proceedings, with the prosecution power vested in local authorities. These enforcement arrangements are increasingly unworkable.

Licensing and registration

Registration is common in other regulatory spheres, and can be used flexibly. Its immediate value is to identify those regulated, but it can be used to authorise some registrants (those trusted) to undertake risky activities. Registration is patchy in farming, and under-used as a regulatory tool.

Risk-based 'permitting' (effectively a licence) is used extensively by the Environment Agency. It has driven significant improvements to air, land and water quality and reductions in unacceptable waste streams through sustained investment and regulatory oversight. We see the potential of licensing in the regulation of farming, and the link between licensing and registration.

However, there are frustrations if licence requirements are set at too granular a level and if permit application processes are cumbersome and time-consuming.

Preliminary strategic evaluations

We have evaluated the overall way we regulate now, using three recognised evaluation techniques and the situation is far from ideal. The regulatory culture for farming has been critiqued and criticised before, in a series of independent reviews: the independent Farming Regulation Task Force in May 2011 (the Macdonald review)⁴, the December 2012 National Audit Office review, '*Streamlining farm oversight*'⁵ and an NFU review of livestock farm inspections in England. Not much has changed.

Leaving the EU gives government the chance to rebalance regulation, to broaden it beyond a set of commands and to develop farm regulation as a broader concept, beyond the experience or resigned expectation of today's farmers, landowners and environmentalists.

⁴ Macdonald Review of Regulation in Farming <https://assets.publishing.service.gov.uk/.../uploads/.../pb13527-farm-reg-task-report.pdf>

⁵ Comptroller and Auditor General, *Streamlining Farm Oversight*, Session 2012-13, HC 797, National Audit Office, December 2012. Available at <https://www.nao.org.uk/wp-content/uploads/2012/12/1213797.pdf>

1.3 How can we regulate better?

Independent regulation

Farming could be regulated more effectively and efficiently by independent regulatory arrangements that allowed for adaptive approaches, tailored to each of government's aims for farming. The arguments for independent regulation are well-rehearsed. As we leave the European Union, policy responsibilities in agriculture will be repatriated to the UK. Regulatory arrangements that do not then provide for a clear separation of powers between government and the regulator will lack credibility. We agree with the Organization for Economic Cooperation (OECD): *a regulator can use other complementary tools such as information campaigns, to achieve the policy objectives, but it is the exercise of control through legal powers that makes the integrity of their decision-making processes, and thus their governance, very important*".⁶

New ways to set standards

We argue that standards should be set in new ways that involve the industry more systematically. The greater the sense of shared ownership, the more likely it is that standards will be recognised as credible and necessary, and this will promote compliance. It is usual for the regulator to hold the ring, as standards are carefully developed.

How compliance can be checked

Compliance-checking and enforcement need to change radically, in our view. The visits that Defra's arms-length bodies undertake are not inspection as we know it. Instead they represent missed opportunities for more comprehensive, effective inspection that should be valuable to farmers.

A common approach in other spheres is to undertake work to inform inspection beforehand. Data and information analysis, perhaps supplemented by self-assessment can influence regulatory risk-modelling and inform individual inspections before, during and after the field visit.

Data and information analysis is already used to some extent within the Defra group, to determine priorities and inform risk-based approaches. It could be used much more extensively in our view, especially if combined more with modern technologies and remote surveillance. Satellites and other automated verification and sensing technologies that can be linked to mobile apps with geolocation all hold promise.

Physical, on-site inspection is still necessary, especially when animals are kept, but it can offer so much more than visits do at present. In other spheres, inspection is more comprehensive and often, those regulated are inspected periodically by a small team that has the right skills. Good inspection does not just identify failings, it also finds good practice, and pinpoints areas with room for improvement.

Rather than the visit arrangements we have now, farms could be assessed (inspected) periodically across the range of key expectations we have of farms. The assessment could cover matters associated with government aims for farming, for example endemic disease diagnosis and control. Inspection should be comprehensive and holistic, while always dealing firmly with big risks. A farm rating system could be considered and could be of commercial value in some sectors: ratings could drive improvement and offer market value to the farmer.

⁶P.17, OECD Best Practice Principles for Regulatory Policy, The Governance of Regulators
<http://dx.doi.org/10.1787/9789264209015-en>

How compliance can be enforced

Good enforcement generally starts with advice, guidance and simple persuasion. Enforcement options then generally progress through warnings, directives, civil penalties and licence withdrawal or revocation, with criminal prosecution reserved for the most serious harms. We see that directions to comply, enforceable undertakings and license withdrawal are potentially effective tools. Sanctions that are immediate and that prevent access to market (for those trading) are very powerful indeed, and there are lessons to be learned here from farm assurance schemes.

We go on to provide details of the enforcement and other powers we expect in a farming regulator, and the rationale. We argue that with a comprehensive suite of powers and the ability to exercise them correctly, regulators do not generally have to resort to formal enforcement. They find simple persuasion works, when they have real powers in the back pocket.

With EU exit, it is timely now to consider appropriate appeal mechanisms. Mature regulatory arrangements generally provide for an appeal route for individuals to challenge decisions, without resort to court.

Regulatory philosophy and approach

We think all three of the usual approaches (rule-based, outcomes-based and management-based regulation) will be needed in future. Incentives have a bigger part to play, most certainly. The key point is the regulator should be clear about purpose and the outcomes it is tasked to achieve, and then decide on an issue by issue and risk by risk basis, what the best regulatory strategy should be. Ideally these strategies should impose the most minimal and least burdensome intervention necessary to achieve the desired outcome, at the lowest cost to the taxpayer.

In the current system, there is not an integrated farm approach to regulation. No one agency is fully empowered, and no one agency can be said to have the full picture in relation to what is going on at any specific farm. No one agency is best placed to be able to properly reconcile competing priorities, at a farm, catchment or other local level, in the context of overarching government policy and the public interest. In our view it is much more likely that farming regulation would be significantly more efficient, effective and adaptive with an integrated approach to farm regulation.

Delivery arrangements

We think it will be very difficult to regulate well unless changes are made to the way regulation is delivered. Local authorities have competing pressing priorities; our delivery arrangements could be improved significantly by the creation of one field force, and we see scope as well for the considered development of contract regulation⁷ arrangements, ideally bridging regulation and farm assurance and involving other bodies such as the Agriculture and Horticulture Development Board and the RSPCA.

Developing a regulatory strategy

We are proposing a set of design principles, to aid decision-making on how best to regulate farming. We hope they will be helpful to government, as they consider options for how best to regulate farming in future. Finally, we present a case study to show how effective regulatory strategy is developed.

⁷ Arrangements that allow for the participation of private industry in the delivery of regulation, usually through contractual arrangements with the regulator

2. Introduction to the review

This independent review of farm inspection and regulation was commissioned in February 2018 by the Secretary of State for Environment, Food and Rural Affairs. Our terms of reference require us to identify opportunities before and after EU Exit for improving farming-related regulation and enforcement, including inspections, to reduce burdens on farmers while maintaining and enhancing our animal, plant and environmental health standards. We are expected to report finally by the end of December 2018.

In this interim report we summarise our progress to date, and the issues that have emerged as priorities for further consideration. We put forward for the Secretary of State's consideration our preliminary appraisal of how farming is regulated now. We propose a set of design principles that we think could shape farming regulation in future, and make suggestions for a new regulatory approach. We also make specific recommendations for the regulatory powers we think necessary to regulate farming differently and more effectively, for consideration now, given the forthcoming Agriculture Bill. We believe the Bill needs to pave the way for a more nuanced and flexible approach to regulating farming, and for more effective enforcement of core requirements.

Throughout this report we refer to 'the regulator'. To be clear, we are not making any assumptions about the future number of regulators for farming in England. It is simply a convenient way of expressing things, at this stage.

2.1 How we are carrying out our work

In this first phase, we have focused on getting to the bottom of why and how we regulate farming now, with an initial appraisal of farming regulation and inspection. We have met with senior staff from each of Defra's arms-length bodies covered by the review⁸. We are following these meetings up with semi-structured interviews, to elicit further detail of how farming is regulated, and expect to complete this phase of work by the end of July.

We have met with leaders of the biggest farm assurance scheme, and we have arrangements in place to shadow a farm assurance inspector on an inspection and to visit farms (with Defra group inspectors and separately) in all key sectors. We have also met with key stakeholders representing farmers, and will shortly be leading focus groups with farmers, facilitated by the National Farmers' Union (NFU).

We remain keen to engage with as many people as possible, and to examine all relevant evidence as we develop recommendations for our final report later this year. We still have lots of work to do.

2.2 Governance of the review

Dame Glenys Stacey is chairing the review, and has established a small review team which includes an experienced regulatory lawyer and a farm inspector. An Advisory Group (with terms of reference) provides the review team with advice on matters referred to it, and more generally.

⁸ The Rural Payments Agency, Natural England, the Animal Plant and Health Agency, the Environment Agency and the Forestry Commission

3. Why we regulate farming

The scale and nature of farming in England and the impact of some possible harms justify regulation. We regulate farming to prevent and control harms, to facilitate trade and to maintain and promote the environment, plant and animal health and animal welfare. These are enduring aims for farming regulation.

The rationale for regulation may be hard for farmers and others to see, because of the volume of regulations, the number of agencies involved and the distortions created by the over-layer of cross-compliance.

The government's policy aims for farming are changing and developing as we leave the EU. Government is putting a much greater emphasis on enhancing the environment, improving animal health and developing a more dynamic and self-reliant agriculture industry.

The way we regulate in future should reflect the government's ambitious agenda, but it must also recognise responsible farmers in their core business, as they produce and market food through an uncertain and potentially turbulent period.

3.1 The scale and nature of farming

Agriculture employs nearly 500,000 people and is a key part of the food and drink industry, which contributes £112 billion to the economy. Agriculture accounts for over 70% of land use within the UK, and has a major influence on our environment.⁹

Farms are complex working environments, carrying both local and national risks. Poor practice on farm can lead to what we refer to in this report as *harms*. Examples include serious pollution; an outbreak of exotic animal disease¹⁰; ever-reducing soil quality; the poor care of individual animals and an increased incidence of endemic disease. With so much land in agricultural use, farmers more than any have the levers to improve or diminish our environment overall.

Harms can be extremely costly to remedy. They are also desperately upsetting for individual farmers and the wider public. The cumulative cost of water pollution in England and Wales was estimated in 2010 at up to £1.3 billion per annum¹¹. The 2007 foot and mouth disease outbreak cost the government an estimated £47 million and the livestock industry an estimated £100 million¹². The 2001 FMD outbreak was much more debilitating and distressing, with over 6 million animals culled for disease control or welfare reasons, and with costs of several billion pounds. Regulation has a key role to play in managing the risk of such big harms. Day to day, individual farmers must strike the right balance between food production, looking after the land they farm and the natural environment, and (for those keeping animals) maintaining animal health and welfare.

⁹ *Health and Harmony: the future for food, farming and the environment in a green Brexit*, CM9577, February 2018. Available at: <https://assets.publishing.service.gov.uk/.../future-farming-environment-consult-docum>.

¹⁰ A disease that is not normally present in the UK - Animal and Plant Health Agency, *Contingency Plan for Exotic Notifiable Diseases of Animals in England*, 2017. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/662335/exotic-notifiable-disease-contingency-plan-2017.pdf

¹¹ Comptroller and Auditor General, *Environment Agency: Tackling diffuse water pollution in England*, Session 2010-11, HC 188, National Audit Office, July 2010. Available at: <https://www.nao.org.uk/report/tackling-diffuse-water-pollution-in-england/>

¹² Dr Iain Anderson's review *2007 Foot and Mouth Disease Review: A Review and Lessons Learned*, HC 312, The Stationery Office, March 2008. Available at: <https://www.gov.uk/.../foot-and-mouth-disease-2007-a-review-and-lessons-learned>

3.2 The purpose of regulation

The reasons why government regulates farming have been obscured to some extent by CAP, but when you strip it back we conclude that the government has traditionally regulated farms to prevent harm (and deal with harms when they happen); to maintain and promote the environment, plant and animal health and animal welfare, and to facilitate trade.

However, government's aims for farming are changing and developing with a greater, more purposeful emphasis on the environment. When the United Kingdom leaves the European Union, control of much of environmental and agricultural policy will return to these shores. Government intends to use this opportunity to strengthen and enhance the protections our countryside, rivers, coastline and wildlife habitats enjoy, and develop new methods of agricultural and fisheries support which put the environment first¹³.

Government intends to take a catchment-based approach to flood management, and indeed catchments and the nature of the countryside at a local level are increasingly recognised as central to the government's environmental aims.

Government intends to support farmers and land managers to help them to work together to achieve benefits at landscape and catchment level. Government is also signalling its intention to get a better grip on endemic animal disease.

The enduring risks remain and must be regulated for. But with EU exit, we surmise that government wishes to regulate to:

- safeguard, maintain and *enhance* plant and animal health and animal welfare
- secure, maintain and *enhance* good management of farmed land and the natural environment
- facilitate agricultural trade

A catchment approach

Nitrate concentrations in the River Frome have increased over time, affecting Poole Harbour.

In agreement with the Environment Agency, Wessex Water is using catchment management approaches for land within 250 metres of the water course to reduce nitrate concentrations at source, rather than managing and removing concentrates once they reach the harbour.

With EU exit, that third aim – to facilitate agricultural trade – is especially important, if our agricultural industry is to be sustained.

Regulating environmental outcomes

Environmental outcomes are challenging to regulate for several reasons:

- the starting point of the natural capital is key. For example, an area with severely depleted wild species of plants and animals is likely to need a different approach and different standards at the outset compared with areas that may be in decline but are not yet in a poor state;
- the 'zones' that may require different approaches and standards may vary for a variety of reasons;
- some have promulgated a catchment approach, which is clearly pertinent to water quality and supply and to those aspects of ecosystems that depend on these, but there may be other considerations as well;
- the things that need to be regulated to achieve environmental outcomes may not represent a significant harm at the outset but may be more insidious and have a cumulative effect over

¹³ A Green Future: Our 25 Plan to Improve the Environment, available at <https://www.gov.uk/government/publications/25-year-environment-plan>

many years. They are, however, not easily reversible once they become a clear harm. There are many parallels with endemic disease in plants and animals.

- as with endemic disease of plants and animals, focusing on single cases and addressing the issue may have a beneficial effect for the individual farmer or land manager but the real benefits arise when concerted action is taken across a whole 'zone' and the collective efforts have a synergistic impact. Disaggregated approaches can fall into disrepute and efforts can be dissipated or benefits reversed in a short space of time.

We have more work to do but we believe there is a role here for regulation, to identify big issues and work out how to fix them using the appropriate mix of incentives and enforcement with relevant standards for the problem in hand. We welcome the recommendations of the Natural Capital Committee¹⁴ to take a systematic approach to natural capital assets and that the Environmental Land Management System is to be based on natural capital principles.

¹⁴ The Natural Capital Committee (NCC) is an independent advisory committee. It provides advice to the government on the sustainable use of natural capital (natural assets including forests, rivers, land, minerals and oceans) and the benefits we derive from them, such as food, recreation, clean water, hazard protection and clean air. Available at <https://www.gov.uk/government/groups/natural-capital-committee>

3.2 Does purpose matter?

The reasons why we regulate farming matter, because the way we regulate should reflect what we are trying to achieve. We have found that many people doubt or cannot see a link, a golden thread between the purpose of regulation and how we regulate farming today. With EU exit and government's ambitious aims for farming, our traditional approaches need to change in any event. One overarching definition of regulation is "sustained and focussed control exercised by a public agency over activities that are socially valued"¹⁵. We argue that in practice, a variety of approaches are needed to achieve the purposes of farm regulation. For example, reducing the risk of serious harms (such foot and mouth disease) and managing the situation when risks materialise requires what we term *red light* regulation – regulation without compromise.

That may be obvious. But we argue that reducing the risk of harms also requires distinctive patterns of operational and organisational behaviour, to pick important problems as they develop, and fix them in whatever ways are necessary. This applies not just to the 'major event' harms but also to the cumulative, insidious harms that mount up over time and are not quickly reversed, such as soil erosion.

Harm reduction challenges can generally be described either way up¹⁶. Instead of *pollution control* for example, we can talk more widely of *environmental stewardship*; instead of *exotic animal disease control* we can focus on *animal health and welfare*. This is beguiling, but we are instinctively wary of it, because in practice the regulatory approaches that detect and control notable harms differ materially from the broad range of adaptive and flexible approaches that are needed to achieve government's other objectives for farming, while sustaining responsible farming and food production.

Harm-based regulation

The General Data Protection Regulation (GDPR) is an ambitious, complex and strict regulation designed to harmonise data protection law across the EU, and transform the way in which personal data is collected, shared and used globally.

The Information Commissioner's Office is responsible for delivery in the UK. It favours the carrot to the stick and prevention over punishment. It emphasises encouragement, engagement and education. This includes raising public awareness, and supporting and guiding organisations.

Nevertheless, proportionate and effective sanctions have their place. They intend to take action against the most audacious offenders.

Rapidly changing technology creates new risks. They are planning ahead – for example, with a two-year post-doctoral appointment to investigate and research the impact of AI on data privacy. They have proposed a regulatory sandbox to enable organisations to develop innovative products and services. They have recognised the synergies between legal requirements and data ethics and are engaging actively in the debate, recognising that even if a practice is legal, it may not be right.

This regulator has identified a problem, understood its causes, transparently developed a multi-strand strategy, and tactically and purposefully aims to use the full gamut of its powers to drive systematic behavioural change, at scale.

¹⁵ G. Majone, 'The rise of the regulatory state in Europe' (1994) 17 *West European Politics* 77, 81; P. Selznick, *Focusing Organizational Research on Regulation*, Regulatory Policy and the Social Sciences, edited by Roger Noll. Berkeley: University of California Press, 1995

¹⁶ *The Character of Harms*, Malcolm K. Sparrow, Cambridge University Press 2008

What is regulation ?

- *A specific set of commands* – the promulgation of a binding set of rules to be applied by a body devoted to this purpose
- *Deliberate state influence* – a broader concept which covers all state actions that are designed to influence business or social behaviour (thus also encapsulating economic incentives, contractual powers, deployment of resources, franchises or the supply of information)
- *All forms of social or economic influence* – all mechanisms affecting behaviour, whether state based or from other sources (such as markets).

We think of regulation as the body of interventions necessary to achieve things that would not normally happen or be driven by the market, without intervention. Baldwin et al's¹⁷ description (adjacent box) of how regulation can be conceptualised in three distinctive ways seems to us particularly pertinent.

Leaving the EU gives government the chance to rebalance regulation, to broaden it beyond a set of commands and to develop farm regulation as a broader concept, beyond the experience or resigned expectation of today's farmers, landowners and environmentalists.

We return to this later in this report, when we look at how farming could be regulated in future. For now, we make the point that it is as important to be clear about the purpose(s) of regulation, the government's aims for farming and the likely pressures and opportunities for the industry in the years ahead, just as these things are important in any other field of endeavour that is regulated. We say this because the same strategies are unlikely to be useful in achieving distinctive and differing purposes and aims. Instead, a broad range of regulatory approaches are required.

3.4 The things we regulate

We have looked to see how government has set out what it expects from farmers, and why. We have categorised the relevant Acts of Parliament, Statutory Instruments and other regulatory instruments according to what they regulate (Figure 1). The table reveals a notably high proportion of Acts of Parliament and Orders relating to animal health and welfare. We have found it helpful as well to think in terms of what the array of regulatory instruments seeks to achieve (Figure 2)

¹⁷ *The Oxford Handbook of Regulation*, R. Baldwin, M. Cave, M. Lodge, Oxford University Press, 2010

Figure 1 – Instruments of legislation

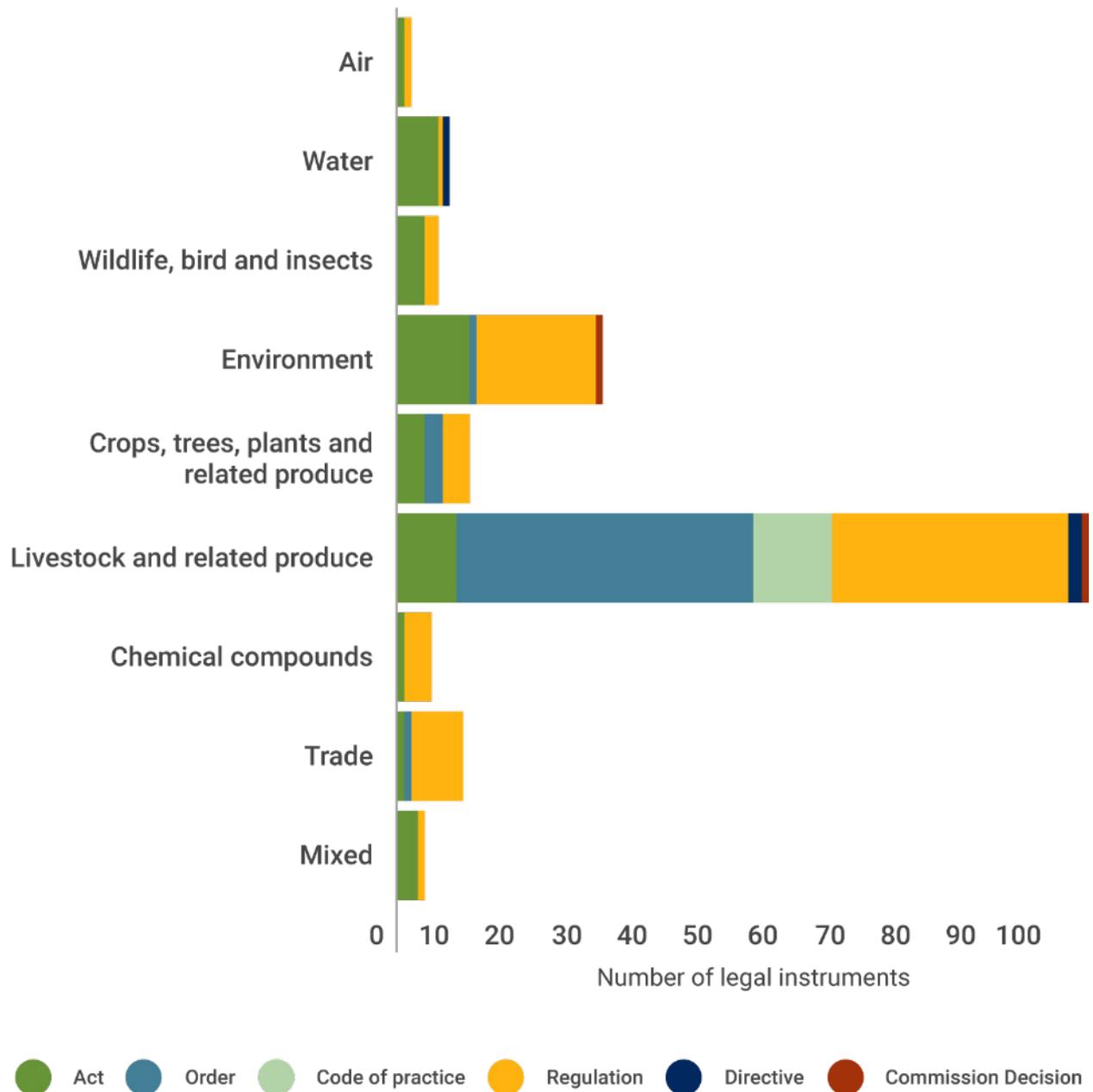
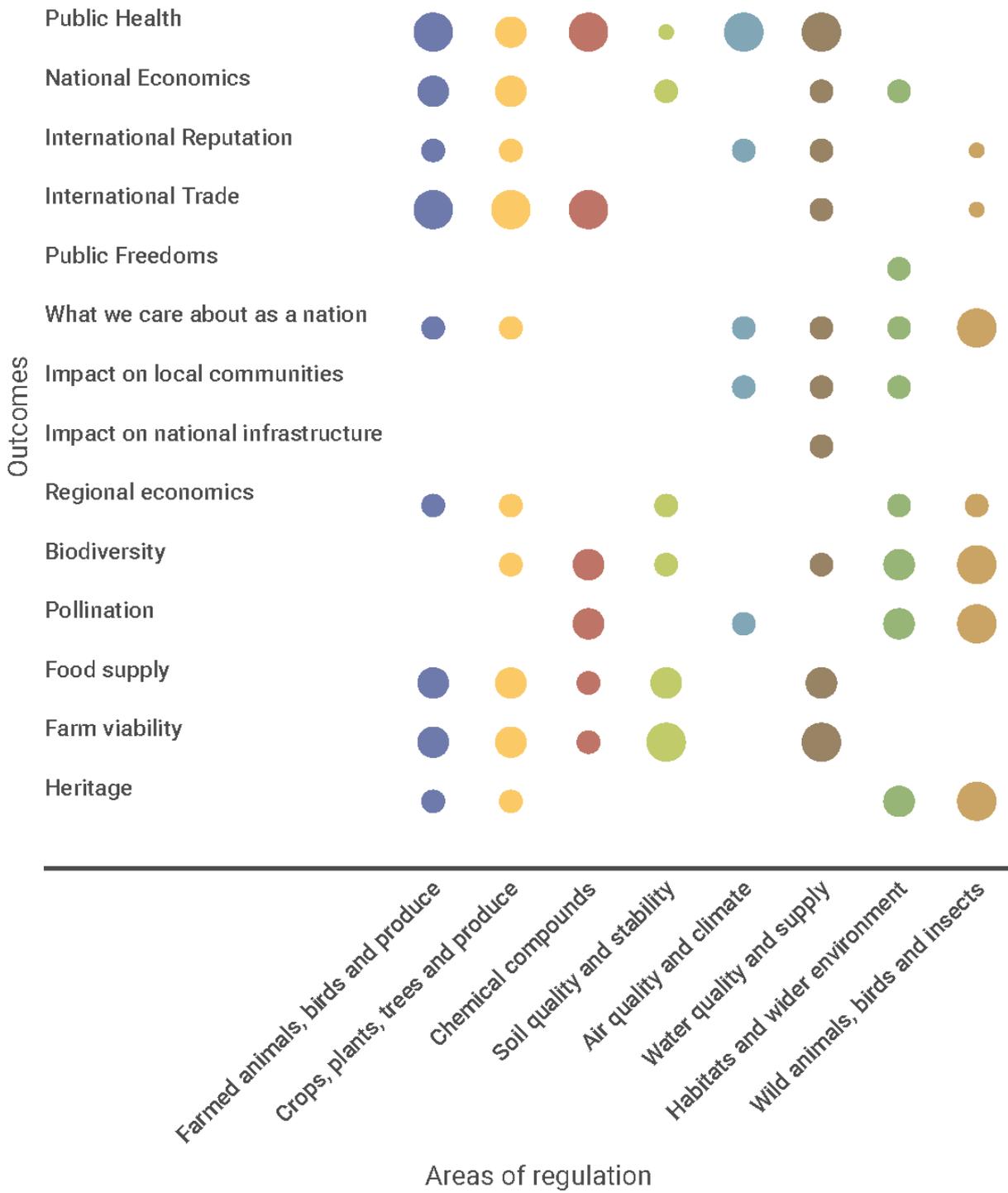


Figure 2 – Aims of regulatory instruments



Incidentally, some of our regulations are unusual, in that they embed ways in which compliance is to be checked, to meet European Union requirements. For example, the regulations may prescribe a minimum percentage of farm inspections that must be done in any period¹⁸.

And under a mechanism known as cross compliance, CAP payments to farms are linked to compliance by farmers with basic standards concerning the environment, food safety, animal and plant health and animal welfare, as well as the requirement of maintaining land in good agricultural and environmental condition.

Cross-compliance checks have been thought necessary because at present, EU policy provides very substantial levels of public funding for agriculture and fisheries with typically over 50% of UK farm incomes coming from public sources.¹⁹

One unforeseen and unfortunate effect of cross-compliance has been to confuse and conflate the purposes of regulation. Farmers may believe compliance is necessary to secure CAP payment rather than to deliver one or more of the primary aims of regulation in farming. Compliance is necessary to secure CAP payment, yes, but that is not the primary aim.

Tightly drawn European regulation can have adverse consequences for farm businesses, and lead to a lack of transparency in the food chain. It inevitably sours relationships between the farmer and the regulatory authority.

Inflexible regulation can lead farmers to hide their mistakes across a range of issues and naturally, that undermines any trust between the regulating authority and the farmer.

This is all avoidable. As we leave the EU, there is an opportunity to change.

3.5 Regulating to achieve government policy aims

Regulation is one way in which governments achieve their policy aims. As the way we regulate in future should facilitate government's developing aims, we have looked at those aims. We are relying here on recent statements of

Inflexible regulation

Sheep farmers must complete and submit to Defra an annual sheep inventory by 31 December each year, showing their sheep and goat numbers on 1 December.

It is a breach of cross-compliance not to keep a record of this annual figure on farm, but it is not a cross-compliance breach not to submit it to Defra. That seems odd, but more fundamentally, do all farmers grasp the purpose of the requirement?

Cattle farmers must register the date of birth of cattle within the first 27 days of the animal's life. There is no flexibility in the regulations to take account of unforeseen circumstances or human error, even where the farmer misses the deadline by only a few days.

Farmers who fail to comply with the regulations and report this will be told that their animals will not be provided a full cattle passport. Instead a Notice of Registration will be issued. This means that while the calf can be used for breeding purposes, it cannot be moved from the farm alive without a licence, thereby preventing sale.

For male calves, with no open market value (as without a passport they cannot enter the food chain) the only likely commercially viable outcome is for the animal to be shot.

¹⁸ NAO, December 2012; some 38 per cent of planned inspections must be undertaken in accordance with European legislation. For example, directives require 1 per cent of farmers receiving common agricultural policy payments to be checked each year and a proportion of these farmers to be selected randomly. Other inspection regimes are also influenced by European legislation, but the number is not prescribed. Most of the visits to monitor and test livestock are also a requirement of disease control programmes, which have to be approved by the European Commission.

¹⁹ National Statistics (2017) Agriculture in the United Kingdom 2016, Defra, London, available at <https://www.gov.uk/government/statistics/agriculture-in-the-united-kingdom-2016> Figures taken from Tables 4.1 and 10.2.

government interest and/or intent²⁰. We do not yet have a complete picture, as government's agricultural policy is still emergent, and we await further information about the proposed Environmental Land Management System as well. We set out our understanding below. We have identified three themes that are congruent with purposes of regulation we proffered earlier. A fourth theme relates to specific opportunities afforded by EU exit.

A better and richer environment

The government has expressed a renewed and noticeably stronger intent to improve environmental outcomes, and is taking a wide view of what it means by our 'environment'. For example, as well as the usual considerations, it is interested in the iconic and architectural features of farms that contribute to our green and pleasant land. Our regulatory arrangements will need to reflect this renewed and stronger interest in the wider environment.

It is the government's view that Common Agricultural Policy Payments have failed to reward some public goods adequately, such as measures to improve water quality and soil health. While Pillar II agri-environmental schemes have produced evidenced benefits, government considers that overall, CAP has not been effective enough at reversing environmental damage caused by agriculture.

To implement its aims, government proposes to develop a new Environmental Land Management System as the cornerstone of England's agricultural policy. It is to be effective as from the end of the agricultural transition period (date not yet specified). The new system will be underpinned by natural capital principles to ensure that benefits are properly valued and used to inform decisions. It aims to deliver benefits such as improved air, water and soil quality, increased biodiversity, climate change mitigation and adaptation. 70% of UK land is farmed, so farmers will play a key role in delivering the environmental land management agenda.

Government wishes to *better incentivise* methods of farming that create new habitats for wildlife, increase bio-diversity, reduce flood risk, better mitigate climate change and improve air quality by reducing agricultural emissions. It is to pay providers for delivering environmentally-friendly outcomes. It will direct public money to initiatives such as restoring peat bogs, and measures which sequester carbon from the atmosphere, and protect iconic aspects of our heritage. It has recently consulted on what is to be incentivised or otherwise encouraged and rewarded.

For now, we note that farmers are uncertain about how much money will be available to the industry overall, and about what will attract payment. And we note that while payments are clearly strong incentives, they are not the only incentives that could be made available and could work.

International trade

Government wants us to continue to compete internationally, supplying products of the highest standards to the domestic market and increasing exports. Although our trading arrangements remain uncertain, the government has said it is fully committed to maintaining high standards of consumer, worker and environmental protection in trade agreements. We recognise that government will wish to protect and facilitate the import trade, as well as exports.

The NFU is clear that the farming industry will wish to compete at all price points. It sees the opportunity to consolidate British farmers' position as the suppliers of the majority (76%) of food on our plates, and more. There is a potential tension: government wants a broad range of things of benefit to society, including food grown in UK and produced in compliance with high standards –

²⁰ *Health and Harmony: the future for food, farming and the environment in a green Brexit*, CM9577, February 2018. Available at: <https://assets.publishing.service.gov.uk/.../future-farming-environment-consult-docum>. And the 25 Year Environment Plan, 2018. Available at <https://www.gov.uk/government/publications/25-year-environment-plan>

farmers generally want to be able to produce food or other produce for a range of markets and to farm most profitably, without being overburdened by regulation.

Responsible farmers wish to be good stewards of their land. However, farmers may not see their land in the context of a catchment area, or see the national picture and trends in, for example, soil quality. Certainly, they do not want to be subject to unduly strict or inflexible requirements relating to promoting the environment and/or the wider aims of government. Whether the potential tension becomes an issue depends largely on how we regulate in future.

We see that trade considerations will be very influential in deciding standards and how best to regulate for those standards as we leave the EU.

Better animal health and welfare

Government wishes to reduce endemic disease substantially, and maintain high animal welfare standards, incentivising better standards in some sectors. The commitment to reducing endemic disease substantially is significant, as we consider how best to regulate to achieve government aims. Endemic disease affects the bottom line, and farming will be more viable, profitable and individual sectors more able to trade, as well as animals healthier, should government succeed in its aims.

Government has stated it intends to reduce disease through *new initiatives that better monitor* animal health and welfare. Monitoring, while helpful, does not necessarily change anything, whereas regulation could have an essential and positive role to play in reducing endemic disease. A review of bovine TB strategy is underway, and it will advise in September 2018 on progress towards achieving disease-free status by 2038. We will keep track of the review and recommendations.

The UK already has a strong reputation for animal welfare, and government wishes to maintain high animal welfare standards. Rather than increasing legislative requirements here, government proposes it could pilot schemes that offer payment to farmers who deliver high welfare outcomes in sectors where animal welfare largely remains at the legislative minimum. In our view, incentivisation approaches are particularly well-suited here. Once baseline standards are achieved, incentivisation can drive up welfare, and the standards themselves can then be revisited and enhanced.

For trade reasons, both government and the farming industry will wish to demonstrate that our standards keep pace with developing standards in Europe and in other established or potential markets. Our regulatory arrangements and underpinning standards must be adaptive to changing circumstances, and to trade requirements. Some farmers we have spoken to have suggested that rather than higher welfare standards, they would prefer to see better enforcement of existing standards, to make sure they are adhered to by all, and to level the playing field. It is a fair and fundamental point, and we come back to enforcement later in this report.

3.6 Specific opportunities afforded by EU exit

A more dynamic, more self-reliant agriculture industry

UK farming has necessarily been shaped in recent decades by the Common Agricultural Policy. Earlier CAP schemes that rewarded production have been superseded by schemes based on acreage and (to a lesser extent) on enhancing bio-diversity and protecting the environment. Farmers and landowners have adapted accordingly. CAP payments represent a notable proportion of average farm income.

Government argues that CAP has imposed unnecessary regulatory burdens. Moreover, there is a public perception and concern that wealthy landowners receive the greatest amount of subsidy

(Pillar I) by dint of extensive land ownership. Most public money paid to support farming is by way of Direct Payment under Pillar I, linked to acreage. Pillar I payments totalled €3.1bn²¹ in 2016. Direct Payments as they stand now (Pillar I payments made under CAP) will be phased out.

There is a good deal of uncertainty about future financial support for farming, and associated oversight arrangements once we leave the European Union. We can assume that payments of any sort will be linked to some (but not necessarily all) government policy aims. There is no suggestion that food production of itself will be subsidised, or that payment will link to acreage as it does now. As CAP payments represent more than fifty per cent of average farm income, and food production provides much of the rest, these changes are extremely significant, given the inevitable volatility experienced in agriculture. They are likely to be felt most especially in less self-sufficient sectors with higher acreage, such as sheep farming or the dairy sector, and in more fragile sectors such as fresh produce.

It is intended that agricultural support will ultimately focus on encouraging farming to invest, raise standards and improve self-reliance, and rewarding farmers and land managers to deliver environmental goods that benefit all. Future policy is expected to include a new framework of incentives for what farmers deliver for the environment and other things that government determines as desirable.

The CAP scheme will continue in its current format until March 2019. Arrangements after this point are dependent on EU Exit negotiations. Should there be an implementation period, then the working assumption is that it will be for two years. After that, an agricultural transition period will run for a period yet to be specified. During the agricultural transition period, Direct Payments will be phased out. Government has consulted on options, including the option to start with those receiving the highest payments.

The chance to regulate more effectively

EU exit clearly provides opportunities to improve and rationalise regulation, and regulatory approaches. As government aims to design 'a more rational and sensitive agricultural policy which promotes environmental enhancement, supports profitable food production and contributes to a healthier society'²², it wishes to regulate better for that policy.

During the agricultural transition period, government wants to *change the regulatory culture* and provide a more integrated, appropriate and targeted enforcement system. With greater regulatory simplification at its heart, the new system is to achieve environmental, animal health and welfare objectives, and *support* farmers to uphold standards.

We see that with EU Exit, there is the opportunity to reset the regulatory approach and the balance between inspection, enforcement and incentives, as England will no longer be at the same risk of infraction proceedings and associated penalties from Europe²³.

Government wants more effective enforcement and where possible, a reduction in the burden of inspection for farmers and indeed that is one focus of this review. But this is not the only rebalancing that can be done. Critically, government can develop a more responsive and nuanced approach to regulating farming overall, while continuing to manage and control the risks of serious harm.

²¹ This is comprised of Basic Payment Scheme payments, and a greening component which is 30% of the Direct Payment total, as well as the Young Farmers' Scheme. Pillar II (€0.8m) is for rural development schemes which include agri-environmental measures.

²² *Health and Harmony: the future for food, farming and the environment in a green Brexit*, CM9577, Feb 2018.

²³ The extent to which compliance with any subsidy requirements in England is checked will be a matter for this government rather than Europe, although government will always wish to know that money is properly allocated and paid, and the National Audit Office will wish to assure parliament periodically as well.

Government wants simplified regulation. In the short term (the agricultural transition period) government aims to simplify Countryside Stewardship Schemes, cross compliance, and remove or reduce current ineffective greening requirements, before moving to a new regulatory regime. In the longer term, it aims to replace cross compliance, greening and Countryside Stewardship with the new Environmental Land Management System.

Government's view is that high environmental and animal health and welfare standards are currently underpinned by robust domestic legislation. That is broadly right, although we argue later in this report that standards need to be set and maintained differently in future.

Government wishes to use regulation to set new and clear baselines and to protect standards. That is certainly possible, and desirable given the proliferation of regulatory instruments now. It is easiest done (and the baseline adjusted over time) through independent regulation, something we cover in more detail later in this report.

Government recognises that it has an important role to play in setting the regulatory baseline, protect standards and create a level playing field for farmers and land managers. It wants a new environmental baseline alongside a more effective application of the 'polluter pays' principle, something else we return to, when we come to discuss enforcement in a little more detail. For now, we note that government accepts that parts of the enforcement system impose disproportionate penalties or provide insufficient scope for farmers to remedy under-performance. Farmers generally agree²⁴. Government wants a new, fairer enforcement system, while maintaining a robust approach.

Government also wants value for money for taxpayers. All regulatory arrangements need to be proportionate and affordable, and it is clear that the current cost and burden of overseeing farming are hard to justify.

Most immediately, government is committed to a new livestock information service, aimed at improving farm to fork traceability. With it, the industry and government should be better-placed to respond in the event of a relevant disease outbreak. It should be operational from 2019. It is intended to identify and track animal movements via electronic IDs (initially dairy cows, cattle, sheep, pigs and goats). It should increase both efficiency and effectiveness over time, as well as reduce the burden on farmers.

Of course, to maintain and enhance national and international trade, we will need to continue to demonstrate good welfare and production standards, increasing them at sectoral level when it is in the interests of trade to do so. We must continue to demonstrate freedom from certain animal or plant diseases. In addition, there are and will be environmental and other requirements that will not be incentivised, but nevertheless need to be complied with, to prevent serious harms.

With these things in mind, we look in more detail in the next section at how we regulate now, and appraise it by considering good regulatory theory and practice.

Value for money

In 2012, the National Audit Office estimated the cost to a farm of complying with regulations was on average around a tenth of its net profit. The NAO estimated that, during 2011-12, nine separate government bodies made at least 114,000 visits to English farms. More than half of these were to carry out disease surveillance and testing (at a cost of £28 million) and 30 per cent to check for farmers' compliance (at a cost of £19 million). The total cost of this frontline oversight activity in 2011-12 was £47 million¹.

²⁴ National Farmers' Union review (2015) reported farmers' fear of financial penalties that could be imposed primarily by the RPA through cross compliance, and that they thought financial penalties through single farm payment were disproportionate, especially for tagging breaches.

4. How well do we regulate farming?

Our initial evaluations echo the dispiriting picture set out in earlier independent reviews of farm regulation. Common themes prevail:

- ***There is a very large body of specific requirements and a plethora of guidance***
- ***There are longstanding concerns about the frequency and nature of inspection***
- ***The regulatory requirements and approach are inflexible***
- ***Enforcement is nowhere near effective. Responsible farmers can suffer as a result.***

Contrary to expectation, we find that Defra group bodies and local authorities do not appear to inspect excessively. Instead, visits to farms are sporadic, uncoordinated and issue-specific. This is not inspection in the usual sense of the word.

Recent efforts by the Defra group to improve matters have been laudable, but inhibited by system and other constraints and a lack of clear vision and strategy for farm oversight in England.

Farmers are increasingly inspected for farm assurance schemes, but regulation and farm assurance are not joined up. The use of modern surveillance techniques is limited, yet technology developments now hold so much promise.

When assessed using standard tools for evaluating regulation, the way we regulate farming comes out poorly.

4.1 The requirements

Farmers need to know what is expected of them. That is obvious. We have identified 182 regulatory instruments (Acts of Parliament, Codes of Practice, regulations and orders) relating to farming. We list them in **Annex four** to this report.

Farming legislation has evolved and accreted in a piecemeal way over many years. Overall, farmers now face an unduly extensive and complex array of regulatory requirements. What is more, some of the requirements seem both inflexible and nonsensical.

Some of the legislation – for example that pertaining to exotic animal disease control – is essential, even though it is only used in disease outbreaks. We call it *red-light regulation*, because it must be obeyed. Nevertheless, the overall volume of legislation is far more than one might expect in more usual regulatory models. And oddly, individual codes of practice for animal welfare are enshrined in legislation. This is an unusual and cumbersome approach.

We are told there is a wealth, an excess of guidance produced by Defra, its arms-length bodies, and other interested groups. We have still to consider this guidance, and to find out more from farmers about how they know what is expected and how to comply.

Red light regulation

Livestock that are susceptible to the most devastating, infectious diseases such as foot and mouth disease are subject to routine, temporary standstill requirements following introduction of new animals to a farm.

However, in a disease emergency further more draconian restrictions covering a wide area may be introduced, depending on the risk of the disease spreading. In the case of foot and mouth disease in particular, animal movements would be restricted throughout the country. In other cases it may be a zone around a suspected outbreak.

Farming is heterogeneous. Our hypothesis is that large, commercial, sectoral farmers generally know what is required and know the weaknesses of regulation as well. At the other end of the spectrum, the increasing numbers of hobby farmers may struggle to find out about all the requirements, especially the general rather than species-specific requirements.

Some of the requirements are absurdly rigid, driven in large part by CAP schemes, cross compliance and other funding eligibility requirements. We provide just one example here, but there are many.

4.2 Farm inspection

Farm inspections (visits) have long been an irritation to farmers. Many are experiencing more visits than ever, as they participate in farm assurance schemes that in themselves require independent farm checks. Defra group and local authority visits appear to the farmer to be sporadic and poorly co-ordinated. Farmers tell us that government inspectors do not generally use judgement or exercise discretion. In fact, they are unable to do that for the most part, because the way we regulate now is shaped by strict requirements associated with CAP.

Frequency

Livestock farmers are particularly affected. In March 2015 the NFU²⁵ found livestock business visited by local government or Defra group inspectors an average of 5.6 times in five years, and that these visits had a major impact on the farm business. Almost one in ten respondents to an NFU survey had not had a visit in five years. At that time, livestock farmers²⁶ also stood a one in ten chance each year of being visited by the local authority, although frequency depended on the local authority. The odds have lessened since, with reductions in local authority visits.

The Defra arms-length bodies have been working together to try and reduce the number of visits they undertake. Together, the AHPA and the RPA have reduced visits by 1,000. There are now thought to be 13,000 less farm visits overall, when compared to 2014/15 figures. The main change is a 10,000 reduction in local authority visits, as they have scaled back activity (as they are entitled to do). There have been changes to bovine TB follow up, and the end of a rural development programme, reducing the inspection/visit load. A Defra target to reduce the number of inspections by 20,000 seems unlikely to be met any time soon, but we question whether this is the right target.

Inflexible requirements

In a typical case, the farmer agreed to provide one hectare of pollen and nectar mix in one field. To do so, he established two plots in his nine-hectare field, one plot of 0.8ha and one plot of 0.37ha. This totalled 1.17 hectares in all, clearly more than the one-hectare requirement.

The scheme prescription, however, states a minimum size of 0.4ha for each plot. The inspector had no option but to reject one plot.

²⁵ NFU 2015 Livestock Information report

²⁶ Defra 2013 stats show 7091 dairy holdings, with 12,528 grazing livestock (LFA) and 32,029 grazing livestock (lowlands). There were more than 5m head of cattle and nearly 15m head of sheep across England.

As things stand, we believe there are around 150,000 farm visits each year by Defra group bodies or local authorities. There are 260,000 farm holdings that are eligible for a government inspection, of which 103,000 are commercial farms. Figure 3 shows the breakdown of these visits²⁷, according to the primary purpose of the visit and the agency involved²⁸. Local authorities appear to make around 9,000 farm visits each year, with the number having reduced significantly in recent years. We understand that almost half of these visits are for animal welfare reasons and may be in response to alerts or complaints from the public. The remainder appear to be animal feed controls, funded by the Food Standards Agency.

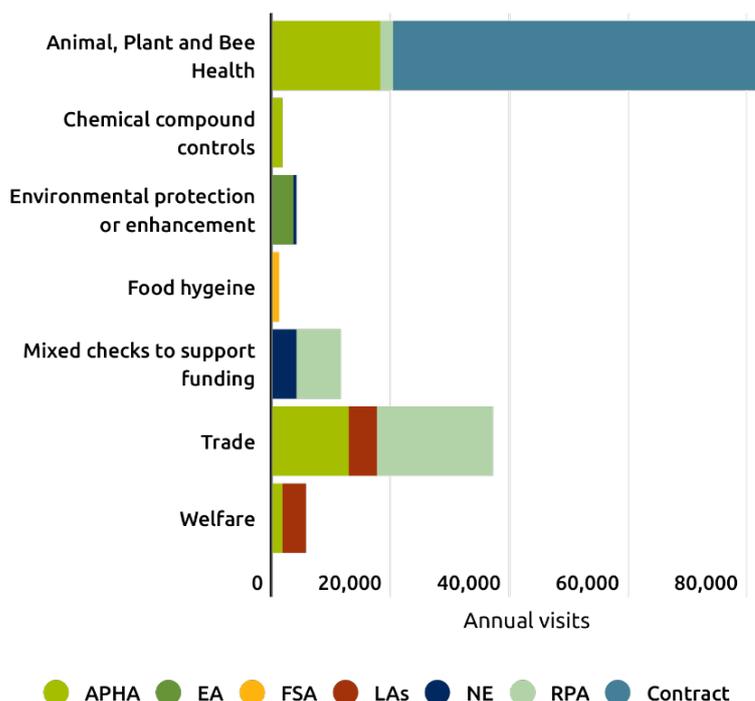


Figure 3. Farm visits by primary purpose and agency conducting the visit

Type

While these visits all tend to be termed ‘inspection’, they differ. The visit might simply be to collect a water, animal feed or other sample. It may involve checks of records, stock or measurements and checks on land use, or else checks on disease status of animals, plants or bees, or the welfare of stock. Some of these checks and their frequency are dictated by CAP requirements.

Bovine TB testing

Visits to test for bovine TB are more time consuming than many others. The biological nature of the test means that it involves inoculation of tuberculin into the skin of cattle.

The test also requires careful measurement of the skinfold both before and several days after the inoculation. The timing between the inoculation and the second reading is critical, so visits must be scheduled in paired days.

Most TB tests (more than 95%) are contracted out to private veterinarians.

Visits that directly support trade are significant. These can be checks or tests and certification required for export, but also checks for wider schemes where certification of quality, stability of variety and freedom from disease permits access to certain markets²⁹.

Fifty eight percent of all visits are to do with animal, plant or bee health. Of these, the majority are bovine TB tests that must be carried out for disease surveillance and control (Figure 4). Indeed nearly 45% of *all* so-called inspections are for bovine TB surveillance or control. About 95% of these are contracted out to private veterinarians.

²⁷ This is a preliminary evaluation of available information at the time of writing this interim report.

²⁸ The agency carrying out the visit is not necessarily the same as the agency with the responsibility to regulate that aspect

²⁹ Inspections carried out by the RPA to support similar checks and certification in slaughterhouses are excluded from this analysis, as we are looking at inspections primarily conducted on farm premises.

Figure 4: Proportion of TB checks vs other animal, plant and bee health visits



undertaken by the Defra group in the Greater Manchester, Merseyside and Cheshire area over a three-month period, to see the complete picture for one geographical area. Crossovers stand out, with field staff from Defra agencies undertaking activities within striking distance of each other, unknowingly. Based on the heroic assumption that any inspector could do or help with any visit, it suggests that travel time alone could reduce significantly, were it possible to coordinate or combine visits.

The need for bovine TB testing is dependent on the spread and prevalence of the disease. Left unchecked, disease spread will inevitably result in more testing. Government wants England to be free of bovine TB by 2038. An independent review for bovine TB³⁰, led by Sir Charles Godfray is considering how this could be achieved. The review will no doubt consider options that may result in increases, reductions or other changes in testing that may then change the pattern or frequency of visits to farms.

Improvement initiatives

Defra group’s arms-length bodies have been working together, to coordinate farm visits better and we have seen already that the number of visits has reduced slightly as a result. When an individual agency has several reasons for visiting a farm, then combined visits sometimes occur. However, co-ordination across the agencies is not straightforward. Apart from logistical and data-sharing considerations, issues of inspector skills and knowledge arise.

The agencies have mapped all field work activity undertaken by the Defra group in the Greater Manchester, Merseyside and Cheshire area over a three-month period, to see the complete picture for one geographical area. Crossovers stand out, with field staff from Defra agencies undertaking activities within striking distance of each other, unknowingly. Based on the heroic assumption that any inspector could do or help with any visit, it suggests that travel time alone could reduce significantly, were it possible to coordinate or combine visits.

³⁰ Defra is currently running an independent Bovine TB Strategy review to achieve Officially Bovine Tuberculosis Free (OTF) status in England by 2038. The terms of reference are available at <https://www.gov.uk/government/publications/a-strategy-for-achieving-bovine-tuberculosis-free-status-for-england-2018-review>

Graphic example: Maps of inspections in Cheshire

Opportunity 1 - If people are travelling significant distance to undertake activities, what other things could they do en-route to increase productivity?



The data in these illustrations raise the following questions:

Top example

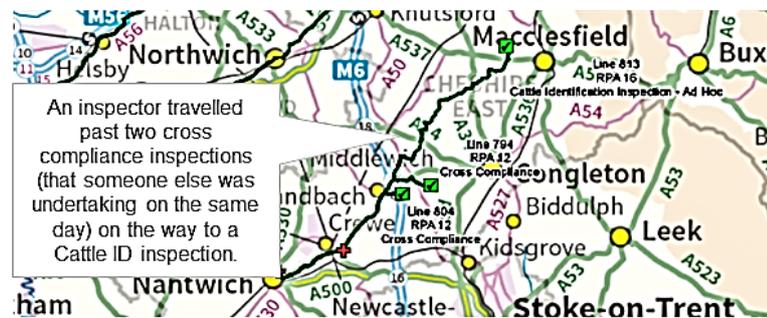
The inspector travelled for 2 hours to undertake their inspection:

Could they have stopped along the way to take a water sample?

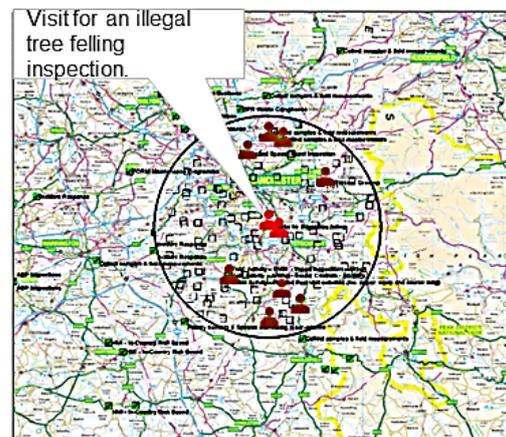
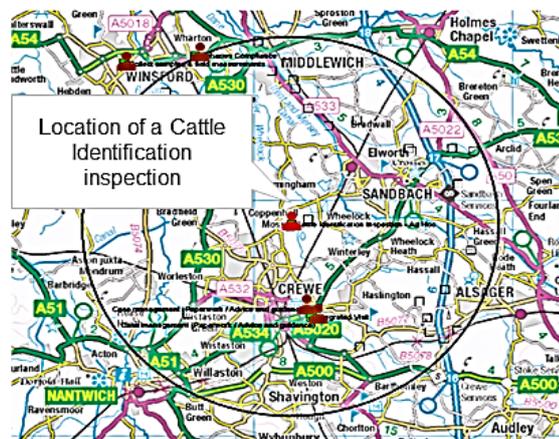
Bottom example

The total time for the activities for the day was 6 hours:

Could just one of them reasonably have completed the work to increase the productivity of the day?



Opportunity 2: Where people are having to travel significant distances to undertake less complex activities should others do it instead?



- The data shows the staff member travelled for 2 hours to undertake a 30 min inspection
- There were 4 other activities undertaken by different people within a radius of just over 5 miles that day

- These types of inspections require 2 people present for H&S reasons
- The other markers within the line show the other people within a 10 mile radius of the activity

Could someone else have undertaken the task to avoid the need for the travel?

Could someone else from across Field Activity staff have supported them to undertake the inspection?

If there was flexibility when the activity was undertaken could the other activities have been carried out by fewer people?

Recent Defra digital transformation work has focused on enabling inspectors: 650 handsets have been provided to APHA field staff and managers to help them access and record information on farm, and by the end of the business year it is anticipated that 23% of AHPA's field activity will be delivered using them. We know as well that some remote sensing is in use. Recent efforts to join up data and analysis are welcome, but it is not straightforward, for systems and other reasons. For example, the RPA carries out the majority of CAP scheme inspections remotely, using different sources of satellite imagery, although it is constrained by exact EU measurement and other requirements.

There is so much more that could be achieved if Defra could be more visionary in its use of modern technology, and able to fund its provision, and if data and information was more joined up, systematically and routinely. We intend to do more work to look at the opportunities here. We will also be considering farming demographics. The distribution of livestock species (e.g. dairy cattle) is markedly different across the country, and distribution is important, from a practical perspective.

There have been some initiatives to reduce farm visits, by placing reliance on farm assurance scheme checks. This is known in the industry as 'earned recognition'. For example, a scheme set up with the British Egg Industry Council has removed the need for about 450 visits. Dairy farms who are not assured by the Red Tractor farm assurance scheme are subject to dairy hygiene inspections every two years, whereas those assured are inspected once every 10 years. One in four livestock farms are subject to feed hygiene inspection each year, but the annual frequency reduces to 2% for those who are Red Tractor assured.

We look next at farm assurance schemes, as it is so relevant to farmers and retailers.

4.3 Farm assurance

There are a number of farm assurance schemes in operation across various sectors of the farming industry. The five main schemes are set out in Table 1, overleaf. The schemes vary in the farm-related activities they cover, but all have a similar business model, charging membership dependent on the nature of the farm and the elements of the scheme for which they wish to be certified.

Farm assurance inspections (except for RSPCA Assured) are sub-contracted to three certification bodies in England. We understand that NSF International plays a leading role, conducting over 30,000 inspections annually on UK farms. These bodies charge farmers directly for carrying out the inspection. Our preliminary work suggests that all the schemes use the same certification bodies production and supply chain for produce they sell. Farm assurance itself is a growing market.

Remote sensing

The Rural Payments Agency uses remote sensing to reduce inspector footfall.

Farms within a radius of a pre-determined location (generally a village) are selected for inspection using remote imagery that can identify different crops through their heat signatures. The imagery can also help to identify changes in field boundaries and non-CAP scheme eligible land use (tracks, rivers, farmyards etc.).

Joining up data

Where the British Cattle Movement Service notes a high number of replacement ear tags orders being received from a keeper, RPA inspect the farm to investigate. Where a high number of cattle passport applications are received late or are refused, again RPA investigate. In recent years the volume of inspections for these reasons has steadily increased.

and there is a degree of competition emerging among them. In addition to these schemes, there are also separate and burgeoning supplier arrangements run by the major supermarkets to assure the farm assurance standards are set by the schemes themselves and may or may not match government standards. We were surprised to hear that a major scheme does not currently cover slurry-tank management by dairy farmers. Some schemes set standards that apply well beyond the farm gate. For example, Red Tractor's beef and lamb standards extend to animal transport, livestock markets and meat processing. Some farm assurance schemes take a whole farm approach, and we see the added value that brings.

Table 1. The main farm assurance schemes

Assurance Scheme	Relevant standards	Scale
Red Tractor	Standards for sectors (can be individually assured). <ul style="list-style-type: none"> • Beef and lamb • Dairy • Pigs • Poultry • Crops • Fresh Produce 	78,000 farms 75% UK farms (may be assured in one or more areas) £12bn UK produce
RSPCA Assured	Standards focused on welfare and related aspects. <ul style="list-style-type: none"> • Beef cattle and calves • Chickens • Dairy cattle and calves • Ducks • Hatcheries • Laying hens • Pigs • Pullets • Sheep • Turkeys 	3,842 farms Predominantly cage free UK egg production (>90% of producers) >27% of UK pig production
LEAF	Integrated farm management approach with 9 control points that require implemented plans (e.g. environment, livestock health, crop health and protection, soil management).	1,032 businesses globally. Predominantly cereals and horticulture. 34% of UK fruit and vegetable produce with >75% coverage for nine specific crops (e.g. leeks - 95%)
Soil Association Certified	Relevant standards grouped as: <ul style="list-style-type: none"> • Agriculture • Horticulture • Forestry 	3,500 farms and businesses globally

British Lion Scheme	Standards organised by production sector: <ul style="list-style-type: none"> • Breeder pullets • Breeder laying birds • Hatcheries • Pullet rearing • Laying Birds 	>90% UK egg production
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4.4 The relationship between farm assurance and government regulation

Farm assurance has taken a firm hold in recent years, primarily driven by the big retailers. Some schemes clearly cover aspects of farming where there are current regulatory requirements in place, and some extend beyond that. Some piecemeal initiatives to combine government and farm assurance have resulted in fewer farm visits, overall. We are considering the role and place of farm assurance, alongside future regulation, and look forward to exploring this more with farm assurers and with government.

As things stand, there are some important constraints, should government think to rely on farm assurance alone. For example, a mixed farm can decide to be certified in relation to just one aspect of production: there is no requirement to be certified for all relevant production. And there are few (if any) incentives for landowners or farms not selling to the open market to seek farm assurance.

We appreciate as well that the assurance schemes are understandably reluctant to make public the detailed information about their membership, and how well or badly individual farms fare when inspected, for reasons of commercial confidentiality.

We think there would be clear advantages in linking farm assurance schemes (and food producer schemes) to regulation in a consistent and coherent way. One example of how others have done this is the approach taken in Victoria, Australia. Here the Livestock Management Act provides a framework to achieve nationally consistent animal welfare, biosecurity and welfare standards through co-regulatory arrangements. It encourages implementation of approved quality assurance programmes and/or equivalent compliance arrangements using defined standards, and permits these to be used.

Such arrangements benefit farmers, government and the wider public. There are some issues to think through, however. Of those, one of the most significant is about the standards themselves, and how they are set and honed over time.

Ineffective enforcement

APHA relies on good record-keeping by farmers. In practice, it is easier for farmers to get away with not keeping records at all, rather than having incomplete records. There are no easy ways to apply sanctions (most courts are not interested in paper-keeping offences) for the lack of records. APHA also rely on compliance notices in some business areas. However, if a notice is ignored or not complied fully with, sometimes the only option is to serve another notice.

Flexible enforcement

In a recent case, Ofgem used the full scope of its discretion under its fining power to levy a £1 fine – on the basis that the body in question accepted it was at fault, did not contest the sanction and made a sizeable contribution to a relevant charity.

4.5 Enforcement

Farmers are frustrated by a lack of enforcement on the one hand, and disproportionate penalties on the other. Defra's arms-length bodies tell us they are not resourced to check compliance sufficiently and/or do not have the range of powers they need.

Enforcement is skewed by CAP scheme requirements. A farmers' most common experience of enforcement will be CAP scheme penalties or deductions for failure to comply in one way or another with requirements that can themselves be exact and inflexible.

To impose sanctions effectively, regulators must follow fair and transparent processes that allow for a degree of flexibility, since the choice of sanctioning responses should not be a purely mechanical exercise³¹. There are weaknesses in the current arrangements as exemplified by the Stody Estate case summarised later in this report³². In that case, the farm took its objections through two appeal processes and a judicial review. Many farmers would find funding judicial review a struggle.

Although we anticipate the rate of judicial review of decisions made against Defra's arms-length bodies will be low, we suspect that beneath it there are many

aggrieved farmers. We fear officials and ministers are frequently lobbied in individual cases.

Good enforcement is informed by effective compliance checks that are generally risk-based. We have explained earlier that inspection is patchy. We are struck by the limitations on EA inspection when compared to the volume of RPA inspections (driven by CAP schemes). We understand that EA resources are ring-fenced, and of the EA's 10,600 staff, around 40 inspect farms. The EA adopts a sophisticated risk-based approach, but still, any individual farm stands just a one in two hundred chance of being inspected by the EA in any one year. There are other ways to check compliance but physical inspection is necessary for some things.

The EA cannot tell us the rate of dairy farmer non-compliance for slurry storage, a key environmental risk, but it thinks non-compliance is common. We believe the Defra group will struggle to state rates of compliance, overall, although there are pockets of good data. Knowing rates of compliance is often a knotty problem for regulators, but it is especially apparent in farming.

Good enforcement generally starts with advice and guidance, and simple persuasion. Enforcement options then generally progress through warnings, directives, enforceable undertakings, civil penalties and licence withdrawal or revocation – with criminal prosecution reserved for the most serious harms.

The EA and NE acquired some civil sanction powers for a range of environmental offences through the Regulatory Enforcement & Sanctions Act 2008. However, there is not a full enough range of enforcement powers across the Defra group as a whole despite earlier studies commissioned by

³¹ R. Macrory, *Regulation, enforcement and governance in environmental law*, 2010, Hart Publishing

³² Stody Estate Ltd v Secretary of State for Environment, Food and Rural Affairs, [2018] EWHC 378 (Admin).

Defra that could be read across the group³³. Some (e.g. APHA) are still unduly reliant on criminal proceedings, with the prosecuting authority vested in local authorities.

4.6 Registration and licensing

Initial registration of all those who are regulated is a common feature of regulatory regimes. Doctors and other medical professionals, veterinarians, social workers³⁴ and other professionals are required to register with their professional bodies, and are subject to the self-regulation regimes of those bodies. Organisations or individuals subject to government regulation are often required to be registered with the relevant regulatory authority as well. For example, some 150 bodies are registered with Ofqual, the exams regulator, and so able to produce and market regulated qualifications.

Registration commonly has pre-requisites attached: the organisation or individual must meet certain requirements before they can be registered. Sometimes registration is conditional, or provisional, pending information or evidence to show that the registrant can meet the regulatory requirements over the longer term. Registration is sometimes qualified, and provides for limited or else unusually extensive authority. Ofqual registration prescribes the sort of qualifications that each provider can market, for example. Only a handful of qualification providers can market GCSE, AS or A levels.

In other spheres, licensing works better. We can each obtain a driving licence by passing a driving test, but to run a taxi service, a driving licence is not enough. We need to be licensed to drive a taxi, because of the broader risks to the public and the range of knowledge and competences required.

In farming, the arrangements vary. Those claiming CAP payments need to register to claim, but CAP will disappear in the coming years. Livestock and poultry keepers need to register with the authorities as well, but the minimum animal/bird number requirements differ. Commercial poultry farmers find this odd, given disease risks, and indeed one can see both sectoral and regional considerations. In those parts of the country most open to pig farming, hobby pig farmers may pose particular risks.

Registration aside, licensing (permitting) is a common regulatory tool in farming today. Effective licensing regimes ensure that applicants design and operate their processes to reduce or eliminate the highest risks, and they clarify expectations and standards on both sides. In the absence of effective registration schemes, licensing is another way to keep out those who cannot operate responsibly.

Lack of scope to apply judgement

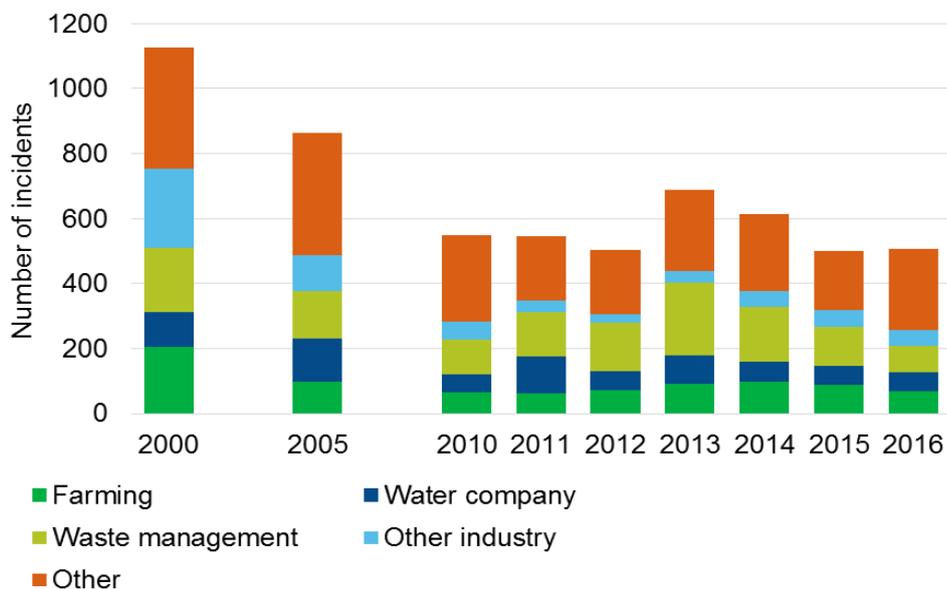
Under a Countryside Stewardship scheme, farmers must comply with a requirement to sow a relevant crop by certain dates. There is no regional variation, for climate differences. Farmers not able to sow their wild bird cover by the time prescribed, due to frozen ground and an overly harsh winter are penalised. Typically, in one example, missing the deadline by just two weeks had to be recorded by the inspector as a breach of the agreement, yet had the crop been sown two weeks previously it would have failed. In those circumstances the farmer would have been permitted legitimately to re-establish with no penalty.

³³ Woods and Macrory, *Environmental civil penalties – a more proportionate response to regulatory breach*, 2004, Centre for Law and the Environment, University College, London

³⁴ Arrangements for registration and self-regulation of social workers in Wales are being extended to England

Licensing works best when accompanied by exemptions. For example, there are millions of EA waste exemptions but only a few thousand permits, where they are needed for ongoing control over potentially harmful activity. Over half of serious pollution incidents in 2015 were caused by non-permitted activities. The Environment Agency can demonstrate notable reductions in serious pollution incidents in farming since 2010, with licensing playing its part in that.

All serious pollution incidents (caused by activities we permit and those we don't) in England



Visual courtesy: Environment Agency

Licensing/permitting has a bad name in farming, because of the cumbersome administrative processes associated with it, and because it is sometimes seen as too granular. We are still trying to understand the trimming, cutting and removal rules for hedging, and any license requirements, for example.

4.7 Preliminary strategic evaluations

Sir Philip Hampton's 2005 review, *'Reducing administrative burdens: effective inspection and enforcement'* remains a mainstay of regulatory evaluation. Sir Philip set out some key principles that in his view should be consistently applied throughout the regulatory system, and good regulators naturally assess themselves against them periodically. In 2012, the NAO evaluated the arrangements for the oversight of farming using some of the principles. We have taken that evaluation and provisionally updated it, in Table 2, overleaf.

We know from current thinking and practice³⁵ what is generally expected of the broader oversight of things delivered at public expense, and consider current arrangements by reference to those expectations in Table 2. Lastly, we know from experience the common features we associate with regulatory schemes and approaches, and evaluate current arrangements by reference to those features in Table 2 (overleaf).

³⁵ *The Oxford Handbook of Regulation*, Baldwin, M. Cave, M. Lodge, Oxford University Press, 2010

Table 2. Assessment using Hampton Principles

Hampton Principle	NAO (2012) assessment	Our provisional (2018) assessment
<p>Regulators and the regulatory system as a whole should use comprehensive risk assessment to concentrate resources on the areas that need them most</p>	<p>While inspection regimes adopt a risk-based approach to enforcement, there were no agreed, established or shared common risk factors across all regulators, such as the competence of the farmer or compliance history</p>	<p>The NAO identified 25 risk models in 2012. We are still gathering information on how things are now. We do know there is no one, common approach to risk assessment or shared risk factors. The Farm Activity Programme has begun work to consider risk evaluation but EA appears not to be fully involved. We anticipate a proliferation of risk models and approaches across the Defra group and in local authorities.</p>
<p>Regulators should be accountable for the efficiency and effectiveness of their activities, while remaining independent in the decisions they take</p>	<p>There was a lack of consistent and formal coordination among oversight bodies, which can lead them to examining the same areas</p>	<p>There is a central co-ordination unit and efforts within the Field Activity Programme to make further progress in coordination of inspection. Progress has been very slow. Some Defra group bodies are not able to demonstrate the independence of their decision-making. There are not clear success measures for some arms-length bodies, and some regulatory activities.</p>
<p>No inspection should take place without a reason</p>	<p>Ability to change is constrained by European Commission requirements for some farms to be randomly selected for inspection</p>	<p>The position is presumed to be much the same as in 2012. Visits happen for a reason but they are not fully co-ordinated, and there is not 'an integrated farm approach'. Incidentally, 45% of government visits/inspections do NOT relate to subsidy grant, or general or specific compliance, but to bovine TB control. The inspection load imposed by the Defra Group does not appear excessive overall. Some farmers are likely to be visited more often by farm assurance scheme assessors.</p>
<p>Businesses should not have to give unnecessary information, nor give the same piece of information twice</p>	<p>The vast majority of farmers responding to the NAO survey agreed that they regularly have to supply the same information to different organisations. Farm information was held on 30 different databases in 2012.</p>	<p>The position appears much the same. IT developments have been piecemeal, and focused on improving the access to information and recording of information by a minority (as yet) of inspectors. There is precious little information exchange between agencies and farm assurance schemes, with commercial constraints prevailing. Defra agencies aspire to better data-</p>

		sharing, but systems and other constraints limit what can be done.
The few businesses that persistently break regulations should be identified quickly and face proportionate and meaningful sanctions	Not assessed	The ability to identify non-compliance quickly (or at all) is limited, as agencies do not generally use a broad range of surveillance techniques. Inspection remains a primary surveillance tool, but the EA is not resourced to conduct more than a relatively trivial number of inspections. Farms are visited by Defra group players or local authorities on average less than once a year, and are visited sporadically. Some sanctions are generally considered disproportionate (they are driven by cross-compliance). There remains an undue reliance on criminal proceedings rather than access to a broad range of more immediate and effective sanctions, such as a direction to comply, with consequences for non-compliance.
Regulators should provide authoritative, accessible advice easily and cheaply	Provision of guidance was plentiful but fragmented. The Department had made some progress but the impact on the ground was yet to be felt.	The position appears much the same. It is hard to see how new entrants can find out easily what is expected, what good looks like, and what they must do to comply. Farmers get advice from trusted sources – their vets, for example.
Regulators should be of the right size and scope, and no new regulator should be created where an existing one can do the work	Not assessed	There are five separate Defra group arms-length bodies overseeing farms, alongside local authorities and the Food Standards Agency. There is scope for confusion and overlap. But for the EA, they are not regulators, in the usual meaning. The government is proposing to create a new body, an environmental watchdog to maintain standards and hold government to account.
Regulators should recognise that a key element of their activity will be to allow, or even encourage, economic progress and only to intervene when there is a clear case for protection	Not assessed	This requirement is not set out clearly for the Defra group, so far as we can see. With government's emerging aims for farming, changes to subsidy arrangements and with the prospect of changes to trade and markets, economic considerations come to the fore. Government wishes to simplify regulation and reduce the burden of inspection.

Table 3. Common expectations of oversight

Expectation	Current state
<p>Standard setting and driving quality</p> <p>There is an expectation that standards are set and that they are used to drive quality, by assessment of individual entities against those standards and the use of other techniques, for example the use of ratings</p> <p>There is an expectation that standards can change, to move the bar if necessary/desirable</p>	<p>Standards are set in a considerable number and range of regulatory instruments (we have identified almost 200). They vary in pitch: some are general, others very specific. Must dos are not necessarily differentiated. There is not an independent regulator to hold the ring on farming standards</p> <p>Individual entities (farms) are not routinely assessed against a complete and comprehensive set of standards applicable to them. Assessment is generally by sporadic visit or inspection, for limited/specific reasons</p> <p>Standards are embedded in such a range of regulatory instruments, and responsibilities for them are dispersed across the Defra group to some extent, with many responsibilities remaining within Defra. It is not easy to see how standards can be adapted seamlessly after EU exit, and as and when needs arise</p>
<p>Driving improvement</p> <p>Good oversight arrangements are expected to drive improvement where needed</p>	<p>There are few levers to drive overall improvement. Instead, specific funding is available for certain things</p> <p>A common arrangement allows for the regulator to take an entity out of the market, for stubborn non-compliance. There is no such provision here. Instead, some must resort to criminal proceedings</p> <p>Ratings are known to drive improvement in a competitive and/or volatile market, and where entities are just below the compliance line. There are no ratings systems in play, so far as we are aware</p> <p>Broader incentivisation drives improvement. It is a well-recognised tool. The government intends to incentivise attaining certain things in future, but the oversight system is not fully geared up or set up for that</p>
<p>Information gathering for commissioners</p>	<p>This is still to be assessed. Information is likely to be available in different formats across the Defra group and within local authorities. We think pure commissioning is limited, but there is scope for more of it in future</p>
<p>Providing public confidence</p> <p>The public wish to know that plant health and animal health and welfare is of the right standard, that major risks are managed and that food produced here is safe to eat</p>	<p>There is little public reporting or national assessment of animal health and welfare compliance in England. Arms-length bodies cannot be sure at all about the level of compliance</p>

	<p>Consumers rely increasingly on farm assurance, without necessarily knowing what it means or that there are levels of assurance</p> <p>Individual breach incidents that attract media attention affect public confidence adversely</p>
<p>Behaviour modification</p> <p>Effective oversight drives entities to modify their behaviour when that is need, to meet policy aims</p>	<p>We have further assessment to do here, but we know already that the current model does not deal effectively with situations where the farmer is unable, or incapable of improving to reach base standards. Agencies have a limited range of regulatory powers, to change behaviours</p> <p>Cross-compliance and the risk of non-payment/penalties is a significant driver of behaviours, some perhaps perverse. We expect cross-compliance arrangements to disappear, after EU exit</p>
<p>Enforcement action</p>	

Table 4. Common (core) features

Feature	Rationale	Provisional Assessment
<p>Registration</p>	<p>Entry and exit points enable the regulator to identify the entities regulated, to set the bar for entry, and if necessary to adjust the bar over time or in response to circumstances. Registration schemes can provide for <i>levels</i> of entry, and <i>conditions</i> of entry</p>	<p>Universal/single point registration is not a feature of the current system. Instead there are various registration or notification requirements, but they depend on the extent and type of farming enterprise and/or CAP claims</p>
<p>Standards</p>	<p>Regulators set standards to be met by those they regulate. The standards should reflect government policy and the purposes of regulation, so that the regulatory purposes are achieved when standards are complied with</p> <p>Standards should be actively honed and nurtured over time</p> <p>Standards should be evidence-based, and</p>	<p>Ownership is unclear. What is meant by 'standards' needs stating</p> <p>Standards are embedded in an exceptional number of statutory instruments and other documents, with responsibilities dispersed. This makes it difficult or impossible to see the bar, or move the bar responsively, or to know when it is necessary or desirable.</p> <p>Industry has little meaningful involvement – early enough – in setting or agreeing standards</p>

	developed with those regulated, so as to improve the prospects of acceptance and compliance.	
Guidance	Those regulated need to know what regulatory requirements apply to them, and what they need to do to comply and demonstrate compliance	Guidance abounds but is uncoordinated, and is said to be written in ways unhelpful to farmers Inspectors vary in the extent to which they are prepared to provide guidance on the ground, reflecting the lack of one regulatory strategy and existing regulatory constraints
Licensing/permitting	To control risky activities and understand the scale of the risk through volume of applications	Licensing/permitting abounds. It is said to be unduly granular, with laborious application processes, but it can be seen to have driven improvements.
Surveillance (compliance monitoring)	Regulators need to know if regulation is working, and should account for their effectiveness. They often use risk-based approaches to manage surveillance Surveillance techniques vary. On-site inspection is comparatively expensive. Other techniques include self-assessment, data analysis and remote (electronic) surveillance	Inspection appears to be the most common surveillance technique deployed, although there is some remote surveillance and data analysis. Overall surveillance is limited, and not timely: regulators are unable to account for the national state of compliance, or changes to it. This will always be a challenge, of course
Enforcement	Regulators need to be able to change the behaviours of those found non-compliant with requirements, and to sanction non-compliant individuals. They hanker after the widest gamut of tools	The common tools (e.g. directions, increased reporting requirements, fixed/variable fines, temporary or permanent withdrawal of licences/access to market) are not available sufficiently

5. How can we regulate better?

Farming could be regulated more effectively and efficiently through independent regulatory arrangements.

Standards should be owned and set in new ways – to simplify them, to make requirements plain and to allow for standards to adapt as required.

A wide range of regulatory approaches and tools are needed. Risk-based approaches should be seamless, and intelligent. Incentivisation has a key role to play to drive improvements, as has investment to support innovation and testing.

Rather than the visit arrangements we have now, farms could be assessed periodically. Inspection/assessment should be supportive and holistic, while always dealing firmly with big risks. A farm rating system should be considered: ratings could drive improvement and offer market value to the farmer.

Our regulatory arrangements should provide for a wide gamut of enforcement powers, with criminal proceedings reserved for the most serious situations. Enforcement should be ramped up, in the interests of responsible farmers and the wider public. The regulator should account periodically for the level of compliance with standards.

New technology should be exploited to the full, and could transform compliance checks and the targeting of enforcement activity.

Delivery arrangements could be improved significantly by the creation of one skilled field force, considered use of contract regulation arrangements and the re-configuration of regulatory capabilities to reduce overlaps and ensure consistency and coherence across the system.

In this section we consider what good regulation looks like, and the approaches we think would work best for farming now. We explain the rationale for what we suggest, before showing how one might go about developing a regulatory strategy for one area, soil health.

We start by looking at the constitutional arrangements for regulating farming, as those arrangements matter. We then move on to how standards should be set, how compliance with standards could be assessed and standards enforced, and how farmers could be encouraged and rewarded for meeting standards.

We then consider enforcement, before stepping back to consider matters of regulatory philosophy and approaches, and the delivery arrangements for regulation. That leads us to suggest a set of design principles for regulation. Finally, we demonstrate how one might develop regulatory strategy for government's aims for soil health, as one example of how one might go about things.

Of course, these suggestions are made amidst a great deal of uncertainty, when regulation should be context-specific. Future agricultural policy in England, the proposed Environmental Land Management approach, and future trade constraints and opportunities, as well as the amount of government funding that might be available to farmers and the mechanisms for authorising and making payments are unsettled as yet.

5.1 The constitutional arrangements for regulation

Given their timing, previous independent reviews of the way farms are regulated and inspected did not anticipate us leaving the European Union and the opportunities arising from it. But they still called for a change in regulatory culture. We agree, and think that change is essential now, with EU exit. However, we think the current constitutional arrangements for farming regulation severely inhibit our capacity to change regulatory culture.

Responsibility for regulating farming is currently dispersed between Defra and five of its arms-length bodies, with some residual responsibilities (mainly for animal welfare) held by local authorities. Defra itself is still responsible for delivering some aspects of regulation, as well as setting the strategic context for it.

We do not think these arrangements can readily deliver what is now required, to meet government aspirations for farming as we leave the European Union. In our view there is a compelling case for more regular arrangements, with independent regulation at the fore.

5.2 The case for independent regulation

Regulation is typically a governmental activity, Responsibility for the regulatory arrangements in any sphere generally rests with government, but there are persuasive arguments in almost all spheres for regulation itself to be at arms-length from government.

Good governance requirements suggest that regulatory functions are assigned to appropriate and capable public bodies, and indeed the regulatory arrangements in this country are generally arms-length arrangements. For example, the safety and security of the UK's 37 nuclear sites rests with an independent regulator, the Office for Nuclear Regulation.

The general arguments for independent regulation are well-rehearsed. Regulators operate in a complex environment and sit between public authorities, the private sector and consumers and the wider public. They must balance competing wants and needs from different stakeholders. They must behave and act objectively, impartially and consistently, without conflict of interest, bias or undue influence – in other words, independently.

The Study Estate Case

In October 2014, a gamekeeper on this large estate was convicted of poisoning raptors. The RPA held the estate vicariously liable for the gamekeeper's actions, considered it a non-compliance, and reduced the estate's single farm payment.

After an unsuccessful appeal to the Independent Agricultural Appeals Panel, the estate appealed to minister who in turn upheld the tribunal decision. The reduction was lessened, but in the panel and the minister's view it was right that acts of the gamekeeper should be treated as those of the farmer.

Then the estate, supported by the NFU, judicially reviewed the RPA decision to impose a penalty reduction because of the intentional acts of an employee in poisoning wild birds.

In the court's view, whether a penalty was appropriate depended on an assessment of the farmer's level of responsibility for what had happened. However there had been no investigation as to the fault (if any) of the farmer for the killing of the wild birds by the gamekeeper. If there was intentional killing of wild birds, by anyone, on the farmer's holding, then the right to impose a penalty for a cross-compliance breach was potentially engaged.

However, the law requires that the legal tests in place be properly applied and, in this case, it found no consideration had been given as to whether the farmer was actually at fault. The penalty could not therefore be lawful, or fair.

OECD best practice guidelines

The OECD⁶ Best Practice Principles on the Governance of Regulators define a regulator as: *“entities authorised by statute to use legal tools to achieve policy objectives, imposing obligations or burdens through functions such as licensing, permitting, accrediting, approvals, inspection and enforcement. A regulator can use other complementary tools such as information campaigns, to achieve the policy objectives, but it is the exercise of control through legal powers that makes the integrity of their decision-making processes, and thus their governance, very important”*.⁶

What distinguishes an independent regulator is not simply institutional design. Independence is also about finding the right balance between the appropriate and undue influence that can be exercised through the regulators’ daily interactions with departments, regulated industries, interest groups and individuals.

Independence is a means to an end, rather than an end in itself. Government (ministers) should be free from operational, every-day decisions and all aspects of enforcement in the relevant field of endeavour, enabling them to focus on strategy and policy. The case for independence is generally compelling, but it is even stronger in circumstances where expert and professional judgements need to be applied and where a degree of

discretion should ideally be exercised, as we will argue here, for farming.

Independence is essential where the decisions of the regulator have significant impact on particular interests (industry most especially, but also powerful interest groups) and therefore there is an express need to protect impartiality *and* show impartiality is protected. Regulators with independence (both from Government and from those regulated) provide increased confidence that decisions are made impartially, consistently and with integrity. They develop fair and consistent decision-making arrangements.

We argue that regulators should be independent in much the same way that judges and adjudicators are. They should have sufficient autonomy to exercise their regulatory functions free from undue interference or any sense of regulatory capture, particularly in relation to specific programmes, individual cases, decisions and appeals. It is however entirely appropriate that the long-term strategic goals or objectives of the regulator should align with, and potentially deliver, national priorities as set by government.

Over time, independent regulators generally develop unparalleled data, information, knowledge and expertise about the industry they regulate. Good regulators deploy a range of regulatory approaches to suit their aims and objectives, and current priorities, and this will be especially important as we regulate farming after EU exit.

Good independent regulatory arrangements are inherently more adaptive than departmental arrangements which are unduly reliant on statutory provisions and inflexible regulatory instruments. We think that is especially important now, for farming. The government’s aspirations for farming and how it wants to see farming regulated are best delivered through an adaptive regulatory approach, with the ability to regulate in a nuanced way tailored to sectors and issues the way we regulate and the standards to be met by farmers must take account of changing trade conditions.

5.3 Defra configuration

Defra's arms-length bodies differ in constitution, and moreover the extent to which each can be said to be a regulator or else a delivery body. In our work so far, most of Defra's arms-length bodies we have spoken to have said that they do not see themselves as regulators. They have also expressed frustration with the clear limitations of their powers, and the lack of flexibility in some of the rules. The common thread is that they each have a legitimate interest in what happens on farm.

One – the EA – is most clearly an established regulator. It is interested in a much wider range of entities than just farms, and has a broader remit. Together, Defra's arms-length bodies are aware of overlaps between them, and work together to try and overcome the obvious issues. When looked at from the farmers' perspective, it can be baffling. Although this configuration may be more or less workable now, we question whether it will be in future.

Regulation strategists recognise the need for a substantial rethink of Britain's regulatory frameworks in the wake of EU Exit. Like them, we see there is an extraordinary opportunity. For farming, there is a chance to reconceptualise regulation beyond just a set of rigid rules. The options that regulators now face are path-dependent, however, they are critically dependent on where they have been as well as where they might be going.³⁶ That makes change all the more difficult and all the more necessary in many spheres, but especially in the regulation of farming.

5.3 How standards should be set

At the heart of regulation are the standards and the requirements which the regulator regulates against. We argue that standards need to be set, honed and nurtured in new ways. It might be helpful to explain a little more what we mean by standards here.

Standards can be specific obligations set out in legislation. They can also be descriptions of what needs to be done or achieved, to meet the obligations set out in primary or secondary legislation. Those descriptions are best set out as guidance by the regulator, for example in a code of practice. However it is done, the legal status of any standards description should be clear to the regulated bodies and the regulator. Is the standard compulsory, or not? All those regulated *and* those regulating must be clear about the mandatory requirements. They should be clear to all, without having to reference back to legislative provisions.

Figure 5: Hierarchy of legislation



³⁶Of Brexit, regulation, tales and tails, P. Bonish and M. Cavus, LSE Risk and Regulation 34. Available at: <http://www.lse.ac.uk/accounting/Assets/CARR/documents/R-R/2017-Winter/171216-riskregulation-ONLINE.PDF>.

Well-drafted standards are not definitive about *how* something must be done, or how an outcome is to be achieved. Good regulators guard against that – otherwise an individual who is regulated and knows the desired outcome and the suitable action plan to achieve it, is frustrated by a specific requirement for compliance that is excessively onerous for the situation.

The key to good standard-setting is to ensure that unless there is an absolute need for prescriptive and universal specification, then standards should take into account the context and allow for variation or choices about how the outcome is achieved, to suit different scenarios, different sectors and so on.

Making standards understandable and workable

Farmers are regulated by government, and many are also members of one or more farm assurance schemes. Those schemes have their own standards and requirements. When you pull it all together (Figure 6) it is hard not to empathise with farmers who feel farming regulation and oversight is baffling and unduly complex.

Farm assurance schemes each have their own standards, and those standards can flex and change when those running the scheme think it appropriate. The government’s farming standards are less flexible, yet much more prolific than those at the heart of farm assurance schemes.

Regulations exist to make people do things that they would not otherwise do, but this only works well if those regulated understand what that is and why they should do it. Standards are at the heart of things, at the touchpoint of regulation, the farmer and the activity being regulated. For standards to be effective, we argue that they need to be right for the scenario being regulated. Their status must be understood by both the regulator and those regulated, and they should be agreed (and so accepted) by relevant parties.

In farming, there has been a proliferation of regulations and schemes which impose a wide range of obligations on farmers but are often set out in an inaccessible way. While this is for good reason from a legal or policy perspective, it is not at all helpful for the farmer. In addition, each area within the wealth of documentation is separate and farmers have to pick out what is relevant to them. It is left to the various agencies to assist farmers to understand what is required of them, and that of itself has resulted in a large volume of advice and guidance documents.

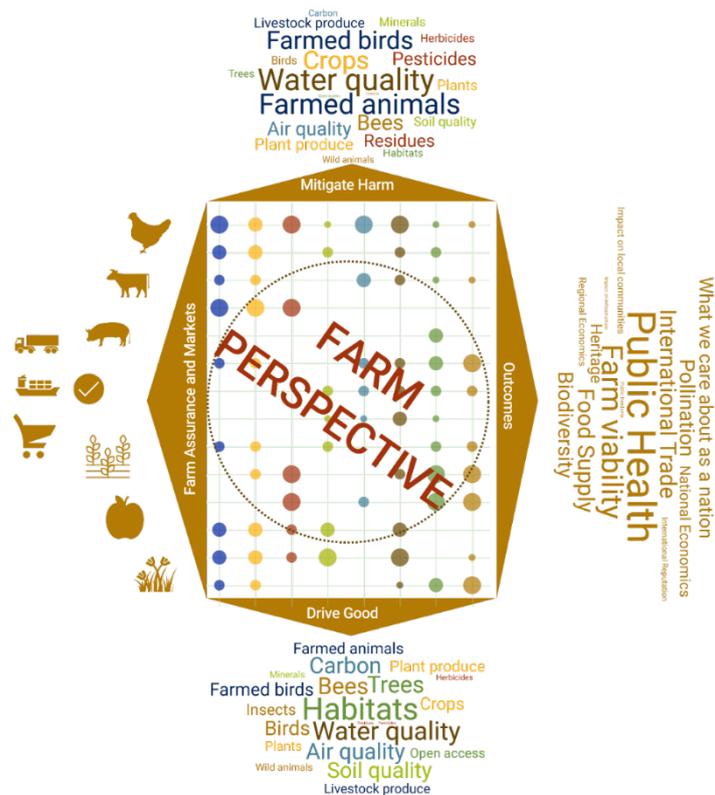


Figure 6: Farms are at the centre of competing objectives

It is a much more common arrangement in other spheres for an independent regulator to work with others to set out what is required in one sensible way, in a set of standards. The regulator holds the ring. It is then for the regulator to monitor, hone and adapt standards, re-set bars, and introduce new requirements quickly if necessary. We think that is going to be essential, for trade purposes and as national and international market conditions develop.

How best to set standards

Whether people comply with requirements (and how well they do so) does not just depend on how easily understandable the requirements are – other things come into play. In some farming sectors, margins are exceptionally tight, and competition is strong, so the cost of compliance and commercial considerations weigh heavy. For most sectors, and as we regulate now, the likelihood of non-compliance being detected is low – another influential factor.

As the likelihood of compliance is dependent on so many contextual factors, there are good reasons for the standards to be set in close consultation with those representing farmers and with other influential and informed stakeholders. In our experience, when standards are created in this way, the risk that standards will create unintended consequences is reduced, and the way the standards are structured and expressed is more likely to be fit for purpose and understandable.

What is more, the greater the sense of shared ownership, the more likely it is that standards will be recognised as credible and necessary, and this will promote compliance. We have been told conflicting things about the extent of meaningful consultation now.

Regulators have a key responsibility to ensure appropriate standards are created and consulted on. They should play a key role in bringing together the relevant expertise from industry, policy and professional or technical experts to advise on the best approach and develop relevant content, while being objective and impartial throughout. In doing so they ensure that the standard is most likely to achieve the desired outcome by addressing the tensions between the different perspectives and driving consensus on the approach. They must also satisfy themselves that the standard will be appropriate for the regulatory strategy in the relevant area, which in turn should be formulated to deliver the relevant policy aims.

As a minimum, any regulator should be able to set clear guidance on what the existing regulations require and how compliance should be achieved. That guidance should have legal status which obliges those regulated to have proper regard for it. Other bodies can play a part in developing and promulgating guidance, under the auspices of the regulator.

Factors that influence compliance

- a) The incentives to comply
- b) The cost of compliance
- c) The likelihood of non-compliance being detected
- d) The consequences of non-compliance, including sanctions
- e) Whether the actions necessary to achieve compliance are aligned with existing motivations
- f) Whether compliance creates a commercial advantage
- g) Whether compliance is generally accepted as good industry practice
- h) Whether the actions necessary to achieve compliance will in fact lead to the desired outcomes
- i) Where the outcomes that compliance is designed to achieve are accepted as being reasonable, well informed and/or necessary.

5.4 How compliance should be assessed

Registration as the start point

We have spoken earlier in this report about the benefits of registration. It is extremely difficult for regulators to know the proportion of folk compliant with requirements when they don't know how many folk there are at any one time. We appreciate this is not straightforward, given the structure of farming, but we do think it is worth evaluating now.

Wider surveillance and mapping

When it comes to compliance checking, we start with Hampton's principle that no inspection should take place without a reason. Data and information analysis is used to some extent already, to determine priorities and inform risk-based approaches, with the Environment Agency a leading example. It could be used much more extensively in our view, especially if combined with modern technologies and remote surveillance.

Satellite technology and other automated verification techniques hold much promise (albeit our satellite (e.g. Sentinel) access may change as we leave the EU). We understand that the Forestry Commission use high-resolution aerial photography to spot disease in forested areas, for example. We know that remote soil sampling is being trialled as well, when so much can be understood from a soil sample. In other spheres of endeavour, individuals can upload photos and other data and information using mobile apps, and we would like to see their application assessed here.

We know that much more could be done, at a local, species and other sector level and more generally, to map compliance and trends – to help spot harms, and to then target specific checks, the provision of advice, or enforcement activity.

Individual visits (checks) – inspection and assessment

We see visits, inspections and assessments on a spectrum. We have explained already that the **visits** that Defra's arms-length bodies undertake are not inspection as we know it. Visits can be seen just as an irritation, and a necessity for compliance-checking, as they have been seen in farming so far. They are usually single issue, for example to take a water sample. One would want to keep visits like this to a minimum, although specific checks in response to intelligence will always have their place, and other checks are needed for bovine TB and other endemic disease control, and for trade reasons. The more checks can be incorporated into more holistic inspections or assessments by the regulator, the better.

Inspection differs from single issue visits, in other regulatory models. In more common inspection arrangements, the organisation to be inspected is given notice. Relevant information is requested and submitted to the regulator in advance for pre-inspection review. In some regimes, those inspected are asked to produce a self-assessment and sometimes details of their strategies and plans. Information provided is considered alongside any other available data and information, to minimise disruption and maximise the use of time on field work, on site.

Following field work, inspections usually result in an inspection report showing the inspection findings. The report sets out clearly against the relevant standards the results of the inspection, with the reasoning explained and evidenced. It points to good practice and areas where things could be improved, as well as to any non-compliance. Individuals have the chance to correct any errors or provide any missing information. This process is best conducted in a timely way but it must be transparent and fair.

Good inspection is holistic, as these two examples (adjacent box) show.

In some regimes, those inspected are rated using a rating system such as that used by HMI Probation and the Care Quality Commission. Ratings are thought most valuable when consumers (or producers) can use them to help make a choice as they select a product or service. Ratings are also particularly valuable in driving improvement where needed, and where some in the sector are performing just below the line³⁷.

Good inspection is holistic

HMI Probation inspects all probation services annually, to see the extent to which they:

- Deliver the enduring aims of probation (rehabilitation, protecting the public and making sure the sentence of the court is served);
- Meet specific sectoral requirements (for example, whether the National Probation Service provides good enough advice to the court about the right sentence in each case before it)
- Deliver government aims for probation, for example relatively new requirements to make sure prisoners are prepared well for their release and so more likely not to re-offend.

As HMI Probation inspect they also consider and assess how well the organisation is led.

CQC inspects hospitals, care homes and other health providers and ask the same five questions of all those they inspect: are they safe, are they effective, are they caring, are they responsive to those they care for and are they well-led?

³⁷ . "Rating providers for quality: a policy worth pursuing?"

See <http://www.nuffieldtrust.org.uk/publications/rating-providers-quality> for the summary report, full report and a video summary by Jennifer Dixon;

"Measuring Success: League tables in the public sector" by Beth Foley and Harvey Goldstein.

At the far end of the spectrum is **assessment**. By this, we basically mean supportive inspection: inspection that is collaborative, that helps those inspected to identify strengths, weaknesses and potential, and to see where improvement is needed and what can be done to improve. An inspection for example that could identify the chance to plant the right tree(s) in the right place could serve both the farmer and the wider environment.

Our argument is that done the right way, inspection can be of value to government and the farmer alike. We think more holistic farm inspection/assessment could have a central place in future. We have more work to do, but we see the potential for generic and sector risk models, to enable farms to be selected for inspection on a risk basis. The regulator must be open and transparent of course about its risk modelling, and how farms are selected.

If we think how this could work for farming, an on-notice inspection would start with pre-inspection, desk-based review. Inspectors should have a clear profile of the farm that they are visiting. They should have prior access to information on any public funding being made or potentially available to that farm and the relevant terms of any ELMs, as well as information on the farm's compliance history, and its risk profile. They should know where a farm is subject to a farm assurance scheme and have information on any current ratings and the basis of those ratings. They should have all remote surveillance data and information available.

A small team with the right spread of expertise would then conduct the field work at the farm. It would of course cover the management of big risks – such as those associated with slurry tanks or animal feed - but it could also diagnose and assess strategies for managing any endemic disease present, and consider soil health, weed control, water management and so on. Many inspection systems cover leadership, and we think there is benefit in considering the farm's own plans for the future.

A more holistic and integrated farm approach, with periodic assessment of the whole farm, offers benefits for the farmer and the regulator. The regulator could evaluate the direction of travel for the farm, identify any concerns and begin to build a better understanding of the local and national picture.

Farmers would be able to see and compare the farm in the broader context of the local area and more widely, understanding the farm's impact on environmental objectives and how improvements could benefit their business. Good inspection does not just identify failings, it also finds good practice, and pinpoints areas with room for improvement.

Were we to adopt this approach, the government, the regulator and the industry could consider together the value of a farm ratings system either farming wide, or else in specific sectors. Good farm ratings would be of value to those farmers trading in national or international markets, we suggest. It may be one way of recognising (and so encouraging) exceptional welfare standards in some sectors. It could recognise and promote those meeting or exceeding environment management expectations.

Ratings (good or bad) could feed into the regulator's risk modelling and influence the frequency of inspection for an individual farm. We are interested in the experience of other regulators operating a risk-based approach and rating those they regulate, and will explore this further.

See <http://www.britac.ac.uk/publications/measuring-success-league-tables-public-sector> for the executive summary, full report and an accompanying presentation.

Thematic inspection

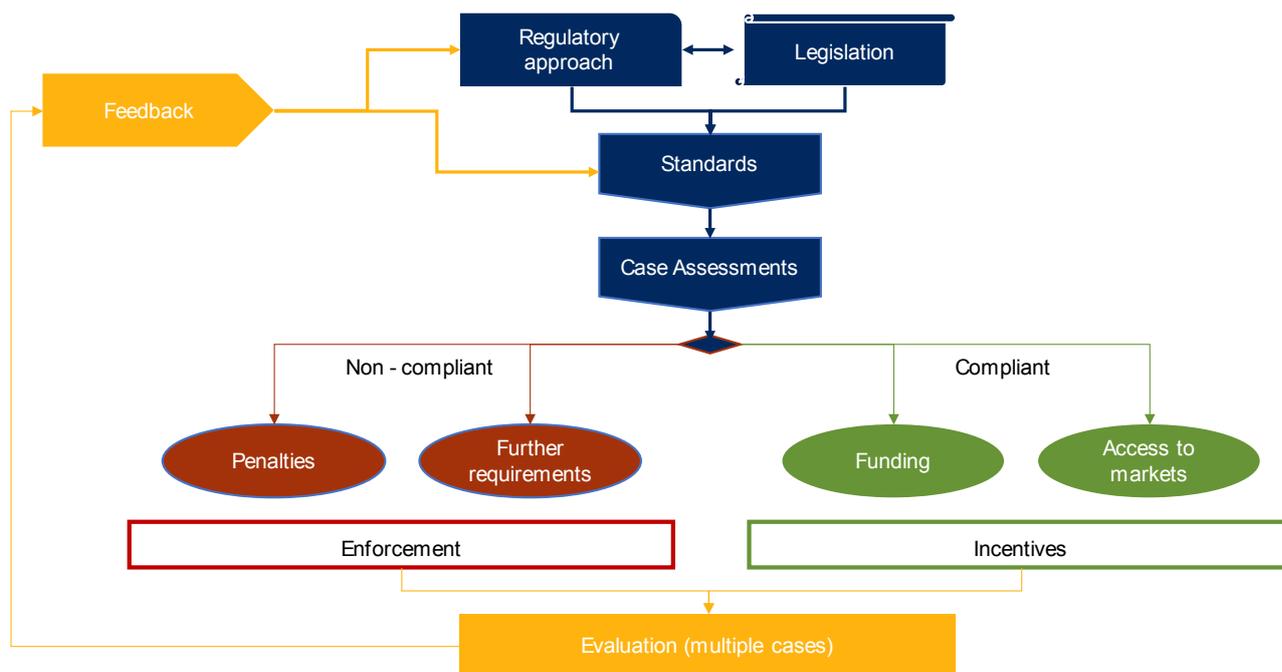
Inspection does not have to be limited to individual businesses or premises. It can be thematic. So for example, Ofsted conduct thematic joint inspection with others in relation to the wellbeing of vulnerable children; the criminal justice inspectorates conduct joint thematic inspections on cross-cutting topics such as disclosure. Thematic inspections may have a place in farming, to gauge the state of play nationally on a particular issue or standard.

5.5 How standards can be enforced

Enforcement is not a stand-alone activity

An effective regulator needs to be able to assess compliance and then take action accordingly. Some of this action will be enforcement action, with the intention of changing the motivations of those who fail to comply and drive future compliance, but the incentive side of the regulatory coin can be powerful as well, providing access to markets and funding initiatives (Figure 7, below).

We do not find it helpful to think of enforcement as a stand-alone activity. To regulate effectively and use regulation as a system of control, the regulator needs to be properly



empowered to undertake a range of specific activities under the following broad headings:

- **Detecting:** Obtaining information (via intelligence) and subsequently evidence about undesirable and/or non-compliant behaviour
- **Responding:** Developing strategies, policies, rules (including standards, guidance, codes of practice), tools (including appropriate operational approaches) to address the problems identified.
- **Enforcing:** Applying the strategies and policies, using the operational approaches to address identified issues.
- **Evaluating:** Measuring the success or failure of the enforcement (in the broadest sense) or incentivisation approach to addressing the specific issue.

- *Modifying*: Adapting to the changing environment; resetting regulatory strategy and standards.

Good regulation follows a cycle and adapts to changes in the environment and as a result of evaluation of the effectiveness of the approach. Good regulation is as much about incentives to change behaviour as it is about enforcement.

Enforcement action

Farmers tell us they think it wrong that they are criminalised for minor misdemeanours. Most regulators regard criminal prosecution and even civil court proceedings as a last resort. They prefer enforcement powers they can exercise more immediately, to make things happen or stop things happening quickly.

We see that directions to comply, enforceable undertakings and licence withdrawal are potentially powerful tools, but most Defra group bodies do not have these powers at their disposal. What is more, sanctions that are immediate and that prevent access to market are very powerful indeed, and there are lessons to be learned here from farm assurance schemes.

Civil sanctions can work well for all, and indeed the EA can demonstrate its effective application of civil enforcement powers. On at least one occasion it has accepted an undertaking but also issued a fine, to signal to the public and those regulated, the seriousness of the non-compliance.

There is a balance to be struck – using the criminal law without careful thought devalues it, but on occasion, criminal proceedings will be the appropriate regulatory response. Civil penalty regimes must be subject to proper governance by regulators. The independent regulator should publish a clear enforcement policy setting out what it intends to achieve by way of enforcement. It should explain how any investigations are run, how it makes sanction decisions and how it determines the size of any fines. The burden of proof for enforcement should be with the regulator in all cases³⁸, civil or criminal, and there should be an appeal route with an independent element – for example, a tribunal.

In **Annex three** we set out the enforcement and other powers we expect in a farming regulator, and the rationale. With a comprehensive suite of powers and the ability to exercise them correctly, regulators do not generally have to resort to formal enforcement. They find simple persuasion works, when they have real powers in the back pocket.

Poor rates of compliance

Currently, all UK sheep are electronically tagged in compliance with EU law. Domestically, Defra requires England abattoirs to record each sheep's electronic tag identity to track the movement of each consignment. Abattoirs are legally bound to submit this information into APHA's Animal Reporting and Movement Service.

Of the 150 abattoirs in England slaughtering sheep, Defra understands that about two-thirds are not including EID tag data in their movement reports. A much smaller number are reporting movements by sending paper records, rather than e-reporting as they should do.

³⁸ Macrory, oral evidence to the Environmental Audit Committee, December 2017

The polluter pays principle

The Polluter Pays Principle is a cost allocation or non-subsidisation principle, intended to guide governments in addressing domestic pollution, with the notion of internalising costs of pollution prevention³⁹. Outside of this context, it is a more abstract principle. As applied by environmentalists, the principle means that polluters (and countries) who do not pay for the costs of their domestic pollution (i.e. those who do not internalise these costs) should be liable for trade penalties. As applied by trade liberalisers, the principle means that polluters (and countries) should pay for the costs of domestic pollution as dictated by national policies.

Government espouses the polluter pays principle. We intend to find out more about what government is thinking here, and the interpretation to be put on the principle when it comes to the enforcement of farm regulation. Meanwhile, we note that some environmental regulation theorists prefer a Five P Principle: The Potential Polluter Pays to Prevent Pollution. In other words, the regulator introduces necessary standards that may mean individuals have to spend money to comply, but the regulation works to stop bad things happening.

Good regulatory theory⁴⁰ does suggest that a sanction should be proportionate to the nature of the offence and the harm caused, but that is not the same as full recompense for damage caused. Instead, the leading authority on environmental enforcement regimes and enforcement more generally, Professor Richard Macrory has long argued for a broader set of principles that all regulators will be familiar with.

In Macrory's view⁴¹, the two key principles are that first, a sanctioning regime should not be designed to punish per se (though sometimes punishment is necessary) but to ensure the offending business is brought back into compliance, and second, that an effective regime should ensure no economic gains are made from non-compliance. Expanding on that second principle, one can see that the extent of any profit made through non-compliance is an entirely legitimate consideration when setting a fine.

5.6 Regulatory philosophy and approach

There is a tendency to think of regulation as a set of unyielding rules, and indeed the way we regulate farming now is characterised by that. Regulation does not have to be like that. It is worth reflecting again on Baldwin et al's observation that regulation can be conceptualised in three distinctive ways:

- 1) A specific set of commands – the promulgation of a binding set of rules to be applied by a body devoted to this purpose
- 2) As deliberate state influence – a broader concept which covers all state actions that are designed to influence business or social behaviour (thus also encapsulating economic incentives, contractual powers, deployment of resources, franchises or the supply of information).

³⁹ The Polluter Pays Principle was first adopted in 1972 in OECD Council Recommendation on Guiding Principles concerning international aspects of Environmental Policies (C(72) 128 (final) OECD 1972.

⁴⁰ R. Macrory, *Regulatory Justice: Making Sanctions Effective*, 2006, Cabinet Office, London

⁴¹ R. Macrory, *Regulation, enforcement and governance in environmental law*, 2010, Hart Publishing

- 3) All forms of social or economic influence – all mechanisms affecting behaviour, whether state based or from other sources (such as markets) are deemed regulatory.⁴²

The need for the first concept – red light regulation – will always remain in farming, for serious harms. We can also agree that the third concept – all forms of social and economic influence – always has the potential to encourage compliance, just as those influences can have the opposite effect. But we argue that the second concept should have a bigger and better place than now, as part of the backbone of farming regulation in future.

The ending of CAP, and with the freedoms associated with EU Exit (the lifting of absolute requirements for certain compliance checks, for example) government can decide different regulatory arrangements to best meet its strategic aims *in ways that are conceptually well-matched to those aims*. The indications are that government sees we must regulate differently, to stand the best chance of success while also managing the enduring risks of harm associated with farming. We agree. Independent regulators can generally regulate in ways that are most likely to succeed, rather than in one, fixed way, come what may.

We have thought carefully about the government's aims for farming regulation. We surmised earlier that government wants the effective management of agricultural land and the natural environment in England, and wishes to regulate to:

- safeguard, maintain and *enhance* plant and animal health and animal welfare
- secure, maintain and *enhance* good management of farmed land and the natural environment
- facilitate agricultural trade

In one sense, preventing harm may seem almost or just the same as promoting good – two sides of the same coin – but we argue they are different, and that they require quite different regulatory approaches. Indeed, we suggest it is helpful to see these aims on a *spectrum (overleaf)*:

⁴² Baldwin, Robert and Cave, Martin and Lodge, Martin (2011) Understanding regulation: theory, strategy, and practice. Business & management. (2nd). Oxford University Press, Oxford, UK.

Figure 8: A regulatory spectrum for farming

Spectrum of regulation



At one end of the spectrum, there are serious harms (such as exotic animal disease) that need firm measures to regulate. At the other, there are things desirable to promote through incentives and in other ways (for example, by providing access to specialist advice). Mid-spectrum, there are areas (such as pollution control) where flexible and adaptive regulation can drive improvement. The mid-spectrum is wide.

We argue that to regulate well, the regulator must recognise where things are on the spectrum, and regulate accordingly. In our view, the way we regulate now does not generally cater for the wide mid-spectrum, and it has some overly-prescriptive rules for the lighter end.

We believe it is possible to regulate in a more coherent and integrated way *across the spectrum*, in future. Our early view is that too many things are treated as being at one end of the spectrum or the other currently, when we now have the chance to position them better. Were the regulator able to then regulate across the middle and lighter end of the spectrum in flexible and adaptive ways, then government would be much more likely to achieve its aims.

We see the competing tensions between the three distinct aims we think government has for farming regulation. They need to be kept in balance, with that balance agreed with government. The regulator must be open and transparent about how that balance is struck, and justified.

Each aim is likely to require distinct strategies and a different balance of regulatory approaches, as we discuss next. Nevertheless, we argue that they impact the same industry – farming – and they require broadly the same or else significantly overlapping knowledge, skills and experience in order to regulate effectively.

Types of regulation

The spectrum of regulation above is one way of thinking about different regulatory approaches, and identifying the best match for the issue the regulator wants to tackle. Another way of thinking about it is to consider at what point intervention might be necessary, as well as the degree of prescription or flexibility that is justifiable for a certain situation. Figure 9 below shows the three most well-known approaches and how they differ.

Using regulation to achieve key objectives

Approaches to reducing endemic disease will vary according to the disease, its prevalence and the implications for trade as well. They need to be considered carefully for each disease and then regulated for.

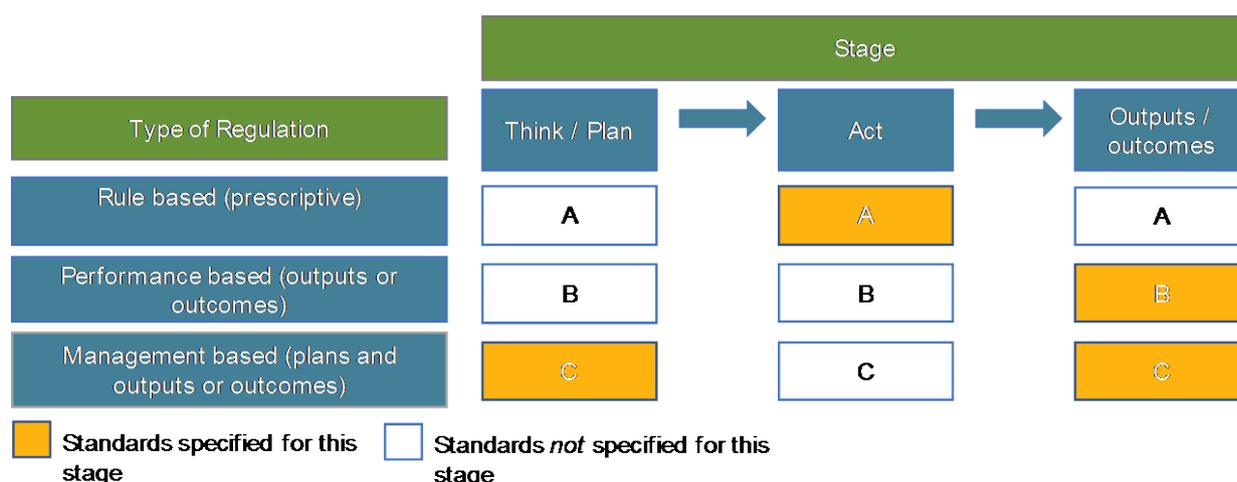
To exemplify, no country has yet successfully eradicated *Mycoplasma bovis* in cattle, but if it could then the cattle industry in that country would be at a competitive advantage.

New Zealand is about to cull more than 150,000 cattle in an attempt to wipe out the disease. It hopes that by carrying out the cull quickly, over one or two years, it can succeed. There are about 10 million cattle in New Zealand, and so the potential gain is considerable.

We do not think that in England we have the regulatory scope now, to act in this way even if there were political and industry backing and funding to support such an approach.

Independent regulation could make it happen, were it considered the best way to deal with the issue.

Figure 9. Types of regulation



With different types of regulation the intervention is at a different stage; planning, acting or

A. Specific requirements for actions – the what, how, when – to deliver intended output

Rules-based approaches typically mandate specific process, technologies or behaviours. These address the *acting* stage, by prescribing the minimum required to achieve compliance. Many of the current regulations in farming would fall into this category. This approach is particularly suitable when dealing with a high degree of homogeneity, and where things can be easily categorised.

Enforcement is relatively straightforward, in theory, because measurability of compliance is generally binary: you are either compliant, or not. It gets tricky though, if you don't have the tools or the ability to check compliance.

Rules-based approaches are predictable and relatively easy to administer at scale, given the low degree of discretion required. However, where there is significant heterogeneity, this approach can be excessively rigid and inflexible, driving perverse behaviours or else sanctions that become extraneous to the purpose of the regulation and are (or perceived to be) disproportionate to the aims. Setting the standards can become contentious as well, and challenge is more likely where the regulation is seen to be unjustifiable or onerous due to its inflexibility in the specification of the minimum requirement (the standard).

Performance-based regulation requires that certain outputs or outcomes will be achieved, or avoided. The standard specifies the output or outcome that must be achieved, but does not dictate how this should be achieved. This is beneficial, in that it allows flexibility dependent on the situation. This is especially relevant in regulating farming, as the degree of heterogeneity is significant. In addition, this approach is far more likely to permit innovation and will be inherently less burdensome, as it is devolved to the farmer to decide how to comply. It benefits farmers who are informed and confident in assessing appropriate approaches to compliance.

However, it places a higher burden on the regulator to evaluate outputs and outcomes, and on farmers to genuinely understand the desired outputs or outcomes, and the underpinning harm or good that forms the foundation as well as any limits on the span of discretion that they have.

It also comes into play at a later stage – after action has been taken – and so regulation will only influence future actions as a result of lessons learned and any remedial steps. This approach requires a greater degree of regulatory discretion to be delegated to the regulator to determine, fairly and rationally, what the best approach is to securing compliance.

Management-based regulation regulates at the planning stage, with the standard setting out the elements that must be included in a plan to achieve specified outputs or outcomes. The plan may or may not be subject to approval (for example trusted and/or low-risk farmers may be allowed to manage their plans without intervention, while others might require approval).

The approach is flexible, like performance-based regulation. It is easier to assess, as the plan should meet relevant standards and in turn this should justify the approach and make it easier to evaluate outcomes. The onus would be on the farmer to evaluate their situation and plan accordingly. The point of control is early, meaning plans that are clearly not going to achieve the desired outputs or outcomes can be modified prior to action.

In cases where there are repeat actions flowing from a plan, where the outputs or outcomes prove to be undesirable there will be opportunities for learning, and the plan can be modified for future actions. In addition, where there are flaws apparent in the plan, they may well point to the misunderstanding, misconception or challenges that the farmer has and where intervention through education or expert advice might have most impact.

We can see roles for each of these three types of regulation, for farming:

- **Prescriptive standards** are necessary in situations where a high degree of control is required, for example national or regional cessation of specified animal movements in an exotic disease outbreak. This type of action can and does create cases of hardship where individual situations do not outweigh the greater good.
- **Performance-based regulation** has a place, given so much heterogeneity within the farming industry. This approach can be useful for well understood scenarios with tried and tested approaches to outputs or outcomes being achieved.
- We see a significant role for **management-based regulation** of farms. This approach can be used for reduction of the risk of harms, dealing with harms when they occur or in achieving public good, and could be at the heart of regulating incentivised actions in the future. For example, the 'plan' could in fact be a proposal, set in the wider context of the farms wider plans, that if approved results in grant funding to support innovation or testing of new approaches to achieving outputs or outcomes.

Each of these three types of regulation has advantages and disadvantages, and each is of course resource dependent. The key point is that regulators should be clear about their purposes and the outcomes they are tasked to achieve, and decide on an issue by issue and risk by risk basis, what the best regulatory strategy should be. Ideally these strategies should impose the most minimal and least burdensome intervention necessary to achieve the desired outcome, at the lowest cost to the public purse.

Independent regulators can monitor and adapt standards, re-set bars, and introduce new schemes quickly. Over time, they generally develop unparalleled data, information, knowledge and expertise about the industry they regulate. Good regulators then deploy a

range of regulatory approaches to suit their aims and objectives, and current priorities, and this will be especially important as we regulate farming after EU exit.

To use regulation in the most effective, proportionate and targeted way, it is optimal for a regulator to have the widest possible toolkit to draw on. We identified earlier (in Table four) the common features of regulatory regimes. Even with the right powers and features, however, regulation can fail or miss the spot as they alone do not ensure success or that the purposes of regulation are met, or met often enough. Instead, success turns on the regulator working out in detail – harm by harm and aim by aim, how to use their powers. That is the art, the craft of regulation.

Hampton⁴³ and MacRory⁴⁴ have provided helpful frameworks for considering and evaluating regulatory approaches, but ultimately the regulator must decide the most efficacious approaches for the industry in question or parts of it – to best achieve the purposes of regulation. This will be particularly important for those things that lie in the middle of the spectrum, for example, the control of endemic disease.

5.7 Delivery arrangements

The field force

We believe there are compelling arguments for one multi-skilled field force, under the command and direction of one regulator day to day and in an emergency. We believe one field force would best suit the way we suggest we should regulate in future, and it would be the optimal arrangement for emergency response as well.

Hybrid delivery arrangements

Independent regulators do not necessarily do all their activities themselves. Of course, they operate within a legal system based on common law. The regulator is expected to act in the public interest and has considerable, although bounded and accountable, discretion in its decisions over service standards and (where relevant) tariffs. In U.K.-style regulatory systems, the regulator's discretion is bounded by legislation, case law and evolving regulatory practice. Nevertheless, they can develop sensible delivery arrangements.

At one extreme, those countries with colonial histories linked to continental Europe – France and Spain in particular – have tended to rely in some spheres on *regulatory contracts* such as concessions, administered within a tradition of civil law combined with provisions for contractual renegotiation or arbitration⁴⁵. In France for example, water concession contracts transfer operating rights while at the same time imposing regulatory obligations. There is no separate regulator and instead the contract is legally enforceable by France's highest administrative court, the *Conseil d'Etat*. Such systems depend on credible, specialist courts.

⁴³ P. Hampton, *Reducing administrative burdens – Effective Inspection and Enforcement*, 2005, HM Treasury, London

⁴⁴ R. Macrory, *Regulatory Justice: Making Sanctions Effective*, 2006, Cabinet Office, London

⁴⁵ Eberhard, Anton. 2007. *Infrastructure regulation in developing countries: an exploration of hybrid and transitional models (English)*. Public-Private Infrastructure Advisory Facility (PPIAF) working paper; no. 4. Washington, DC: World Bank. Available at: <http://ppp.worldbank.org/.../infrastructure-regulation-developing-countries-exploration-hyb...>

Hybrid arrangements (a mix of independent regulation and regulatory contracts) are more common, and are deployed in the UK. In such a model, independent regulation sits alongside and administers regulatory contracts that enable private-sector participation in operational delivery. Hybrid arrangements don't always work well, as the experience of Ofsted and the Care Quality Commission shows. The key is to ensure the right levels of expertise out in the field, and the right level of central control over the standards applied and the judgements made.

Within the Defra group, agencies sometimes trade inspection responsibilities or deliver schemes for each other, albeit some of these arrangements have been agreed for largely pragmatic rather than strategic reasons. APHA relies on veterinary services supplied by contractors, although it is not a conventional regulator. We are interested incidentally in whether bovine TB testing will remain a matter for vets, or whether technicians could take on the work. We await recommendations from the independent review of bovine TB strategy.

We think there is scope for hybrid arrangements that include this sort of contract regulation. The RSPCA maintain a strong interest in animal welfare and it has developed its own high-end assurance scheme. Several large companies provide assurance (through inspection) of other established and growing farm assurance schemes.

Regulation and farm assurance

As we explained earlier, farms may be assured in some but not all respects, and they are assured against standards set by the schemes and through arrangements determined by the schemes.

Government visits to farms have been curtailed to a small extent by some Defra agencies accepting farm assurance as a reason to visit less often. We think there is scope to *invert* this relationship. Instead of government inspecting less often, a farming regulator could develop contract regulation more fully, using standards set by the regulator consensually with the industry.

We start from the premise that for government to rely on farm assurance, the regulator would need to endorse the standards as being exactly as required for its own assurance, and it would also need to quality assure the inspection of those standards. However, we will consider this in more detail, and look closely at how other countries have developed the arrangement between farm assurance and regulation. The RSPCA and large farm assurance schemes may be interested in developing a hybrid approach, or in providing inspectors (for a charge) at the regulator's disposal. We will reflect on this further, but we see already that possibilities should be shaped by other considerations about how we intend to regulate in future.

Local authorities⁴⁶

There appears to be a disparate picture across the country. Again, we have more work to do, but it is plain already that local authorities are generally reducing their checks on animal welfare, with visits now thought to be mostly in response to complaints. The staff involved are committed to animal welfare and generally wish to do more, but this is no longer a

⁴⁶ Local authorities have a statutory function in relation to animal health (Animal Health Act 1981) and a non-statutory function in animal welfare.

reliable delivery model. Welfare complaints-handling may be better subject to contract regulation.

Local authorities are increasingly unwilling to prosecute matters referred to them, because of competing priorities. Indeed, this has been a longstanding problem in at least some areas of the country. Farmers have told us they object to being criminalised, and we see that is not always appropriate. In any event, criminal prosecution is often not the most effective, efficient or timely way to make things happen or stop things happening. It should be reserved for the most serious incidents, with prosecution in the hands of the Crown Prosecution Service, we suggest.

The Defra group

Regulators create the most value when they can see the full picture and can use their interventions to help secure the best outcomes *overall*, in the public interest. They can then use that insight to assist government to set informed policy, and better influence the structural and systemic pressures which drive non-compliance. And they can have a much more sophisticated understanding of risk.

The regulator needs this insight because in farming, as in many areas of regulated activity, desired objectives and outcomes can often be in tension with each other and need to be resolved. The regulator needs to know how these tensions are being resolved on the ground. It needs a fulsome understanding of the industry and its structures, the systemic pressures and interdependencies that exist within it and the market, and the behavioural motivations of farmers. It also needs to have a good grasp of the environmental outcomes required for each locality and the natural capital assets that the farm impacts or could impact.

It is very challenging to secure this level of insight and to use it well when responsibility is disaggregated across multiple bodies, each with different objectives and purposes. Effective information sharing protocols have proved difficult to establish and sustain, and even when they are in place, they do not address the fact that different agencies have different objectives and accountabilities.

At the moment, no one agency can be said to have the full picture in relation to what is going on at any specific farm, and no one agency is best placed to be able to properly reconcile competing priorities, at a farm level, in the context of overarching government policy and the public interest. In our preliminary view this is a significant hindrance to the development and implementation of effective and efficient regulatory arrangements post Brexit.

We appreciate incidentally that the notion of a 'farm' is not straightforward, with some farm enterprises dispersed across several holdings rather than conducted in one place. While we have more work to do, we do not think this is an insurmountable obstacle to a much better regulatory arrangement.

5.8 Developing a regulatory strategy

To aid us in both evaluating current regulation and in making recommendations about future regulatory systems and approaches, we have developed a set of design principles. We believe it could be helpful to government, as it considers the best regulatory arrangements in future. The principles are drawn from our early diagnostic work, and our understanding of what good regulation looks like. They also take into account government's aims for the

farming sector, the indications we have of how government wants regulation to change, and the particular challenges we think the sector will face, during and after EU exit.

We set out a detailed rationale for each of the design principles in **Annex two**, and set out the principles themselves in Table 5, below.

Table 5. Design Principles

	Design Principles
1	The system provides/promotes public, industry, parliamentary and international confidence in the standards achieved by those regulated.
2	The regulatory system is simplified, standardised and accessible, to ensure those regulated are clear what is required of them.
3	The regulatory system is aligned with the Hampton, Macrory and Better Regulation principles ensuring the system and delivery are transparent, fair and justifiable.
4	The regulatory system is geared correctly, recognising the different issues, situations and behaviours that need regulating, and utilising appropriate interventions accordingly to drive changes in activity or behaviour where needed.
5	The regulatory standards are: <ul style="list-style-type: none"> a. appropriate within the spectrum covered by regulation; b. take account of competing objectives; c. take account of localised and national objectives; d. are framed to ensure accessibility for farmers; e. are supported by industry, professional experts, policy makers and the regulator.
6	The regulatory system and standards can adapt and change in good time when needed and utilise feedback loops to ensure that the system adapts to: <ul style="list-style-type: none"> a. deregulate where appropriate; b. reset minimum requirements where higher standards are desirable; c. correct standards if they are not achieving the desired outcomes; d. modify to take account of different objectives or when new requirements or incentives are indicated.
7	The regulatory system aligns with and builds on initiatives driven by the market and does not seek to duplicate or discount these unless there is a need to counterbalance to achieve a policy objective for the greater public good.

So far in this progress report we have spoken about why we regulate farming, and how we regulate it now. We have highlighted some of the issues with the way regulation works now, and then gone on to consider how it could work differently. We have more to do, to complete our evaluations.

We have proposed three purposes of farming regulation, but we find it helpful (from a regulatory perspective) to think of the aims of farming regulation as a spectrum. Our argument is that a good amount of what we all want from farming regulation falls in the middle of the spectrum and the regulator needs freedom to decide how best to tackle that

centre ground, helped by a wide array of regulatory tools. We show here how the design principles we propose above guide a regulatory strategy (Figure 10, value chain diagram).

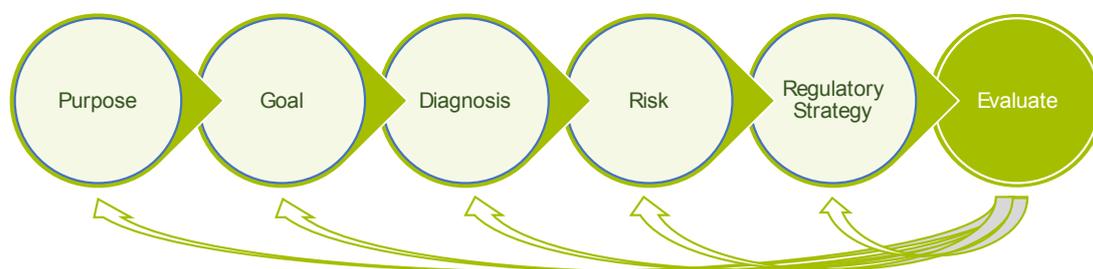


Figure 10: design principles guide regulatory strategy

Any regulatory strategy starts with a purpose. We have advised what the purpose of agricultural regulation might be, earlier in this report. Flowing from a purpose, specific priorities should be identified that provide focus and direction. These might be best described as goals and should be derived from a diagnosis of the most significant issues to be addressed, taking into account government’s strategic aims for agriculture. The goals should be targeted against problems. If the goal is achieved, the problem should be resolved, reduced or meaningfully mitigated.

A useful example of how goals can be articulated can be seen in New Zealand’s agriculture strategy.⁴⁷ Goals should be stated simply and concisely, and it should be possible to set measures of success against them. Success measures should be calibrated against meaningful outcomes rather than procedural compliance, for example, the 0.4 ha requirement for pollen and nectar mix.

Taking time to ensure a thorough diagnosis is critical. Unless the problem, and all of its facets, is properly understood, interventions are unlikely to be properly targeted and will be of limited effectiveness. To diagnose effectively, the problem should be considered from all angles and assumptions should be tested and challenged.

The focus of operational activities to achieve the stated goals should in turn be informed by risk analysis. Risk-based regulation is a particular strategy or set of strategies that regulators use to target their resources at

GROWING AND PROTECTING NEW ZEALAND

OUR AMBITION
New Zealand is the most trusted source of high value natural products in the world

OUR OUTCOMES

- Growth**: New Zealand's food and primary sector grows the value of its exports.
- Sustainability**: New Zealand's natural resources are sustainable, in the primary sector.
- Protection**: New Zealand is protected from biological risk and our products are safe for all consumers.
- Participation**: New Zealanders participate in the success of the primary industries.

OUR PRIORITIES

- EASE OF BUSINESS**: people and business-focused regulations and services
- MARKET SUCCESS**: market access, insight and assurances
- SUSTAINABLE PERFORMANCE**: sustainable primary sector resource use, supported by science
- REALISING POTENTIAL**: building long-term capability and optimising the way we work
- LEADERSHIP**: enabling action in the primary and government sectors
- NEW ZEALANDERS**: informed, engaged and supportive

WE DELIVER THROUGH STEWARDSHIP OF OUR SYSTEMS

BIOSECURITY FORESTRY FOOD SAFETY SUSTAINABLE ECONOMIC DEVELOPMENT ANIMAL WELFARE TRADE FISHERIES

AND HOW WE WORK

- RESPECT**: Value people, value our work
- CONNECT**: Work together, build partnerships
- TRUST**: Own responsibility, take responsibility
- DELIVER**: Act with purpose, achieve results

⁴⁷ To be found here: <https://www.mpi.govt.nz/about-us/our-strategy/>

those sites and activities that present threats to their ability to achieve their objectives.⁴⁸ The use of risk analysis and judgements should not be formulaic and assessments should be rational, coherent and evidence-based. A comprehensive approach to assessing and understanding risk should provide insight to allow meaningful choices to be made around where to concentrate resources. Risk analysis should be multi-dimensional. It should as a minimum assess:

- systemic risks – the pressures that exist within the agricultural system as a whole
- generalised entity risks – the specific factors that make farms inherently more or less risky
- specific entity risks – the track record, or compliance history of any specific farm.

A hypothetical case study

Goal

Government has expressed an intention to reverse the declines and restore soil health across the country by 2030. It has proposed to legislate to support this. New laws create a starting position, but delivering change is likely to require a coherent regulatory strategy.

Diagnosis

Take time to fully understand the problem. A strategy should start with a review to assess the currently available evidence on the extent and causes of the problem and in order to determine the baseline as it currently exists.

Identify and engage with a wide range of relevant stakeholders from the outset to inform the diagnosis and to start the process of building both momentum for action and consensus. This is essential to ensure that the problem is looked at from all angles, that expertise and experience is accessed and that the right solutions can be identified. It is also essential to maximise the effectiveness of social drivers for change.

The diagnosis needs to identify in some detail what behaviours need to stop or to start, the scale of the change needed and the timescales. The regulator should undertake or commission further research if necessary. The regulator should make sure it understands the nature of the behavioural change it wants to secure, and impact assess the costs and implications of those changes against the likely motivations of farmers at the moment. This is essential in order to determine which levers are likely to be most effective.

The objective ultimately should be to raise the regulatory baseline and then sustain the change.

Risk

Identify what countervailing systemic pressures will undermine achieving the goals. Consider these at a macro and micro level. Draw on expertise, evidence and intelligence. Keep the risk model current and live. Review and refine it regularly. Subject it to validation.

Identify where interventions are most urgent. So for example, the regulator will wish to consider soil sampling (and the prospect of remote sampling) and areas of the country or industry sectors or scale and other characteristics of farms more likely to be exacerbating

⁴⁸ Black 2005a; Black 2008; Black & Baldwin 2010

the problem. The regulator should consider where interventions will maximise success or where risks of harm are highest, and consider this in light of assessments of how likely it is that farmers *will* comply and how likely it is that they *can* comply.

Strategy

The regulator should have a range of tools available to it to drive change and needs to decide which tools to use, how and when.

Advice to government

If legislation is not yet in place, the regulatory should work closely with government to iterate and influence thinking. This aim is to ensure that requirement set out in legislation are sufficiently well informed and are most likely to support the regulator to deliver change and do not create unintended outcomes. Where possible, legislation should allow flexibility to achieve outcomes rather than being prescriptive about input standards. Either way, the regulator needs to be able to translate legal obligations for farmers so that it is easy for them to understand what must be done and ideally be able to promote the rational and ethical validity of legal requirements.

Setting standards

It is the job of the regulator to make it clear to farmers what compliance with the law requires of them. Whether the regulator is empowered to set its own legally binding rules, or to issue Guidance on what rules in primary or secondary legislation says, these should draw on the evidence arising from the diagnostic stage to make it clear to farmers what they must do. The regulator should undertake consultation and wide engagement with industry and representative groups – for example, the Soil Association, Leaf and others with an interest in the field, and knowledge - to test and refine their thinking and to build consensus.

Raise public awareness and create the debate to drive cultural change and awareness. This will maximise the social drivers for change.

Educate and advise

Where change is significant or where technical expertise is needed, the regulator can invest in developing targeted advice for farmers. This can be through a variety of method such as:

- a) a regulator run advice line
- b) outsourced advice services, either free to use or charged for
- c) an online hub of information resources and case studies
- d) facilitating regional forums for discussion and collaboration

The objective is to raise awareness of what needs to be done in a supportive way.

Incentivise compliance and deter non-compliance

Depending on the diagnosis, change can be delivered through a balance of incentives and deterrence. If information is clear and impact has been accurately assessed, farmers should understand what they need to do and be able to do it. Where there are financial barriers to change, this is an ideal opportunity to use incentives, through direct funding, loans or guarantees. The regulator can consider funding innovative schemes to further build its evidence base about successful strategies to address the problem. This can create safe spaces to innovate.

In conjunction with incentives, the regulator can send clear messages about the consequences where farmers do not comply, either generally, or with the terms of their incentive scheme and the range of potential sanctions that could be imposed.

Create and run a monitoring programme

The regulator needs to be able to check that farmers are meeting their obligations – either under incentive schemes or in relation to overarching obligations. The regulator should operationalise as efficient a system as possible. This might include the use of inspection or checks but is likely to use a range of methods such as:

- a) Self-assessment with a mandatory return. This could be done by the farmer or by an approved third party, depending on the level of expertise needed.
- b) Inclusion of soil health compliance in accredited farm assurance schemes
- c) Physical inspection on a targeted basis, informed by risk and intelligence
- d) Physical inspection on a random basis
- e) Thematic inspection

Enforce

Have a clear and transparent enforcement strategy which can deploy escalating levels of direct intervention. This can include:

- a) Issuing warnings that there is non-compliance or risk of non-compliance and that action is required
- b) Accepting binding undertakings as to the steps that will be taken to achieve compliance
- c) Issue directions to require specific actions to be taken or to stop specific activities
- d) Fixed financial penalties for late or incomplete returns
- e) Discretionary financial penalties where serious harm is caused or in cases of dishonesty
- f) Additional licence conditions to restrict activities
- g) Revocation or suspension of licences

Assess

Review progress against goals and assess the effectiveness of the range of interventions. Review and refine.

6. Conclusion

We have spoken about why we regulate farming, and explained broadly how regulation works now before going on to consider how it could work differently. We have proposed three purposes of farming regulation, but we find it helpful to think of the aims of farming regulation on a spectrum. Our argument is that a good amount of what we all want from farming regulation falls in the middle of the spectrum, where a proportionate regulatory approach should be selected carefully and according to the nature of the issue.

The regulator needs a good amount of freedom to decide how best to tackle that centre ground, helped by a wide array of regulatory powers. We have suggested the broad range of powers needed. For most things, most of the powers won't be needed, but in circumstances where they are needed they should be there.

Managing and controlling the risk of serious harms (such as exotic animal disease) falls at one end of the spectrum and needs a prescriptive approach, what we term *red light* regulation. At the other end of the spectrum, driving desirable improvements - such as finding new approaches to improving biodiversity – need more social regulatory approaches, such as incentivisation. For the most part though, for the middle of the spectrum, the regulator needs to be able to consider the right approach for the right issue, by understanding well enough what farming is about and what happens on farm, and why.

Government wants a richer and better environment, and better animal health and welfare, with a better grip on endemic animal disease. The way we regulate needs to change as a result. Government wants a more dynamic and self-reliant industry, and the way we regulate should help rather than get in the way unnecessarily. We think that trade considerations will be exceptionally important in future, and as market orientations change. The regulator will need to hone, nurture and adapt standards to best deliver the aims of regulation, with one of those aims being to facilitate agricultural trade. Upon leaving the European Union, the way we regulate needs to be flexible and adaptive, and entirely in tune with the market.

Standards are so important, but they are hard to glean at the moment, and hidden within an exceptional number of regulatory instruments. They need to be set out in ways that those regulated can understand and appreciate, and they must be honed and nurtured, purposefully and conscientiously. We argue this is best done if the regulator holds the ring on standards, but involves others (including the industry) in meaningful ways and as standards are developed.

Enforcement can be so much better. The EA has the widest range of enforcement powers within the group and is experienced at using them, but other group members are not empowered in the same way. The bigger point though is that as with other aspects of farm regulation, enforcement is not joined up. Defra cannot be sure of the extent of compliance with the range of regulatory requirements on any one farm.

We have proposed a set of design principles that we think future regulatory arrangements should meet, to be sure we regulate in the right way. We want flexible, adaptive regulation to *enhance* plant and animal health and animal welfare, *enhance* good management of farmed land and the natural environment, underpin agricultural trade *and keep these aims in proper balance as well*. We argue for an intelligent, integrated farm approach. The regulator needs the whole picture of what is happening on the farm and to be able to weight it up, rather than sight of just one issue or aspect.

An integrated farm approach could provide for periodic assessment of the whole farm, overall. This could be particularly helpful in some sectors and in some geographical locations. Were we to adopt that approach, the government and the regulator could consider together the value of a farm ratings system. Good farm ratings would be of value to those farmers trading in national or international markets, and we know that ratings can drive improvement.

The way we regulate needs to change in any event, as we leave the European Union. There is a precious opportunity to regulate in much more proportionate and adaptive ways, assisted by the best technology, should government grasp the nettle now.

We think there are compelling arguments for independent regulation. We appreciate that if these arguments are accepted, the many staff involved now in farming oversight will enter an unsettling period, while government considers the implications and plans for change. We think it is difficult to avoid that. We find it hard to see how we can regulate well after EU exit with the current arrangements.

We have much more work to do, to complete this review and make recommendations. We expect to report finally by the end of the year.

Annex one: summary of post 2009 independent reviews of the way farms are regulated

The Macdonald Review

In July 2010, to provide new impetus for change, the government established an independent Farming Regulation Task Force, which was asked to look through the eyes of a farmer or food processing business in advising on reform. The Task Force reported in May 2011, concluding that 'the Department, its agencies and delivery partners need to establish an entirely new approach to and culture of regulation; otherwise the frustration that the Task Force, farmers and food-processing businesses have felt will continue'.

The review characterised government's thinking on regulation as cautious, prescriptive, fearful of EU infraction and possessive of implementation. It argued that government must trust industry, must involve it in the development of non-regulatory and regulatory solutions, and strengthen the partnership between government and the farming and food-processing industries.

The review advocated a tighter, risk-based approach to regulation and for a system (referred to in the review as 'earned recognition') to enable regulators to reward good practice with less frequent inspection. In the review team's view, such a system could be based on farm assurance schemes, enhanced where necessary.

The review advocated that government develop a new approach to inspection and enforcement that should be targeted and fairer. It argued for proportionate penalties: stiff punishments for major misdemeanours, but a light touch for breaches of process or minor non-compliance.

The review advocated more coherent and accessible guidance for farmers, prepared in conjunction with the industry and with the farmer in mind, and better training of inspectors.

NAO: Streamlining Farm Oversight

In December 2012 the National Audit Office reported on the extent to which farm oversight had been streamlined, and the extent to which government understood the scale, nature and proportionality of farm inspection activity, targets it appropriately, and co-ordinates farm visits.

The NAO's view was that farm oversight activity did not deliver value for money for the taxpayer, and continued to burden compliant farmers unnecessarily. The Comptroller and Auditor General's remarks were prescient:

"If English farmers are not to be disadvantaged in supplying our food sector, inspections must be proportionate and with minimum burden on the farmer. That is not happening at present. Oversight bodies miss opportunities to coordinate activity and share intelligence. They also do not take enough account of most farmers' commitment to good practice which would allow the bodies to reduce redundant activity and unnecessary cost. The Department has made some progress in exploring how to streamline farm oversight. However, the net result reflects a gradualist approach. Streamlining needs to be driven with a sense of urgency to overcome the individual bodies' conservatism in a way that is proportionate to the risks."

The NAO considered Defra had not taken a sufficiently strategic approach to identify opportunities to streamline activity, or collected the necessary data, to fully understand farm oversight activity, or evaluated the relationship between the level of oversight activity and compliance rates. As Defra group bodies measured activity and categorised visits differently, progress was inhibited, and Defra did not bring together systematically the data on levels of non-compliance, or use it to evaluate associated risks. The NAO argued that systematic evaluation would enable the Defra to prioritise the nature and approach of inspection activity across its oversight bodies.

At the time, oversight bodies were using at least 25 different risk models to target farms for inspection. Weightings given to different criteria varied and were difficult to understand for the farmer – and in reality, there is no one, correct weighting. In some models, a high level of confidence in the competence of the farmer could not outweigh inherent hazard (for example because of the size of the farm).

In tune with the Macdonald review, this report noted that approximately forty per cent of farmers received regular private inspections to qualify for membership of assurance schemes and that this was not consistently factored in, when assessing risk. While Defra could not reduce the number of specific inspections required by Europe without the possibility of penalties, it could ensure those inspections provided as wide assurance as possible, to prevent the need for other visits and duplication for the farmer.

The arrangements then in place resulted in potential duplication of effort, especially in checking the 63% of farmers who kept livestock. Each oversight body worked individually to provide assurance over individual regulatory regimes. A dairy farmer, for instance, could receive a separate visit from eight different government bodies to check for compliance. Some bodies checked the same areas or collected duplicate information, but for different purposes. For example, inspectors from local authorities and the Rural Payments Agency (RPA) checked movement records and ear tags. Assurance scheme inspectors could also carry out the same activity, and the NAO found similar overlap of checks for animal feed regulations.

In short, opportunities for oversight bodies to coordinate activity were not being maximised. Oversight bodies were collecting the same information separately, with limited sharing of intelligence. Bodies did not hold or share consistent information that could reduce duplication of effort and inform risk assessment. This could include dates of past and programmed inspections and their outcomes, and up-to-date certified assurance scheme membership.

At the time of the NAO review, Defra did not have data to measure cost-efficiency or achieve structured cost reduction in farm oversight activity. Defra had allowed individual agencies to transfer responsibility for some farm inspections without an informed and cross-government understanding of how to cost-effectively and collectively provide an on-farm presence.

The NFU review of livestock farm inspections in England

This March 2015 review considered the impact on livestock farmers of the then current enforcement practices, examining the potential for duplication and overlap between national and local regulators.

It found livestock business visited an average of 5.6 times in five years, and that these inspections had a major impact on the farm business. Almost one in ten respondents to a review survey had not had an inspection in five years. Farmers viewed local authority visits

as inspections, and stood a one in ten chance each year of being visited, but a higher chance in the North-East region⁴⁹.

Farmers wanted to see local authorities taking full account of farm assurance membership in their risk selection in when conducting animal health and welfare inspections, and indeed here has been some progress here. The review found most overlap between local authority and farm assurance inspections, but local authorities have since reduced their inspection activity notably, as we demonstrate later in this report. Farmers were also concerned at the potential for repeated checks as between the RPA and AHPA.

The review argued that farm assurance schemes have developed in the preceding years, with every quality assured farm checked regularly by independent inspectors – so that farm assurance has a greater presence on farm than any statutory or local regulator. Earned recognition was in place for Food Standards Agency food and hygiene inspections, which local authorities carry out on behalf of FSA, but none in place at that time for local authorities' animal health and welfare responsibility. Arrangements are in place now.

There was a lack of communication, and transparency, about when farm visits were to happen and how farms were selected. Visits themselves were seen as a burden, especially by micro-businesses, with an average 3.5 hours taken up by a local authority visit. Animal welfare visits take the greatest average time – 3hrs 49 minutes – presumably because of the collecting and gathering of animals. Here, the Livestock Information Programme holds out the promise of remote monitoring as well as much more efficient monitoring on farm when needed.

Farmers felt the knowledge and competence of farm assurance inspectors was generally better than national regulators and local authorities. Farmers felt the 2011 Task Force's recommendations around the training of inspectors had not progressed sufficiently. Sometimes the attitude and behaviour of the inspector was thought unhelpful, and working against the industry – thereby discouraging cooperation and an open and transparent dialogue.

Of course, farmers advocated the sharing of data and information to minimise the possibility of duplicate visits. And the NFU were told that joint inspections would be welcome, especially where this involved the gathering of cattle.

⁴⁹ Defra 2013 stats show 7091 dairy holdings, with 12,528 grazing livestock (LFA) and 32,029 grazing livestock (lowlands). There were more than 5m head of cattle and nearly 15m head of sheep across England.

Annex two: Rationale for Design Principles

	Design Principle	Rationale
1	The system provides/promotes public, industry, parliamentary and international confidence in the standards achieved by those regulated.	Good regulatory systems are characterised by trust instilled both within the system and the wider public. International confidence and trust will promote trade and evidence of compliance with regulatory standards and can support the negotiation of trade agreements.
2	The regulatory system is simplified, standardised and accessible, to ensure those regulated are clear what is required of them.	The current set of regulations have evolved over a very long period during which significant changes have taken place including joining the EU and devolution of powers. Leaving the EU provides an opportunity to reset the 'architecture' of the legislation and the wider regulatory system. The current system is / is perceived to be complex and difficult to understand. Through simplification of regulation structure together with improved visibility and accessibility of requirements, and guidance on what good looks like, those regulated are more easily able to understand what is expected of them and why. This in turn should lead to better local judgements on how to comply.
3	The regulatory system is aligned with the Hampton, Macrory and Better Regulation principles ensuring the system and delivery are transparent, fair and justifiable.	These are the accepted standards for regulatory systems. They have been tried and tested in other sectors and are designed to ensure that regulation is focused on areas where it is needed and that it is fair, effective and efficient. The current system is / is perceived to be unfair in the weight of penalties in places and there is evidence of significant levels of challenge. The regulatory system and standards should be designed to work with the natural capital principles and approach to ensure that natural capital assets are valued, and regulation is geared to delivering environmental outcomes. The burden and impact on farmers and land managers should be fair and justifiable with a coherent approach across the whole regulatory system. Defra covers a wide range of regulation and the current system is perceived to be very fragmented and in places unfair and disproportionate. The approach to risk across the regulatory system should be fair and justifiable. Fair implies a proportionate approach that is coherent across the regulatory system. Justifiable implies that the approach to risk is geared to the spectrum of regulation.
4	The regulatory system is geared correctly, recognising the spectrum of regulation and utilising appropriate interventions accordingly to drive changes in activity or behaviour where needed.	The current regulatory scope is very wide and covers a range of potential risks from those which could have a national and major impact (such as a disease emergency), to those where the impact is localized but a cumulative effect is undesirable (such as animal welfare, pollution or pesticide misuse incidents), through to incentivisation of activity (such as stewardship schemes). The regulatory system should ideally allow for a range of approaches that reflect the scale and nature of risk that it is designed to mitigate or the good that it is designed to promote.

		<p>The regulatory system and standards should be designed to work with the natural capital principles and approach to ensure that natural capital assets are valued, and regulation is geared to delivering environmental outcomes.</p> <p>Due to multiple agencies being involved in regulation across Defra the language has the potential to have different meaning and this can cause confusion and uncertainty for those being regulated. Correct gearing, standardisation and consistent use of language enables all parties to have a clear understanding of the regulatory journey with a common language and clear differentiation of regulatory activities (e.g. standards, compliance monitoring, and enforcement actions). The regulatory system should utilise effective leverage within the industry to drive compliance or uptake of incentives. Both national and local factors can impact the effectiveness of regulation – for example, national industry groups can significantly affect the motivation of those in the sector and locally peer pressure can encourage individuals to maintain high standards and report significant risks.</p>
5	<p>The regulatory standards are:</p> <ul style="list-style-type: none"> a) appropriate within the spectrum covered by regulation; b) take account of competing objectives; c) take account of localised and national objectives; d) are framed to ensure accessibility for farmers; e) are supported by industry, professional experts, policy makers and the regulator 	<p>The regulatory system should drive compliance with relevant standards, which in turn drives achieving desired outcomes. The regulatory system needs to take account of motivations as well as risks. Working against motivations creates an inherently unstable system as there must be constant effort to counterbalance these. Alternative approaches or incentives to change motivations should be sought.</p> <p>The regulatory system and standards should be geared to work with the natural capital principles and approach to ensure that natural capital assets are valued, and regulation drives environmental outcomes.</p> <p>The regulatory systems and standards should be geared to ensure the reduction of critical risks. Not all risks are equal and clarity of the purpose of mitigating the most significant risks is essential to ensure that both the regulated and the regulators are focused on taking appropriate action where and when it most matters. Some of the risks that are mitigated by regulation are significant national risks that are part of complex systems and standard setting for these and others require professional input.</p> <p>All standards should ideally be supported by industry – the consequence of a lack of support is likely to be low levels of compliance. Policy makers need to be assured that the standards are likely to, or do, drive achieving their policy objectives, and regulators need to be certain that the standards are practical from a regulatory perspective i.e. proportionality, compliance monitoring and gathering of evidence is feasible and likely to withstand challenge.</p> <p>Setting standards in collaboration with industry leads to setting achievable and understandable standards with clear understanding of purpose – all of which help to drive good compliance. The regulatory system should enable engagement with industry in both standard setting and maintenance.</p>

6	<p>The regulatory system and standards can adapt and change in good time when needed and utilises feedback loops to ensure that the system adapts to:</p> <ul style="list-style-type: none"> a) deregulate where appropriate; b) reset minimum requirements where higher standards are desirable; c) correct standards if they are not achieving the desired outcomes; d) modify to take account of competing objectives when new requirements or incentives are introduced. 	<p>The regulatory system plays a relevant role in delivery of policy aims and can adapt to support change. No environment is stable and regulatory systems must adapt to changes in policy priorities and trade dynamics that impact behaviours. This is challenging as constant change can drive complexity, which in turn can impact understanding of the purpose of regulation and consequent compliance requirements. The system must include mechanisms that allow adaptation in a timely way.</p>
7	<p>The regulatory system aligns with and builds on initiatives driven by the market and does not seek to duplicate or discount these unless there is a need to counterbalance to achieve a policy objective for the greater public good.</p>	<p>We should only intervene when necessary to ensure the system is effective, efficient, fair and proportionate.</p>

Annex three: Desirable regulatory powers

	Power	Purpose(s)	Operation and controls
1.	To create binding requirements on farmers within specified areas of responsibility	<p>To allow the regulator to set and change requirements that can be tailored and targeted to address specific risks or issues</p> <p>To allow the regulator to deploy different regulatory approaches within rule making</p> <p>To allow the regulator to set differential requirements for farms which have different characteristics</p> <p>To allow requirements to be changed and updated at pace</p> <p>To reduce the number of regulatory instruments that farmers are subject to and to secure simplification and consolidation into a single rulebook</p>	<p>The regulator should have delegated authority to set binding requirements on farmers within specified areas</p> <p>The regulator should be able to set different requirements for different types of farms so as to allow differential approaches that can reflect the different inherent characteristics of farms.</p> <p>The regulator should be able to set different requirements for different regions so as to allow differential approaches that can reflect the relevant local contexts.</p> <p>The regulator should have discretion to set process based, outcomes based or management based requirements and to use a blend of approaches if appropriate</p> <p>Requirements must be published</p> <p>The setting of requirements should be subject to mandatory consultation</p> <p>The setting of requirements should be subject to mandatory impact assessment</p>
2.	To publish Statutory Guidance/Codes of Practice in relation to the interpretation of substantive legal obligations which farmers must have regard to	<p>Statutory Guidance/Codes of Practice that assists farmers to understand what the law obliges them to do</p> <p>To create Statutory Guidance/Codes of Practice that create as closely as possible a single point of reference</p>	<p>The more complex the substantive legal requirements, the harder it is for farms to understand what is required. The regulator should ensure that it has a comprehensive understanding of the legal requirements and create accessible guidance that assists farmers in understanding what their obligations are and how to comply</p>

		<p>for farmers in relation to all of their obligations</p> <p>To give the regulator the ability to change guidance to reflect changing circumstances</p> <p>To provide a framework against which the regulator can make consistent assessments of whether a farmer is behaving in a compliant way or not</p>	<p>The regulator should use its Statutory Guidance/Codes of Practice in assessing compliance and in its enforcement decision making</p> <p>The regulator should adapt its Statutory Guidance/Codes of Practice as needed in response to decisions of the Courts which clarify or change the law</p> <p>Statutory Guidance /Codes of Practice must be published</p> <p>The setting of Statutory Guidance /Codes of Practice should be subject to mandatory consultation</p> <p>The setting of Statutory Guidance /Codes of Practice should be subject to mandatory impact assessment</p>
3.	To undertake or commission research	<p>Undertaking research can enable the regulator to better perform its functions by improving technical knowledge and understanding</p> <p>The ability to commission and fund third parties to undertake research targeted at high risk and uncertain areas can secure the information necessary to better regulate to achieve outcomes</p> <p>The ability to collaborate with third parties on research programmes can be cost effective</p>	<p>Regulators should be technical experts and/or have access to such expertise in order to be credible and authoritative</p> <p>Research should be undertaken with the aim of assisting the regulator to achieve its aims by exploring and innovating through research</p> <p>The regulator should have a wide margin of discretion to find ways of funding research to reduce the cost to the taxpayer</p> <p>The regulator can draw on research to help develop and refine standards and to inform its qualitative judgements in relation to achieving regulatory objectives</p> <p>This power should be enabling and discretionary and will be subject to availability of funding</p>
4.	To provide advice to farmers	This creates the ability to provide bespoke advice to	The regulator should have discretion to develop and

		individual farmers to assist them to comply	<p>implement an approach to providing advice to individual farmers but this should not be mandatory</p> <p>The regulator should have discretion on how to operationalise an advisory function and should have discretion to use multiple delivery models, such as the use of relationship managers, regional forums or through the field force</p> <p>The regulator should have published policy which make the status of its advice clear and its relationship to compliance and decisions on enforcement</p> <p>The regulator should have discretion to deliver this function by procuring an outsourced advice service if that would be the most efficient and effective delivery model</p> <p>The regulator should have discretion to help encourage or facilitate the creation of private sector advice services or cooperatives</p> <p>The regulator should have the power to charge for advice. Charging should not however create unfairness by allowing farmers to buy advice that should reasonably be available to all in the form of Statutory Guidance/Codes of Practice</p>
5.	To share information with other relevant bodies	To create enabling powers to share information with third parties, including other regulatory bodies, where that will assist the regulator in performing its functions	The regulator should be able to create information sharing protocols with any relevant third party, subject to complying with substantive information law provisions.
6.	To cooperate with other public bodies	Cooperation between the regulator and other public bodies, may assist the regulator in performing its functions, particularly	The regulator can best achieve its objectives where it can cooperate with other authorities, at national or local

		where sectoral risks and issues are created in the external environment	level, in relation to cross cutting or systemic issues
7.	To give advice to the Secretary of State	To create the authority to provide advice, on request, or unilaterally. This reflects the regulator's status as being both expert and independent	<p>The regulator should be empowered to provide advice to the Secretary of State on any matters within its expertise.</p> <p>Advice must be provided on request</p> <p>Advice may be given at the discretion of the regulator</p>
8.	To register all farmers	To secure a full list of legal persons undertaking farming activities	<p>Express requirements for all legal persons who are undertaking farming activities to register with the regulator</p> <p>Farming activities should be a defined terms in legislation</p> <p>The bar for registration should be administrative however the regulator should have discretion to determine what information should be provided as part of the registration</p> <p>Farmers should be obliged to ensure that their registration information remains accurate</p> <p>Farming activities should be prohibited by persons who are unregistered</p> <p>The regulator should have authority to use enforcement powers in relation to persons undertaking farming activities who are not registered</p>
9.	To create licence schemes in relation to designated farming activities	<p>To create entry controls so that only suitably capable farmers undertake designated farming activities</p> <p>To create an exit system to secure that unsuitable persons are prohibited from undertaking designated farming activities (temporary or permanent bans)</p>	<p>The regulator should have discretion to create a licensing regime linked to farm registration</p> <p>The regulator should have discretion to specify which activities are designated activities that require a licence</p> <p>Licencing should only be required where the burden can be justified in order to manage specific risks</p>

		<p>To create a system that can impose limits or additional controls over designated farming activities at the level of individual farms</p>	<p>The regulator should have discretion to set the minimum requirements that must be met in order to obtain a license for each designated activity and in order to retain that licence. These requirements can legitimately differ from scheme to scheme and from time to time as long as they are transparent and consistently applied</p> <p>The regulator should have discretion to grant licences subject to additional controls imposed at the point of licensing or later. The basis on which additional controls are imposed should be transparent and consistently applied</p> <p>The regulator should have discretion to prohibit farmers from undertaking activities that are subject to licensing unless licences are held</p> <p>The regulator should have discretion to refuse licences in line with a published policy</p> <p>An right of appeal should exist that is independent from the licence decision itself</p> <p>Licence schemes and any material changes to them should be subject to mandatory consultation</p> <p>Licence schemes and any material changes to them should be subject to mandatory impact assessment</p>
<p>10.</p>	<p>To accredit third party assurance schemes and to impose requirements that the schemes must meet in order to retain accreditation</p>	<p>The regulator should be empowered to exercise oversight over private sector assurance schemes where those schemes seek accreditation.</p> <p>This will be for the purpose of ensuring that those schemes are</p>	<p>The regulator should have discretion to create a system of voluntary accreditation for assurance schemes where those schemes are assessing minimum regulatory standards</p> <p>The regulatory should have discretion to set the terms of those schemes and the bar</p>

		<p>assessing against minimum regulatory standards and undertaking that activity with appropriate skill. This would allow the regulator to rely on judgements from accredited schemes and also allow third parties to have confidence in them</p>	<p>that assurance schemes should have to meet to achieve accreditation and to retain accreditation</p> <p>The regulator should have discretion to set the terms of accreditation, such as requirements to share information, audit, supervision and observation of judgements</p> <p>The regulator should have discretion to use accredited schemes in place of its own monitoring activities where farms are subject to the oversight of accredited schemes</p> <p>Assurance schemes should not be required to be accredited but the regulator should consider how to incentivise schemes to seek accreditation, particularly if this creates a commercial advantage for that scheme</p> <p>The regulator should retain the discretion to undertake monitoring or investigative activities even if farmer is using an accredited scheme</p> <p>An appeal system is necessary in relation to decisions not to accredit</p> <p>Accreditation schemes and any material changes to them should be subject to mandatory consultation</p> <p>Accreditation schemes and any material changes to them should be subject to mandatory impact assessment</p>
11.	To administer environmental land management schemes and other incentives schemes	<p>The regulator should ensure that public money is paid properly to those who qualify</p> <p>The regulator should advise government on the overarching structures of the schemes, including</p>	<p>The scope of schemes under which public money can be paid to farmers and the objectives of those schemes are matters for government to decide</p> <p>Administration and the operational design of the</p>

		<p>qualifying criteria, performance obligations and outcome measurements to ensure that each scheme is optimised to deliver its aims</p> <p>The regulator should have discretion to develop and deliver the operational elements of the scheme including the detailed rules and assessments</p> <p>The regulator should be able to use qualitative assessments of compliance with the requirements of the schemes</p> <p>The regulator should have access to its enforcement powers to ensure that the money paid out is used as it should be</p>	<p>schemes including decisions on whether individual farmers (or land managers) have met the requirements of the schemes can properly fall within the remit of the regulator</p> <p>By delegating the operational design of the schemes to the regulator, the regulator can use its toolkit to optimise how each scheme is delivered</p> <p>The regulator should be able to use its professional judgement to make qualitative assessments on whether farmers or land managers have met the requirements of the schemes and be able to secure changes in approach</p> <p>The regulator can take a whole farm view is assessing the suitability of any one farm for inclusion in a scheme</p>
12.	To investigate complaints	<p>The regulator should be empowered to investigate complaints about farmers in relation to matters linked to farmers' legal obligations and to use its enforcement powers to deal with any non-compliances identified as a result</p>	<p>The regulator should have discretion as to the basis on which it will investigate complaints</p> <p>The regulator should have a complaints policy which it adheres to</p> <p>The regulator should be able to delegate the investigation of complaints to third parties</p>
13.	To monitor compliance	<p>The regulator should be fully empowered to assess the degree to which farmers are compliant with any regulatory requirement</p>	<p>The regulator should have discretion to design and develop suitable monitoring regimes that can take a variety of operational forms. This could include:</p> <ul style="list-style-type: none"> - remote and satellite surveillance - physical inspection - data analysis - desk based analysis <p>The regulator should determine its policy and approach to monitoring and be transparent about those choices</p>

			Farms should understand the purpose and basis of monitoring and the likely outcomes
14.	To require self- assessment of compliance or assessment of compliance by independent third parties	The regulator can minimise costs to the taxpayer by requiring farmers to assess their own compliance and provide that information to the regulator. This also can minimise burden and encourage responsible approaches for compliance	<p>The regulator should be able to establish schemes whereby farmers are obliged to undertake self-assessment of compliance. The scope of the scheme should be for the regulator to determine</p> <p>The regulator should have discretion on how the scheme should operate, what the self-assessment should cover, how often they should take place and whether those assessments should be submitted to the regulator</p> <p>The regulator should have discretion to require assessments to be undertaken by third parties and should have discretion to set minimum requirements that those third parties must meet</p> <p>The regulator should have discretion to require that third party assessors must be approved by the regulator and the terms of that approval</p> <p>The regulator should have discretion to help facilitate collaborations between farmers and other suitable parties to establish assessment schemes</p>
15.	To undertake investigations	In order to gather evidence in a structured and professional way to support effective enforcement	<p>The regulator should be transparent about when it is undertaking an investigation rather than undertaking monitoring activities</p> <p>The regulator should have a published investigation policy and an investigation process that it adheres to</p> <p>Farmers should understand why they are being investigated and the potential consequences of that</p>

			investigation and should be able to make meaningful representations to the investigation before it concludes
16.	To require the provision of information	<p>Regulators need to obtain information in order to perform many of their functions. This power should be broad and fully enabling</p> <p>The regulator should be able to require compliance with an information request via the civil courts</p>	<p>The regulator should have a published policy on how it will use this power.</p> <p>The regulator should be clear about the information required, the time period in which it must be provided, the form it should be provided in, the purpose for which it must be provided, how it will be used, including sharing with third parties, how long it will be retained and how it will be protected</p> <p>Information requests should always be proportionate but the regulator should be able to require information to be provided in very short time frames where it is necessary for the performance of its functions</p>
17.	To obtain access to premises	The regulator will require access to both farm and non-farm premises for the purposes of performing its functions	<p>Existing powers of entry should be retained but they should be consolidated and simplified to ensure that they are properly configured to allow the regulator to perform its functions</p> <p>Powers of entry should be subject to strict statutory controls however the regulator will need the strongest possible powers in relation to dealing with serious incidents</p> <p>Powers to force rapid entry to premises that can be exercised at the shortest possible notice should be retained for emergency situations</p>
18.	To issue warnings	The regulator should have the power to issue warnings as an alternative to more significant action	Warnings are a simple and straightforward way to bring a non-compliance to the attention of the farmer in a formal way

			<p>The regulator should have discretion to decide the basis on which a warning would be issued and the process of issuing one</p> <p>Issuing a warning should be a recorded enforcement action that can be used to justify more significant intervention or sanction should the warning not secure the desired outcome</p> <p>The regulator should guard against using warnings for purely administrative convenience when a more significant intervention may be more appropriate</p>
19.	To accept binding undertakings	<p>Where there is agreement on non-compliance, an efficient method of resolution is for the farmer to offer to take specific actions, in specific time frames to achieve compliance and/or rectify the consequences of breach</p>	<p>Undertakings must be in writing and must be on the basis that the farmer accepts the non-compliance</p> <p>Undertakings should be offered on a voluntary basis but once accepted should be legally binding on the farmer insofar as the promised actions address the non-compliance or are designed to prevent future non-compliance.</p> <p>Undertakings should be created to align with the power of direction so that the regulator can move swiftly to compel performance the farmer fails to comply with an undertaking</p> <p>The regulator should monitor performance of the undertaking and should have discretion to re-negotiate the terms should that be appropriate</p>
20.	To issue directions to take specified steps or to cease from taking actions where: (a) the farmer is likely to become non-compliant or (b) to bring the farmer back into compliance	<p>This power allows direct intervention to prevent or correct non-compliance.</p> <p>It is not punitive but does secure that the cost of prevention or correction is met by the farmer</p>	<p>This power is a significant one and should be exercised in a controlled way. The regulator should ensure that it has sufficient evidence of non-compliance or evidence of a likelihood of future non-compliance.</p>

		<p>The ability to direct will incentivise farmers to offer undertakings which are less costly to administer and which afford farmers more discretion in how to resolve non-compliances</p> <p>This power would cover the equivalent of a stop notice but go further in reach</p>	<p>The regulator should ensure that the farmer has the opportunity to make representations as part of the directions process</p> <p>The regulator should monitor performance of a direction and discharge it as soon as it is reasonable to do so</p> <p>An appeal system should be in place to challenge decisions to direct</p>
21.	To require farmers to publish specific information	<p>This power allows a regulator to harness the power of the market by requiring farmers to publish specific designated information</p>	<p>The regulator should have discretion to establish mandatory publication schemes that are applied to farmers</p> <p>The regulator should consider where schemes of this type might be useful. These are likely to be in cases where consumers are influential in driving positive behaviours but where information to allow consumers to make choices is unreliable, inconsistent or absent</p> <p>Requirements to publish specific designated information should be subject to mandatory consultation</p> <p>Requirements to publish specific designated information should be subject to mandatory impact assessment</p>
22.	To develop and implement a farm ratings scheme	<p>Independent ratings can help encourage trade and can allow meaningful differentiation by consumers based on trusted information</p>	<p>The regulator can have discretion to establish ratings schemes drawing on existing standards, good and best practice</p> <p>The regulator should have discretion to determine the scope of the schemes, the relevant measures and the areas against which farms will be rated</p>

			<p>The regulator should be empowered to amend the schemes over time</p> <p>Ratings schemes should be subject to mandatory consultation</p>
23.	<p>To require farmers to undertake rectification works at their own cost to correct damage or harms caused by non-compliance and to empower the regulator to undertake or commission those works itself on a cost recovery basis</p>	<p>This would allow the regulator to ensure that damage caused by non-compliance is rectified at the cost of the responsible party</p> <p>Rectifications are likely to be achieved through voluntary undertakings rather than following by using this power however by having the power, the likelihood of settlement by consent is increased</p>	<p>This power is distinct from the direction power as it gives the regulator the powers to require rectification at the cost of the farmer who has caused the non-compliance</p> <p>The regulator should have discretion as to what it is appropriate to step in to secure that rectification works are completed and to an appropriate standards</p> <p>As this is a significant power, it should be subject to an independent appeal</p>
24.	<p>To create and administer fixed financial penalty schemes.</p>	<p>To deter simple non-compliances such as late returns or failures to meet deadlines</p>	<p>The regulator should have discretion to develop and implement fixed penalty schemes to address non-compliances which can be characterised as strict liability. This may be multiple schemes.</p> <p>The regulator should have the discretion to develop and set differential tariffs (where appropriate) so that penalties act as a meaningful deterrent to farms of different sizes and resources.</p> <p>Penalties should be proportionate to the risk they are designed to mitigate.</p> <p>Schemes should be consulted on, the terms published and consistently applied.</p> <p>An appeal mechanism should be created to address and resolve errors</p> <p>Any fixed penalty schemes should be subject to mandatory consultation</p> <p>Any fixed penalty schemes should be subject to</p>

			mandatory impact assessment
25.	Discretionary financial penalties	<p>To punish and be seen to punish significant non-compliances which either create a significant risk of harm or in fact cause harm.</p> <p>To deter other farms from such behaviours</p>	<p>The regulator should have discretion to develop and implement a discretionary financial penalty system that will allow the imposition of financial penalties for non-compliance or for undertaking designated activities without a licence.</p> <p>The regulator should develop and consult on a policy for the use of discretionary financial penalties and how quantum of fines will be set. The policy should identify aggravating and mitigating factors which the regulator will take into account.</p> <p>Maximum financial penalties should be defined in statute but the amount to be levied in any particular case should be for the regulator to determine.</p> <p>The regulator should have discretion to settle financial penalty cases by agreement.</p> <p>The regulator should be obliged to be transparent about financial penalty cases.</p> <p>An independent appeal mechanism should be available. This ideally would be to the first tier tribunal.</p> <p>Any discretionary financial penalty schemes should be subject to mandatory consultation</p> <p>Any discretionary financial penalty schemes should be subject to mandatory impact assessment</p>
26.	To seize and dispose of livestock or other associated assets where there is a risk of harm, where the farmer is in breach of a licence condition or restriction or to	To ensure that the regulator can enforce licence conditions that place restrictions on keeping animals	This is a significant power that must be exercised with appropriate care and under suitable controls

	secure compliance with an undertaking or direction	<p>To ensure that the regulator can seize animals where the farmer is unregistered or unlicensed</p> <p>To ensure that the regulator can secure compliance with an undertaking or direction</p>	It is ancillary to other enforcement powers apart from in animal welfare cases
27.	To seize or compulsory purchase farming assets and to dispose of those assets, including by culling	<p>To ensure that the regulator has the ability to seize livestock, animal products or by-products, plants and other farming chattels where it is necessary to do so</p> <p>This power may be exercised separately to any issue of compliance and so should be exercisable in relation to specific risks or issues</p>	The regulator should be subject to standard controls arising from powers that permit interference with private property
28.	To undertake criminal prosecutions	To ensure that the regulator can prosecute the most serious offences	The regulator should retain the ability to prosecute relevant offences but should have discretion to determine if this is the most appropriate course of action rather than be obliged to prosecute in all cases
29.	To recover monies through the civil court	<p>To recover the costs of investigation and enforcement from farmers</p> <p>To recover the costs of enforced rectification from farmers</p> <p>To recover monies given as subsidies, incentives or grants if not used</p>	The regulator needs civil recovery powers enforceable through the civil courts be able to recover its costs of investigation and enforcement
30.	To give grants or make loans or provide loan guarantees.	To have the powers to fund specific projects, including to support programmes of research or pilots, where that will help the regulator deliver its objectives	<p>Giving grants, funding or loans for specific projects can assist the regulator to test new methodologies</p> <p>The regulator will need to set specific terms and monitor performance</p>

		<p>To do the same but on a loans basis on terms set by the regulator</p> <p>To underwrite or guarantee private loans to allow farmers to borrow to invest in compliance</p> <p>Allows innovations that might not otherwise be financially viable</p>	
31.	To charge	The ability to charge for issuing licences	To cover the costs of the administration of the licence regime.
32.	Catch all provisions	To undertake any other activities necessary for performance of their functions	This is a general enabling power to avoid the risk of vires challenges for ancillary activities that are not expressly covered but which are complementary to the regulator performing its functions

Annex four: Regulatory instruments

	Legislation	Type
1.	Animal Welfare Act 2006 (Replaced - Animal Health and Welfare Act 1984)	Act
2.	Agricultural Act 1970	Act
3.	Agriculture Act 1993	Act
4.	Ancient Monuments and Archaeological Areas Act 1979	Act
5.	Animal Health Act 1981	Act
6.	Animal Health and Welfare Act 1984	Act
7.	Animal Welfare Act 2006	Act
8.	Animals Act 1971	Act
9.	Animals Act 1971 (Chapter 22)	Act
10.	Clean Air Act 1993	Act
11.	Control of Pollution Act 1974	Act
12.	Countryside and Rights of Way Act (CRoW) 2000	Act
13.	Countryside and Rights of Way Act 2000 (CRoW)	Act
14.	Dangerous Wild Animals Act 1976	Act
15.	Deer Act 1991	Act
16.	Environment Act 1995	Act
17.	Flood Water Management Act 2010	Act
18.	Food and Environment Protection Act (1985)	Act
19.	Forestry Act 1967 (and as amended)	Act
20.	Forestry Act 1979	Act
21.	Highways Act 1980	Act
22.	Natural Environment & Rural Communities Act (NERC) 2006	Act
23.	Natural Environment and Rural Communities Act 2006	Act
24.	Plant Varieties Act 1997	Act
25.	Pollution prevention and Control Act 1999	Act
26.	Protection of Animals Act 1911	Act
27.	Protection of Badgers Act 1992	Act
28.	Riding Establishment Act 1964	Act
29.	The Dogs (Protection of Livestock) Act 1953 (Chapter 28)	Act
30.	The Environmental Protection Act 1990	Act
31.	The Hill Farming Act 1946 (and 1985)	Act
32.	The Land Drainage Act 1991	Act
33.	The Pollution Prevention and Control Act 1999 (Superseded The Environmental Protection Act 1990)	Act
34.	The Town and Country Planning Act 1990	Act
35.	Water Resources Act 1991 (Anti-pollution work notices)	Act
36.	Water Resources Act 1991 (Codes of Good Agricultural Practice)	Act
37.	Water Resources Act 1991 (Notice requiring information)	Act
38.	Water Resources Act 1991 (Part II abstraction licenses)	Act

39.	Wildlife and Countryside (Amendment) Act 1991	Act
40.	Wildlife and Countryside Act 1981	Act
41.	Code of practice for the welfare of goats (1989)	Code of practice
42.	Code of practice for the welfare of cattle (2003)	Code of practice
43.	Code of practice for the welfare of gamebirds reared for sporting purposes (2010)	Code of practice
44.	Code of practice for the welfare of horses, ponies, donkeys and their hybrids (2017)	Code of practice
45.	Code of practice for the welfare of laying hens (TBC 2018)	Code of practice
46.	Code of practice for the welfare of meat chickens and breeding chickens (TBC 2018)	Code of practice
47.	Code of practice for the welfare of pigs (TBC 2018)	Code of practice
48.	Code of practice for the welfare of sheep (2003)	Code of practice
49.	Code of recommendations for the welfare of deer (1999)	Code of practice
50.	Code of recommendations for the welfare of ducks (1987)	Code of practice
51.	Code of recommendations for the welfare of rabbits (1987)	Code of practice
52.	Code of recommendations for the welfare of turkeys (1987)	Code of practice
53.	Commission Decision 2006/968	Commission Decision
54.	Commission Decision of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council Text with EEA relevance	Commission Decision
55.	Council Directive 2008/71	Directive
56.	SMR 4	Directive
57.	WFD Drinking Water Protected Areas	Directive
58.	The Export of Horses (Protection) Order 1969; The Export of Horses (Excepted Cases) Order 1969; The Export of Horses (Veterinary Examination) Order 1986.	Order
59.	Animal Gatherings Order 2010	Order
60.	Animals (Post-Import Control) Order 1995	Order
61.	Anthrax Order 1991	Order
62.	Aujeszky's Disease Order 1983	Order
63.	Avian Influenza (H5N1 in Poultry) (England) Order 2006	Order
64.	Avian Influenza (H5N1 in Wild Birds) (England) Order 2006	Order
65.	Avian Influenza and Influenza of Avian Origin in Mammals (England) (No.2) Order 2006/2702	Order
66.	Brucellosis (England) Order 2000	Order
67.	Brucellosis (England) Order 2015	Order
68.	Cattle Compensation (England) Order 2012	Order
69.	Control of Salmonella in Broiler Flocks Order 2009	Order
70.	Control of Salmonella in Poultry Order 2007	Order
71.	Control of Salmonella in Turkey Flocks Order 2009	Order
72.	Disease Control (England) Order 2003	Order
73.	Disease Of Poultry (England) Order 2003	Order
74.	Diseases of Animals (Approved Disinfectants) (England) Order 2007	Order
75.	Enzootic Bovine Leukosis (England) Order 2000/2056	Order

76.	Export of Sheep (Prohibition) Order 1991	Order
77.	Export Quarantine Stations (Regulation) Order 1973	Order
78.	Foot and Mouth Disease (England) Order 2006	Order
79.	Hill Farming Improvements Order 1949	Order
80.	Importation of Animal Pathogens Order 1980	Order
81.	Importation of Animals Order 1977	Order
82.	Importation of Birds, Poultry and Hatching Eggs Order 1979	Order
83.	Importation of Processed Animal Protein Order 1981	Order
84.	Infectious Diseases of Horses Order 1987	Order
85.	Movement of Animals (Restrictions) (England) Order 2002/3229	Order
86.	Pigs (Records, Identification and Movements) Order 2011	Order
87.	Plant Health (Forestry) Order 2005	Order
88.	Psittacosis or Ornithosis Order 1953	Order
89.	Rabies (Control) Order 1974	Order
90.	Rabies (Importation of Dogs, Cats and Other Mammals) Order 1974/2211	Order
91.	Sheep and Goats (Records, Identification and Movement) (England) Order 2009/3219	Order
92.	Sheep Scab Order 1997	Order
93.	Specified Diseases (Notification) Order 1996	Order
94.	The Agriculture, Animals, Environment and Food etc. (Miscellaneous amendments) Order 2012	Order
95.	The Avian Influenza and Influenza of Avian Origin in Mammals (England) (No.2) Order 2006	Order
96.	The Foot-and-Mouth Disease (England) Order 2006	Order
97.	The Plant Health (Export Certification)(Forestry) (Great Britain) Order 2004	Order
98.	The Plant Health (Forestry) (Phytophthora ramorum) (Great Britain) Order 2004	Order
99.	The Plant Health (Wood Packaging Material Marking) (Forestry) Order 2006	Order
100.	Transport of Animals (Cleansing and Disinfection) (England) (No.3) Order 2003	Order
101.	Tuberculosis (Deer and Camelid) Order 2014	Order
102.	Tuberculosis (England) Order 2014	Order
103.	Warble Fly (England and Wales) Order 1982	Order
104.	Welfare of Animals (Transport) (England) Order 2006	Order
105.	Welfare of Animals At Markets Order 1990	Order
106.	Welfare of Horses at Markets (and other places of sale) Order 1990	Order
107.	Zoonoses Order 1989	Order
108.	African Horse Sickness (England) Regulations 2012	Regulation
109.	Animal By-Products (Enforcement) (England) Regulations 2013	Regulation
110.	Animal Feed (Composition, Marketing and Use) (England) Regulations 2015	Regulation
111.	Animal Feed (England) Regulations 2010	Regulation

112.	Animal Feed (Hygiene, Sampling etc. and Enforcement) (England) Regulations 2015	Regulation
113.	Animals and Animal Products (Examination for Residues and Maximum Residue Limits) Regulations 1997	Regulation
114.	Animals and Animal Products (Examination for Residues and Maximum Residue Limits)(England and Scotland) Regulations 2015	Regulation
115.	Avian Influenza (Preventive Measures) (England) Regulations 2006	Regulation
116.	Avian Influenza (Vaccination) (England) Regulations 2006/2703	Regulation
117.	Avian Influenza (Vaccination) (England) Regulations 2008	Regulation
118.	Bluetongue Regulations 2008	Regulation
119.	Bovine Products (Restrictions on Placing on the Market) (England) (No2) Regulations 2005	Regulation
120.	Bovines & Bovine Products (Trade) Regulations 1999	Regulation
121.	Cattle Identification Regulations 2007	Regulation
122.	Commission Regulation (EC) 1505/2006	Regulation
123.	Commission Regulation (EC) 509/1999	Regulation
124.	Commission Regulation (EC) 911/2004	Regulation
125.	Commission Regulation (EC) No 1082/2003	Regulation
126.	Commission Regulation (EC) No 1342/2003 laying down special detailed rules for the application of the system of import and export licenses for cereal and rice	Regulation
127.	Commission regulation (EC) No 376/2008 laying down common detailed rules for the application of the system of import and export licenses and advance fixing certificates for agricultural products	Regulation
128.	Commission Regulation (EC) No. 644/2005	Regulation
129.	Commission Regulation (EEC) No 120/89 laying down common detailed rules for the application of export levies and charges on agricultural products	Regulation
130.	conservation of habitats and species regulations 2010	Regulation
131.	Conservation of Habitats and Species Regulations 2017	Regulation
132.	Contaminated Land (England) Regulations 2006	Regulation
133.	Control of pesticides regulations 1986	Regulation
134.	Control of Pesticides Regulations 1986 (as amended)	Regulation
135.	Council Regulation (EC) 21/2004	Regulation
136.	Council Regulation (EC) 2100/94 on Community plant variety rights	Regulation
137.	Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91	Regulation
138.	Country of Origin of Certain Meats (England) Regulations 2015	Regulation
139.	Countryside Stewardship Regulations 2000	Regulation
140.	Diseases of Swine Regulations 2014	Regulation
141.	EC Regulation 1099/2009 on the protection of animals at time of killing	Regulation
142.	EC Regulation 1/2005 on the protection of animals during transport and related operations.	Regulation

143.	Environmental Impact Assessment (Agriculture) (England and Wales) Regulations 1999 as amended	Regulation
144.	Environmental Impact Assessment (Forestry) (England and Wales) Regulations 1999, as amended.	Regulation
145.	Environmental Permitting (England and Wales) Regulations 2010	Regulation
146.	Environmental Permitting (England and Wales) Regulations 2010 (EPR)	Regulation
147.	Foot & Mouth Disease (Control of Vaccination) (England) Regulations 2011	Regulation
148.	Foot-and-Mouth Disease (Control of Vaccination) (England) Regulations 2006	Regulation
149.	Hedgerows Regulation 1997	Regulation
150.	Horse Passports Regulations 2009	Regulation
151.	Moorland (Livestock extensification) Regulations 1995	Regulation
152.	Mutilations (Permitted Procedures) Regulations England 2007	Regulation
153.	Nitrate Pollution Prevention Regulations 2015	Regulation
154.	Official Controls (Animals, Feed and Food) (England) Regulations 2006	Regulation
155.	Plant Protection Products (Sustainable use) regulations 2012	Regulation
156.	Prevention of Diffuse Agricultural Pollution (England) Regulations 2017 (known as basic measures)	Regulation
157.	Products of Animal Origin (Disease Control) (England) Regulations 2008	Regulation
158.	Registration of Establishments (Laying Hens (England) Regulations 2003	Regulation
159.	Registration of Establishments (Laying Hens) (England) Regulations 2003/3100	Regulation
160.	Regulation (EC) No 1760/2000	Regulation
161.	Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending directive	Regulation
162.	Regulation (EU) No 1293/2013	Regulation
163.	Regulatory Reform, England and Wales Animals, England and Wales	Regulation
164.	The Air Quality Standards Regulation 2010	Regulation
165.	The Aquatic Animal Health (England and Wales) Regulations 2009	Regulation
166.	The Common Agricultural Policy (Controls and Enforcement, Cross compliance, Scrutiny of transactions and Appeals) Regulations 2014	Regulation
167.	The Common Agricultural Policy Basic Payment and support schemes (England) Amendment) Regulations 2017	Regulation
168.	The Crop Residues (Burning) Regulations 1993	Regulation
169.	The Environmental Damage (prevention and remediation) (England) (Amendment) Regulations 2017	Regulation
170.	The Environmental Stewardship (England) Regulations 2005	Regulation
171.	The Forest Reproductive Material (Great Britain) Regulations 2002	Regulation
172.	The Heather and Grass etc. burning (England) Regulations 2007	Regulation
173.	The Nitrate Pollution Prevention (amendment) Regulations 2016	Regulation

174.	The Persistent Organic Pollutants Regulations 2007	Regulation
175.	The Sludge (Use in Agriculture) Regulations 1989	Regulation
176.	The Welfare of Animals at the Time of Killing (England) Regulations 2015	Regulation
177.	Trade in Animals and Related Products Regulations 2011	Regulation
178.	Transmissible Spongiform Encephalopathies (England) Regulations 2010	Regulation
179.	Veterinary Medicines Regulations 2013	Regulation
180.	Water Environment (Water Framework Directive) England and Wales regulations 2017	Regulation
181.	Welfare of Farmed Animals (England) Regulations 2007	Regulation
182.	Zoonoses (Monitoring) (England) Regulations 2007	Regulation