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Tackling Defra's ageing digital services

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The Committee of Public Accounts

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Contents

Summary	3
Introduction	4
Conclusions and recommendations	5
1 Defra's progress in addressing legacy IT issues	9
Impact of legacy systems on users	9
Progress in addressing legacy systems	10
The availability of digital skills	11
2 Defra's long-term strategy	13
Defra's long-term strategy and vision for digital transformation	13
Aligning digital and business transformation	13
3 Collaboration and standardisation across government	15
Collaboration across government – the role of the Central Data & Digital Office (CDDO)	16
Formal minutes	18
Witnesses	19
List of Reports from the Committee during the current Parliament	20

Summary

Defra has one of the most significant legacy IT challenges across government, with a proliferation of outdated applications across the Department and the many other organisations that make up the Defra Group. While Defra is making good progress in tackling its most urgent legacy systems it does not have a long-term strategy for its much-needed wider digital transformation. Defra systems are used by a wide range of customers and are critical to the country's trade, disease prevention, flood protection, and air quality monitoring. To these groups of customers its legacy IT systems feel outdated and difficult to use, often being reliant on paper forms or documents. Defra and its organisations handle around 14 million transactions per year that still involve paper forms, making them inefficient and expensive. Defra does not measure the cost to users of its unmodernised digital services, so it is not possible to assess the total burden they place on other organisations and the wider economy. Defra estimates that it needs to spend £726 million on modernising legacy services between 2021 and 2025, but that fully transforming its digital systems could save £20 million to £25 million every year.

At the same time as addressing the challenges posed by legacy IT, Defra is undertaking a business transformation process which includes potentially major structural changes to Defra and its arm's-length bodies. Defra does not currently have a vision of how the transformed Department and its organisations will operate. This means that any changes made now to its digital systems may not be appropriate once longer-term decisions about the structure of the Department and its organisations have been made. This may lead to unnecessary time and money spent implementing these changes. Defra is struggling to recruit the digital, data and technology staff it needs, and so it remains over-reliant on contractors which can cost up to twice as much.

The Central Digital and Data Office (CDDO) at the Cabinet Office is working with departments to ensure that at least 50 of the 75 highest priority customer services across government reach a "great" standard by 2025. CDDO has reviewed nine of these services but only one of these meets this standard. CDDO's attempts to establish strong cross-government collaboration and agree challenging commitments to replace legacy systems with departments are positive steps towards improving digital services more widely. Despite its confidence that it can meet its commitments by the 2025 deadline Defra's current plans do not show how it will do so.

Introduction

Government as a whole faces a significant challenge from ageing IT systems, known as legacy IT. These systems are costly to maintain and have a large impact on services, with real-life consequences for people who use and rely on them. The Department for Environment, Food & Rural Affairs (Defra) is a complex organisation: as well as the main department, it comprises a range of arm's-length bodies (ALBs) and other bodies of varying size that make up the Defra Group. It provides services ranging from permits to move animals to monitoring air quality to paying grants, but many of the IT systems it uses are outdated.

In 2020, Defra estimated it needed to spend £726 million on modernising legacy services between 2021 and 2025, the second largest legacy spend requirement in government after the Home Office. Many of its 365 main applications use software that is now outdated: 30% of them are no longer supported by their supplier and 50% are in extended support, where Defra may have to pay additional charges for updates. Defra does not expect to resolve all its legacy issues until 2030. In the 2021 Spending Review, Defra received £871 million over three years for digital investment. This included £366 million for addressing legacy issues and bringing systems up to the necessary standard. The settlement was 58% of Defra's bid to HM Treasury.

The Central Data and Digital Office (CDDO) is part of the Cabinet Office. It leads the digital, data and technology function for government and is responsible for strategy, standards, and capability development. In June 2022, CDDO set out the government's latest approach to improving the conditions for digital transformation in *Transforming for a digital future: 2022 to 2025 roadmap for digital and data*.

Conclusions and recommendations

1. **Defra has made good progress in tackling its most urgent legacy issues, though the majority of its applications are still not fully supported.** Defra has one of the most significant legacy IT challenges across government, with a proliferation of outdated applications across the Defra Group. Of Defra's 12 systems with the highest volume of public or business users, two are a mixture of modern and legacy systems and one is an entirely legacy system. Defra has made good progress in tackling its legacy systems so far. It has tackled the most pressing issues first and prioritised work on applications that most need to be stabilised in the short-term. However, 80% of Defra's applications remain either in extended support, where Defra may have to pay additional charges for updates, or are completely unsupported by their supplier increasing the risk of failure or cyber attacks. Legacy problems have built up in systems related to older legislation, and Defra has tended to focus resources on building IT systems to address newer legislation such as the Future Farming and Countryside programme.

Recommendation 1: Defra should, within six months, identify the success factors behind the progress it has made in addressing issues within its legacy IT, and share lessons with CDDO and other departments.

2. **Defra does not have a strategy or vision needed for its long-term digital transformation.** Defra has so far focused on stabilising its legacy applications by seeking to mitigate the biggest risks of cyber-attack or operational failure and is moving towards enhancing and transforming these applications. But it does not yet have a strategy for the transformation of its digital services and is not taking a proactive approach to challenges, such as reducing reliance on paper forms and making applications available on mobile phones. It has instead tended to be reactive and focus its efforts on areas that need to be addressed more urgently, such as implementing the IT systems needed for EU Exit. We would expect Defra to look at the digital needs across all of the organisations within the Defra Group and consider where it can make savings and improvements. Many different technologies and standards are used across Defra owing to how it has grown and developed over time, and the different approaches to technology adopted by different organisations within Defra. Defra does not yet have agreed standards for IT systems across the Department and its organisation that would ensure they are developed in a more consistent way across the Group.

Recommendation 2: Defra should:

- a) *develop its longer-term digital and data strategy, and ensure that this reflects the digital needs of organisations across the Defra Group;*
 - b) *write to the Committee by the end of March 2024, outlining details of the actions planned in its strategy, including the measures it will use to monitor performance and how it will establish and implement Group-wide standards for technology and architecture.*
3. **Defra has not given enough attention to the impact of its poor digital services on its users.** To users, legacy IT systems feel outdated or lack functionality and they are

at higher risk of temporary crashes. Defra has recently upgraded its system that vets and farmers use to record bovine tuberculosis test results. Previously vets had to buy old laptops to be able to run the programme. Many legacy systems still rely heavily on paper forms or documents. Defra and its organisations handle around 14 million paper transactions each year. Defra intends to reduce its reliance on paper forms but is unable to say when this will happen. Despite the advantages of digital forms, there are barriers to increasing the use of digital-based applications and processes which Defra does not yet fully understand. For example, some customers prefer paper-based licenses, and Defra is working to understand and address the barriers to more of its customers using digital solutions. Defra does not measure the costs to its customers of its unmodernised digital services but is now attempting to include these in business cases for specific changes.

Recommendation 3: *In its Treasury Minute response, Defra should set out how it will identify the problems and costs faced by its service users as a result of unmodernised services, and how it is going to address each of them.*

4. **Defra is at risk of wasting money on digital services because it has not yet taken decisions on business transformation.** In parallel with its work on legacy, Defra is embarking on a fundamental review of the structure of its organisation, including potentially major structural changes to the bodies and organisations that form the Defra Group. Some decisions about digital services need to be taken without delay. But without clarity on what the transformed Defra will look like, it is difficult for its digital specialists to prepare. If Defra makes decisions and undertakes work as part of improving its digital services before it has decided the future shape and structure of its business operations or before it has determined what its digital requirements are, it risks limiting the usefulness of the systems and causing future problems. It has assured us that it would not invest in building new digital systems that would have to be rebuilt to fit its new business model.

Recommendation 4: *As part of the Treasury Minute response, Defra should set out how it will ensure that investment and new digital systems put in place before it has made key decisions about the future shape, structure and digital needs of the Defra Group, will not need not to be rebuilt.*

5. **Defra is over-reliant on contractors because it struggles to recruit and retain the people with the digital skills it needs.** Defra says it has reduced its reliance on contractors and temporary staff over the last year from 30% to 22%, but this is still too high. CDDO tells us that using some contingent labour is good for flexibility but that it can be up to twice as expensive for some roles. In June 2022, CDDO committed to reducing vacancies in the digital community across government departments to less than 10% by 2025. Between October 2021 and October 2022, Defra ran recruitment campaigns for 244 digital, data and technology roles but could not fill 31% of these roles. In October 2022, 14% of roles in the digital and data community were vacant across government. The digital, data and technology pay framework has helped to attract digital staff, and Defra expects forthcoming changes to the framework to help further. Defra has found that being able to offer home- and hybrid-working can make it easier to recruit staff. In addition, people often join Defra because they are committed to improving the environment and we encourage Defra to continue to capitalise on this.

Recommendation 5: As part of the Treasury Minute response, Defra should:

- a) *explain what new approaches it will adopt to recruit staff and reduce its reliance on contractors and temporary staff to provide digital skills;*
 - b) *specify what target it is working towards for the appropriate level of contractors and temporary staff and when it expects to achieve it.*
6. **Defra does not yet know how it will meet Government's ambitions for digital change within its existing resources.** CDDO has agreed a set of challenging commitments with departments, and Defra is confident it can meet these. However, Defra received only 58% of the funding it bid for in the 2021 Spending Review and cannot deliver all its aspirations with the funding it has available. For example, it aims to digitise all of its 20 most used services but none of this work is yet funded. Defra has taken an ordered approach to prioritising its work, focussing on its riskiest digital systems first, such as those most likely to fail or at most risk of cyber-attack. It says it has saved money by decommissioning services as part of its review of legacy applications, and believes there is scope for it to save £20-£25 million if it modernised all its IT. However, Defra is unlikely to know the full extent of the cost savings and efficiency gains that are possible because it does not know all the additional costs of operating its legacy services, for example because of the need for manual processes.

Recommendation 6: Defra should:

- a) *strengthen its case for investment by developing its analysis of the efficiency savings that could be achieved through modernising its systems and processes;*
 - b) *write to the Committee within a year with the results of this analysis and what action it plans to take as a result.*
7. **We welcome CDDO's efforts to establish strong cross-government co-operation and collaboration to identifying and addressing legacy IT issues.** Since our December 2021 report on the *Challenges in implementing digital change*, CDDO has worked with all departments to establish a common methodology across departments for prioritising legacy risk. It has developed a framework to identify vulnerable legacy systems and tested it with six departments including Defra. Covering 105 digital systems across the six departments, this has highlighted those which need immediate work. CDDO intends to use the framework with the remaining departments by the end of 2023. CDDO has worked closely with departments in the development of its Roadmap to identify problem areas that need to be tackled and has introduced a set of commitments that all departments have signed up to and agreed to fund from within their own budget. CDDO is also working with departments to determine how significant the financial benefits from addressing legacy can be, and it expects this will support departments' bids for funding to HM Treasury.

Recommendation 7: As part of the Treasury Minute response, CDDO should set out whether it is getting the traction needed from departments to achieve its missions, and report annually thereafter on its progress and any difficulties in working with departments.

1 Defra's progress in addressing legacy IT issues

1. On the basis of a report by the Comptroller and Auditor General, we took evidence from the Department for Food, Environment & Rural Affairs (Defra) and the Central Digital & Data Office (CDDO) at the Cabinet Office about modernising ageing digital services.¹

2. Departments across government face a substantial challenge from ageing IT systems, known as legacy IT. Defra has one of the most significant legacy IT challenges in government. It is a complex organisation: as well as the main department, it comprises a range of arm's-length bodies (ALBs) and other bodies of varying size that make up what is known as the Defra Group. There is a proliferation of legacy applications across the Group.² Defra provides a wide range of services including giving permits to move animals, monitoring air quality, and paying grants to farmers and businesses, but many of the IT systems it uses are outdated. Legacy IT systems cost a lot to maintain and have a large impact on services, with real-life consequences for people who use and rely on them. In addition, legacy systems are at higher risk of temporary crashes and security breaches.³ CDDO leads the digital, data and technology function for government and is responsible for strategy, standards, and capability development. In June 2022, CDDO set out the government's latest approach to improving the conditions for digital transformation in *Transforming for a digital future: 2022 to 2025 roadmap for digital and data*.⁴

3. In July 2022, there were 1,963 IT applications across Defra Group. Defra told us many of these were applications such as printer drivers, leaving about 365 larger applications. Of these, it explained that 20% were new and directly supported by the original supplier, and 50% were in extended support, which meant an extension to the original contract for the supplier to continue to provide support. The remaining 30% were in hypercare, which Defra explained to mean that it supported these applications either through its internal digital team or by paying suppliers to help if something went wrong. For this 80% which are in extended support or hypercare, Defra may have to pay additional charges for support.⁵

Impact of legacy systems on users

4. To their users, legacy IT systems feel outdated, lack functionality or are hard to use. For example, Defra told us about one of its biggest legacy problem areas, the system used to record bovine tuberculosis tests results from vets and farmers. It explained that the system was too old to run on the operating system used by many newer devices, and vets had to buy old laptops on eBay to be able to run Defra's programme. Defra told us that it had recently invested around £11 million in upgrading the system, which meant that it could be run on an iPad or phone.⁶

1 C&AG's Report, *Modernising ageing digital services*, Session 2022–23, HC 948, 6 December 2022

2 Q 13; C&AG's Report, paras 2, 9

3 Chair's introduction; C&AG's Report, para 1.4

4 Central Digital and Data Office, [Transforming for a digital future: 2022 to 2025 roadmap for digital and data](#), 9 June 2022

5 Qq 13–14; C&AG's Report, para 1.15

6 Q 15; C&AG's Report, para 1.8

5. In July 2021, the majority of Defra's services had some elements which required users to phone helplines or complete forms offline. At this time, only 34 of Defra's 101 transactional services (those that allow users to exchange money for services or update official records) could be used fully online. Defra Group handles around 21 million customer transactions each year and around two-thirds (14 million) of these involve the user having to complete paper forms.⁷ We asked the CDDO how Defra's and government's approach compared with the private sector. CDDO told us that there was a huge opportunity across government to improve the experience of users. It explained that most people do not want to fill in paper forms and wait weeks for an outcome, yet many legacy systems still rely heavily on paper forms or documents.⁸

6. We asked the Department when it intended to reduce the number of transactions that required paper forms. Defra told us that it intended to reduce its reliance on paper but was unable to say when this will happen. At the time of our evidence session, it had not yet made a plan for how it will digitise the systems that rely on paper. Defra explained that it had taken the opportunity to digitise and remove paper forms from its processes when it introduced new policy or areas of work, such as future farming.⁹ It told us that it had introduced the first paperless imports and exports, and movement of goods and services, with Northern Ireland in particular.¹⁰

7. Despite the advantages of digital applications, there are barriers to bringing applications fully online. For example, Defra explained that fishing rod licences could be entirely digital, but following testing with users it decided to retain the paper element of the application process. It told us that 60% of customers who apply for a license request the paper version and that it intended to work with these customers to understand the barriers and address those which prevent users adopting digital solutions and try to increase their uptake of digital forms.¹¹

8. Defra recognised that one of the main issues of legacy systems was that they created a burden on the service user. But the NAO found that Defra does not measure the cost to its customers of its unmodernised digital services.¹² We asked the Department what work it had done to understand the potential cost savings to the user of modernising its digital systems, for example the cost of time spent filling out paper forms. Defra explained that it would look to build this in as part of developing business cases for changing its systems. It noted that it had so far found them hard to quantify, but that CDDO had provided a framework which should help it assess these costs.¹³

Progress in addressing legacy systems

9. Defra had made progress in tackling its most urgent legacy systems. The NAO found that it had addressed the most pressing issues, prioritising work on applications that need to be stabilised in the short-term. Defra had taken a formal approach to prioritising its work and focussed on riskiest systems first. It established a digital prioritisation board,

7 C&AG's Report, paras 17, 2.15

8 Qq 28, 72

9 Qq 28–29

10 Q 35

11 Qq 77, 83

12 Q 31; C&AG's Report, para 1.8

13 Qq 74–75

made of up Defra's senior leaders and representatives from its main arm's-length bodies. This board identified 109 projects that it will fund with the £366 million it received in the 2021 Spending Review to address all areas of digital legacy.¹⁴

10. The NAO also found that Defra did not expect to resolve all its legacy issues until 2030.¹⁵ For example, Defra told us that it had worked with the Central Digital & Data Office (CDDO) to establish which services were most critical or had the largest number of users. It explained that, of the top 75 public-facing applications identified using this classification, 12 were within Defra.¹⁶ In January 2023, Defra told us that, of Defra's 12 systems with the highest volume of public or business users, two were a mixture of modern and legacy systems and one was an entirely legacy system.¹⁷ However, across Defra's applications as a whole, only 20% were fully supported by the original supplier. 50% of the applications had at least one part that was in extended support and the remaining 30% were unsupported by the original supplier, reduced from 50% in September 2019.¹⁸ Defra recognised that the legacy applications which were unsupported by the original supplier were more at risk of security breaches or operational failure.¹⁹ Defra told us that it had put in place "hyper-care" to support these applications, including additional routine monitoring of these services so that it was "more acutely aware if there is an issue".²⁰ It explained that it supported these applications either through its internal digital team or by paying suppliers to help if something went wrong. Defra told us that, while it was less confident that these services were providing the best service for the customer, it was confident that it had identified the applications that were most at risk and had put the right care in place to prevent the risk of cyber-attack or the systems failing.²¹

11. We asked Defra whether the applications in extended support or hyper-care sat within particular parts of the Defra Group. Defra told us that legacy systems were typically located in areas where the legislation was older, which tended to be in the more long-running delivery areas for Defra Group. Defra explained that it had invested in replacing IT systems to align with newer legislation created for exiting the EU and had created new IT systems, such as for borders and trade, and the future farming and countryside programme.²² It told us it used some of the applications it had created more recently as building blocks to form standard platforms for new digital developments, increasing the speed at which it could react to changes.²³

The availability of digital skills

12. When we examined the challenges in implementing digital change in December 2021, we concluded that there was a large gap between the demand for, and supply of, the digital specialists that government needed, and that it was hard to get the right balance of in-house and outsourced skills.²⁴ In response, in February 2022, CDDO committed to creating

14 C&AG's Report, paras 9, 18, 22

15 C&AG's Report, paras 9, 22

16 Q 24

17 Q 25

18 Qq 13–14 and C&AG Report, figure 3

19 Qq 19–20

20 Qq 13–14

21 Qq 14, 20

22 Q 15

23 Qq 29, 78

24 Committee of Public Accounts, Thirtieth Report of Session 2021–22, [Challenges in implementing digital change](#), HC 637, 10 December 2021

a consistent, streamlined process for Digital, Data and Technology (DDaT) recruitment which would enable a consistent, streamlined process through which government would identify, assess, onboard and deploy DDaT talent. It explained that this would align departments with the DDaT capability framework and associated remuneration offer to further support recruitment and retention.²⁵

13. There is still a digital skills shortage across UK industry and the public sector and, in December 2022, the NAO found that Defra had found it difficult to recruit and retain people with the right digital skills. Between October 2021 and October 2022, Defra ran recruitment campaigns for 244 digital, data and technology roles but could not fill 31% of these roles.²⁶ CDDO told us that this problem was not unique to Defra: in October 2022, 14% of roles in the digital and data community were vacant across government. In June 2022, CDDO committed to reducing vacancies in the digital community across government departments to less than 10% by 2025.²⁷ We asked the Department what it was doing to fill the digital roles that it had so far been unable to fill. Defra told us it used contractors to fill the gap in its workforce.²⁸ CDDO clarified that using some contingent labour was good for flexibility, but that it can be up to twice as expensive for some roles. Defra explained that it had reduced its reliance on contractors and temporary staff over the last year from 30% to 22%.²⁹

14. Defra told us that the digital, data and technology pay framework, which allowed supplements to be paid based on capability for specific digital roles, helped it to attract digital staff. It expected forthcoming changes to the framework, such as changes to career progression and the breadth of roles covered, to help further recruit the staff it needs. We asked what Defra had done to make the roles as attractive as possible, for example through hybrid working. Defra told us that it had used this for both recruiting those with digital skills, but also in its recruitment more generally. It also explained that it had brought in more junior staff through setting up its own academy and used apprenticeships to provide a pipeline of experienced staff. Defra told us that people often joined the department because they were committed to improving the environment and explained how it actively promoted not just a job vacancy but also the outcome they will deliver, such as protecting and enhancing the environment.³⁰

25 HM Treasury, [Treasury Minutes: Government response to the Committee of Public Accounts on the Twenty-Seventh to the Thirty-First reports from Session 2021–22](#), CP 631, February 2022

26 C&AG's Report, paras 5, 15, 1.23

27 Q 65; Central Digital and Data Office, [Transforming for a digital future: 2022 to 2025 roadmap for digital and data](#), 9 June 2022

28 Qq 58–59

29 Qq 59, 65

30 Qq 59–61

2 Defra's long-term strategy

Defra's long-term strategy and vision for digital transformation

15. Defra told us that it had so far focused on stabilising its legacy applications to reduce the risks of cyber-attack or operational failure and on developing and implementing the IT systems needed for EU Exit, rather than work to reduce reliance on paper forms or to make applications widely available on mobile phones.³¹ It explained that stabilising applications often involved moving them from older data centres onto modern cloud-based platforms. Once the risks have been diminished, Defra told us it intends to move on to enhancing and transforming its legacy applications. This will involve rebuilding and replacing applications and decommissioning existing legacy IT. Defra expected the full transformation of its business applications to take around 10 years.³² However, Defra told us that it does not yet have a strategy for transforming its digital services or a plan for enhancing and transforming its legacy applications. It explained that it intended to complete work on developing a vision for digital transformation within a year but was unable to give an indication of what it would achieve in terms of digitising its systems.³³

16. Many different technologies are used across Defra as a consequence of how the Defra Group has grown and changed over time, and how systems were originally developed by different organisations within the Group, which each had their own approach to technology. Defra does not yet have agreed standards for IT systems across the Department and its organisation that would ensure they are developed in a more consistent way across the Group. It told the NAO that, where work to address legacy IT systems had so far resulted in greater use of common technologies, this had been coincidental rather than in accordance with an overarching design. The NAO found that different areas of Defra were still making different choices about their IT systems based on what they already had and were not always taking into account wider corporate considerations, which would inhibit Defra's ability to gain the full benefits of standardisation.³⁴ We asked the Department when it expected to have established an overall Group-wide standard for technology and architecture. Defra recognised that, while it had established many standards, there were some gaps, and told us that it had work in place to fill these which it anticipated would be complete within the year.³⁵

Aligning digital and business transformation

17. In parallel with its work on address legacy IT systems, Defra told us it was embarking on a fundamental business transformation process, including potentially major structural changes to the Defra Group. Defra explained that this will include considering how it could reduce duplication across the Group.³⁶ For example, it explained that across Defra Group, many bodies issued licenses and permits and there were 37 different IT applications that supported this. It explained that it thought that there was scope to consolidate its technology, processes and teams to create efficiency savings.³⁷

31 Qq 20, 28–30, 51

32 Qq 17, 29; C&AG's Report, para 2.5

33 Qq 28–29, 82

34 C&AG's Report, paras 2.20–2.21

35 Q 78

36 Q 47

37 Q 80

18. However, Defra has not yet developed a clear vision for how its business will operate after transformation. Business transformation and digital transformation are closely linked but without clarity on what the transformed Defra will look like, it is difficult for its digital specialists to prepare. Decisions taken now may need to be reversed when the new Group structure is implemented and this could mean systems have to be rebuilt.³⁸ Given this, we asked Defra how it could design a digital programme. Defra told us that it was working through what it might do in terms of further joining up the Defra Group and any structural changes that this might involve. It told us that it thought that the way that it currently operated its IT, on a Group basis, should mean that any changes would not affect, or be an issue, for its digital programme.³⁹

19. We also asked Defra how it would ensure that its approach did not result in the waste of taxpayers' money. Defra explained that the majority of its transformation programme was focused on business process, how people used business processes, and the way that is governed. It assured us that it will not invest in building new digital systems that will have to be rebuilt to fit its new business model. Defra explained that its approach was to invest in common components that can provide the agility needed to support future development and whatever direction Defra decided to go in.⁴⁰ It recognised, however, the NAO's findings that there was further work to do to align the different perspective of policy, future business needs, and digital, data and technology to ensure a clear and consistent vision and blueprint for Defra's transformation. It noted that it needed to undertake its digital work in a way that allowed it to be as flexible as possible in terms of how it worked across the Defra Group in future. It told us that this agility and flexibility would underpin its vision, but was not complete yet, and expected to have completed this within the year.⁴¹

38 Q 80; C&AG's Report, paras 6, 2.25

39 Q 47

40 Qq 80–81

41 Q 82

3 Collaboration and standardisation across government

20. In June 2022, CDDO published a Roadmap which set out a common cross-government vision for digital and data by 2025. It contained a set of challenging commitments across six strategic areas known as missions, which CDDO told us all departments signed up to and had agreed to meet out of their own budgets. For example, in the Roadmap, CDDO stated that it was working with departments to ensure that at least 50 of the top 75 highest priority customer services across government reach a “great” standard by 2025.⁴² CDDO told us that, of the services it had looked at so far, only 10% qualified as great. CDDO explained that, while this was not “a super starting point”, it did mean that there were substantive opportunities to improve existing services, which in its experience would lead to “very significant upsides in terms of efficiency and payback”.⁴³ It anticipated that this work would allow departments to set out a strong case for digitalisation, which would contribute to their discussions about funding with HM Treasury.⁴⁴

21. In the 2021 Spending Review, Defra received £871 million for digital investment for 2021–2025, of which £366 million was to address legacy issues and bring its systems up to date. The remainder was for investment in the Future Farming and Countryside and borders and trade programmes which were needed to support EU Exit as well as flood-related IT.⁴⁵ Defra received 58% of the funding it bid for in the 2021 Spending Review. According to Defra, this was sufficient funding to resolve some major operational and cyber risks and automation, but not enough to fund a broader digital transformation of all legacy services. For example, it aims to digitise all of its 20 most used services but none of this work is yet funded. Defra had to prioritise its activities to determine what it could deliver with this money.⁴⁶

22. We asked how departments would deliver the ambitions and standards set for digitisation using their existing budgets. Defra was confident it could fulfil the commitments made in the CDDO’s Roadmap and that it would get the 12 services in the government’s top 75 to a “great” standard by 2025 by improving both their usability and their efficiency.⁴⁷ It explained that it was finding ways to achieve as much as possible with the funding that it had, for example opportunities to introduce something new but to improve an existing service at the same time. It also told us that it had identified areas where it will prioritise digitising or transforming a service if it is able to release funding from its existing budget, for example by delivering another programme “better and quicker”.⁴⁸

23. As part of its review of legacy applications, Defra told us it had decommissioned over 30 IT systems because more modern alternatives were available. It explained that this had improved its internal efficiency and created cost savings. Defra estimated that it needs to spend £726 million on modernising legacy services between 2021 and 2025. Defra told us that it considered that there was scope for saving £20–25 million per year if

42 Qq 50–51; Central Digital and Data Office, [Transforming for a digital future: 2022 to 2025 roadmap for digital and data](#), 9 June 2022

43 Q 49

44 Qq 49, 76

45 Q 48, C&AG’s Report, para 1.19

46 Q 48; C&AG’s Report, paras 2.8, 2.15

47 Qq 48, 51, 56–57

48 Q 51

it modernised all its IT.⁴⁹ However, Defra did not record the additional costs of continuing to use legacy services such as manual processes, where outdated technology added to the cost of operating services. For example, it could not tell us how many additional people it employed because of the legacy systems it used.⁵⁰

Collaboration across government – the role of the Central Data & Digital Office (CDDO)

24. We asked CDDO its assessment of government's approach to digitisation. CDDO told us it had been delighted with the collaboration it had received from government departments as part of putting together the digital change road map. It explained that, while there was still more to do, it was "considerably more optimistic now as we go forward".⁵¹ CDDO pointed to what it saw as a huge opportunity for not just better use of public money, but a far better experience for citizens. We therefore asked CDDO whether departments' approaches to working together were sufficient to allow them to take advantage of synergies between their work, including economies of scale and efficiencies. CDDO told us that cross-departmental working came in many forms, such as the chief technology officer forum where 30 senior staff discussed opportunities for sharing and consolidating systems. For example, it explained that a pilot project was considering grants, because many departments provided grants but used multiple systems for this and it thought there might be an opportunity to share and consolidate these.⁵² We asked how this work had helped departments bidding for funding for digitisation. CDDO explained that it had provided technical input into each of the major funding bids for legacy and other digital investment projects in the 2021 Spending Review.⁵³

25. In December 2021, we examined challenges in implementing digital change. We concluded that there was no clear plan to replace or modernise legacy systems and data that were critical to service provision but were often old, unsupportable, vulnerable and a constraint on transformation. We recommended that CDDO should work with departments to map legacy systems across government to document what is there, why it exists and how critical it is. We recommended that, by the end of 2022, the CDDO should use this to produce a pipeline of prioritised legacy systems with milestones for action.⁵⁴ The government agreed with our recommendation, and in response told us that CDDO was working with departments to establish a common methodology for identifying and prioritising legacy risk, which it aimed to implement across departments by the end of 2022.⁵⁵ CDDO told us that, it was making progress with departments to identify and understand the risks and to help departments mitigate them.⁵⁶ It explained that it had developed a framework and tested it with six departments including Defra, which covered 105 systems, and highlighted those which needed immediate work. It intended to use the framework with the remaining departments by the end of 2023, and to refresh it annually.

49 Qq 46, 63

50 Q 30; C&AG's Report, para 12

51 Q 72

52 Qq 68, 72

53 Q 43

54 Committee of Public Accounts, Thirtieth Report of Session 2021–22, [Challenges in implementing digital change](#), HC 637, 10 December 2021

55 HM Treasury, [Treasury Minutes: Government response to the Committee of Public Accounts on the Twenty-Seventh to the Thirty-First reports from Session 2021–22](#), CP 631, February 2022

56 Q 41; HM Treasury, [Treasury Minutes: Government response to the Committee of Public Accounts on the Twenty-Seventh to the Thirty-First reports from Session 2021–22](#), CP 631, February 2022

It told us that it expected that this work would give it a good sense of where the risks were in government and how well they were mitigated, as previously there had not been a central, single framework for understanding, prioritising and assessing risk.⁵⁷

Formal minutes

Monday 17 April 2023

Members present:

Dame Meg Hillier

Olivia Blake

Sir Geoffrey Clifton-Brown

Mrs Flick Drummond

Mr Mark Francois

Anne Marie Morris

Nick Smith

Tackling Defra's ageing digital services

Draft Report (*Tackling Defra's ageing digital services*), proposed by the Chair, brought up and read.

Ordered, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 25 read and agreed to.

Summary agreed to.

Introduction agreed to.

Conclusions and recommendations agreed to.

Resolved, That the Report be the Fifty-first of the Committee to the House.

Ordered, That the Chair make the Report to the House.

Adjournment

Adjourned till Thursday 20 April at 9.30am.

Witnesses

The following witnesses gave evidence. Transcripts can be viewed on the [inquiry publications page](#) of the Committee's website.

Thursday 19 January 2023

Tamara Finkelstein CB, Permanent Secretary, Department for Environment, Food and Rural Affairs; **Chris Howes**, Chief Digital and Information Officer, Department for Environment, Food and Rural Affairs; **Malcolm McKee**, Chief Technology Officer, Department for Environment, Food and Rural Affairs; **Paul Willmott**, Chair of the Central Digital and Data Office, Cabinet Office

[Q1–86](#)

List of Reports from the Committee during the current Parliament

All publications from the Committee are available on the [publications page](#) of the Committee's website.

Session 2022–23

Number	Title	Reference
1st	Department for Business, Energy & Industrial Strategy Annual Report and Accounts 2020–21	HC 59
2nd	Lessons from implementing IR35 reforms	HC 60
3rd	The future of the Advanced Gas-cooled Reactors	HC 118
4th	Use of evaluation and modelling in government	HC 254
5th	Local economic growth	HC 252
6th	Department of Health and Social Care 2020–21 Annual Report and Accounts	HC 253
7th	Armoured Vehicles: the Ajax programme	HC 259
8th	Financial sustainability of the higher education sector in England	HC 257
9th	Child Maintenance	HC 255
10th	Restoration and Renewal of Parliament	HC 49
11th	The rollout of the COVID-19 vaccine programme in England	HC 258
12th	Management of PPE contracts	HC 260
13th	Secure training centres and secure schools	HC 30
14th	Investigation into the British Steel Pension Scheme	HC 251
15th	The Police Uplift Programme	HC 261
16th	Managing cross-border travel during the COVID-19 pandemic	HC 29
17th	Government's contracts with Radox Laboratories Ltd	HC 28
18th	Government actions to combat waste crime	HC 33
19th	Regulating after EU Exit	HC 32
20th	Whole of Government Accounts 2019–20	HC 31
21st	Transforming electronic monitoring services	HC 34
22nd	Tackling local air quality breaches	HC 37
23rd	Measuring and reporting public sector greenhouse gas emissions	HC 39
24th	Redevelopment of Defra's animal health infrastructure	HC 42
25th	Regulation of energy suppliers	HC 41
26th	The Department for Work and Pensions' Accounts 2021–22 – Fraud and error in the benefits system	HC 44
27th	Evaluating innovation projects in children's social care	HC 38

Number	Title	Reference
28th	Improving the Accounting Officer Assessment process	HC 43
29th	The Affordable Homes Programme since 2015	HC 684
30th	Developing workforce skills for a strong economy	HC 685
31st	Managing central government property	HC 48
32nd	Grassroots participation in sport and physical activity	HC 46
33rd	HMRC performance in 2021–22	HC 686
34th	The Creation of the UK Infrastructure Bank	HC 45
35th	Introducing Integrated Care Systems	HC 47
36th	The Defence digital strategy	HC 727
37th	Support for vulnerable adolescents	HC 730
38th	Managing NHS backlogs and waiting times in England	HC 729
39th	Excess Votes 2021–22	HC 1132
40th	COVID employment support schemes	HC 810
41st	Driving licence backlogs at the DVLA	HC 735
42nd	The Restart Scheme for long-term unemployed people	HC 733
43rd	Progress combatting fraud	HC 40
44th	The Digital Services Tax	HC 732
45th	Department for Business, Energy & Industrial Strategy Annual Report and Accounts 2021–22	HC 1254
46th	BBC Digital	HC 736
47th	Investigation into the UK Passport Office	HC 738
48th	MoD Equipment Plan 2022–2032	HC 731
49th	Managing tax compliance following the pandemic	HC 739
50th	Government Shared Services	HC 734
1st Special Report	Sixth Annual Report of the Chair of the Committee of Public Accounts	HC 50

Session 2021–22

Number	Title	Reference
1st	Low emission cars	HC 186
2nd	BBC strategic financial management	HC 187
3rd	COVID-19: Support for children's education	HC 240
4th	COVID-19: Local government finance	HC 239
5th	COVID-19: Government Support for Charities	HC 250
6th	Public Sector Pensions	HC 289
7th	Adult Social Care Markets	HC 252

Number	Title	Reference
8th	COVID 19: Culture Recovery Fund	HC 340
9th	Fraud and Error	HC 253
10th	Overview of the English rail system	HC 170
11th	Local auditor reporting on local government in England	HC 171
12th	COVID 19: Cost Tracker Update	HC 173
13th	Initial lessons from the government's response to the COVID-19 pandemic	HC 175
14th	Windrush Compensation Scheme	HC 174
15th	DWP Employment support	HC 177
16th	Principles of effective regulation	HC 176
17th	High Speed 2: Progress at Summer 2021	HC 329
18th	Government's delivery through arm's-length bodies	HC 181
19th	Protecting consumers from unsafe products	HC 180
20th	Optimising the defence estate	HC 179
21st	School Funding	HC 183
22nd	Improving the performance of major defence equipment contracts	HC 185
23rd	Test and Trace update	HC 182
24th	Crossrail: A progress update	HC 184
25th	The Department for Work and Pensions' Accounts 2020–21 – Fraud and error in the benefits system	HC 633
26th	Lessons from Greensill Capital: accreditation to business support schemes	HC 169
27th	Green Homes Grant Voucher Scheme	HC 635
28th	Efficiency in government	HC 636
29th	The National Law Enforcement Data Programme	HC 638
30th	Challenges in implementing digital change	HC 637
31st	Environmental Land Management Scheme	HC 639
32nd	Delivering gigabitcapable broadband	HC 743
33rd	Underpayments of the State Pension	HC 654
34th	Local Government Finance System: Overview and Challenges	HC 646
35th	The pharmacy early payment and salary advance schemes in the NHS	HC 745
36th	EU Exit: UK Border post transition	HC 746
37th	HMRC Performance in 2020–21	HC 641
38th	COVID-19 cost tracker update	HC 640
39th	DWP Employment Support: Kickstart Scheme	HC 655
40th	Excess votes 2020–21: Serious Fraud Office	HC 1099

Number	Title	Reference
41st	Achieving Net Zero: Follow up	HC 642
42nd	Financial sustainability of schools in England	HC 650
43rd	Reducing the backlog in criminal courts	HC 643
44th	NHS backlogs and waiting times in England	HC 747
45th	Progress with trade negotiations	HC 993
46th	Government preparedness for the COVID-19 pandemic: lessons for government on risk	HC 952
47th	Academies Sector Annual Report and Accounts 2019/20	HC 994
48th	HMRC's management of tax debt	HC 953
49th	Regulation of private renting	HC 996
50th	Bounce Back Loans Scheme: Follow-up	HC 951
51st	Improving outcomes for women in the criminal justice system	HC 997
52nd	Ministry of Defence Equipment Plan 2021–31	HC 1164
1st Special Report	Fifth Annual Report of the Chair of the Committee of Public Accounts	HC 222

Session 2019–21

Number	Title	Reference
1st	Support for children with special educational needs and disabilities	HC 85
2nd	Defence Nuclear Infrastructure	HC 86
3rd	High Speed 2: Spring 2020 Update	HC 84
4th	EU Exit: Get ready for Brexit Campaign	HC 131
5th	University technical colleges	HC 87
6th	Excess votes 2018–19	HC 243
7th	Gambling regulation: problem gambling and protecting vulnerable people	HC 134
8th	NHS capital expenditure and financial management	HC 344
9th	Water supply and demand management	HC 378
10th	Defence capability and the Equipment Plan	HC 247
11th	Local authority investment in commercial property	HC 312
12th	Management of tax reliefs	HC 379
13th	Whole of Government Response to COVID-19	HC 404
14th	Readying the NHS and social care for the COVID-19 peak	HC 405
15th	Improving the prison estate	HC 244
16th	Progress in remediating dangerous cladding	HC 406

Number	Title	Reference
17th	Immigration enforcement	HC 407
18th	NHS nursing workforce	HC 408
19th	Restoration and renewal of the Palace of Westminster	HC 549
20th	Tackling the tax gap	HC 650
21st	Government support for UK exporters	HC 679
22nd	Digital transformation in the NHS	HC 680
23rd	Delivering carrier strike	HC 684
24th	Selecting towns for the Towns Fund	HC 651
25th	Asylum accommodation and support transformation programme	HC 683
26th	Department of Work and Pensions Accounts 2019–20	HC 681
27th	Covid-19: Supply of ventilators	HC 685
28th	The Nuclear Decommissioning Authority's management of the Magnox contract	HC 653
29th	Whitehall preparations for EU Exit	HC 682
30th	The production and distribution of cash	HC 654
31st	Starter Homes	HC 88
32nd	Specialist Skills in the civil service	HC 686
33rd	Covid-19: Bounce Back Loan Scheme	HC 687
34th	Covid-19: Support for jobs	HC 920
35th	Improving Broadband	HC 688
36th	HMRC performance 2019–20	HC 690
37th	Whole of Government Accounts 2018–19	HC 655
38th	Managing colleges' financial sustainability	HC 692
39th	Lessons from major projects and programmes	HC 694
40th	Achieving government's long-term environmental goals	HC 927
41st	COVID 19: the free school meals voucher scheme	HC 689
42nd	COVID-19: Government procurement and supply of Personal Protective Equipment	HC 928
43rd	COVID-19: Planning for a vaccine Part 1	HC 930
44th	Excess Votes 2019–20	HC 1205
45th	Managing flood risk	HC 931
46th	Achieving Net Zero	HC 935
47th	COVID-19: Test, track and trace (part 1)	HC 932
48th	Digital Services at the Border	HC 936
49th	COVID-19: housing people sleeping rough	HC 934
50th	Defence Equipment Plan 2020–2030	HC 693

Number	Title	Reference
51st	Managing the expiry of PFI contracts	HC 1114
52nd	Key challenges facing the Ministry of Justice	HC 1190
53rd	Covid 19: supporting the vulnerable during lockdown	HC 938
54th	Improving single living accommodation for service personnel	HC 940
55th	Environmental tax measures	HC 937
56th	Industrial Strategy Challenge Fund	HC 941