Boardman Review of Government Procurement in the COVID-19 pandemic

1. Introduction and executive summary

I have been asked to conduct a short and targeted review into procurement activities in key areas of the Government's response to the COVID-19 pandemic.

This is not a forensic investigation. The purpose is not to examine each and every procurement carried out, nor is it to question the policy decisions behind these activities, or make comparisons with the response of other countries. My findings are based predominantly on interviews with key people who were involved in each programme at the time. The purpose of the review is to understand what lessons the Government can learn from this process to be better equipped to meet any future similar challenge. It is limited to procurement of PPE, ventilators, vaccines, test and trace and food parcels for the clinically extremely vulnerable in the period March to December 2020.

Procurement activity covers, for the purposes of this review, governance of the procurement process, determining what it is necessary to buy, devising strategies for acquiring those goods and services from the market, concluding contracts with suitable terms and conditions and then working with suppliers to ensure delivery. I do not make any assessment of the overall value for money provided by these programmes, for which there is a well-established accountability process, via Ministers, Accounting Officers, the National Audit Office and Parliament.

I have made recommendations across five broad themes of *preparedness and strategy, organisational structures, resourcing, purchasing, and governance and regulation*. Very few of them are free of cost, and in considering this report, the Government will have to evaluate in each case the cost/benefit of the action in the context of its assessment of the likelihood of a similar event (which is outside my competence). This consideration should also include the urgency with which to implement recommendations. Most can be implemented immediately and will be important in building resilience for future crisis situations, but this will require resource, which, given the ongoing challenges of the current pandemic, should be managed as ministers see fit. Government should ensure that the new UK Health Security Agency has the necessary powers to be able to implement, monitor and enforce those of my recommendations which fall within its proposed scope.

My starting recommendation is a clear need for stronger, more comprehensive and responsive contingency planning, and many of the other, more detailed recommendations flow from this. It is of course true that this country has not experienced a pandemic of the seriousness of COVID-19 for a century and it is therefore understandable that pandemic preparedness was not a high priority. The government will need to consider, as mentioned above, the likelihood of a further pandemic in the foreseeable future. Bearing this in mind, it is nonetheless incontrovertible that some of the challenges encountered in procurement could have been mitigated had the Government had more fully formed contingency plans and/or taken earlier action (either as preparation or in response to the rising threat of COVID-19). National resilience to future pandemics needs to be strengthened in every area, including in stockpiles, supply chains (including sovereign manufacturing capability) and

purchasing frameworks. Risk management should be prioritised as a proper cross-government profession to enable Government to respond to rising risk levels.

Data modelling was crucially important in judging how to respond to the pandemic. At the outset, the nature of the disease was only partly understood, and the Government had no choice but to take decisions rapidly and without the usual level of detailed information. Knowledge increased over time, for example in understanding the disproportionate effect of the virus on some parts of the population, or the high level of asymptomatic cases which affected the demand for PPE and is a challenge for Test and Trace. There is good practice evident in the way the Government responded to changing levels of information and preparedness as the crisis developed: winding down the ventilator challenge as planning assumptions (and knowledge of existing stock) matured; switching from central delivery of food parcels for the clinically extremely vulnerable to supermarket food slot priority and local government support; and reviewing the expansion of Test and Trace facilities as demand became clearer. A flexible response is essential, both to ensure effectiveness and also to use resources efficiently. To underpin flexibility, data models need to be interpreted with considerable judgement and awareness of their limitations. In addition, while direct awards under the procurement regulations enabled a swift response, teams should plan for an early transition to competitive procurement wherever possible.

I make recommendations regarding organisational structure only where the pandemic has exposed structural challenges that may have formed barriers to effective procurement. Central government should look to ensure its systems are compatible, and that its commercial teams are structured in the most effective way to target resources where needed, including being scalable in a crisis. I believe it will be necessary to review the way procurement is done in the health sector in times of crisis, with particular reference to the position of Supply Chain Coordination Limited (SCCL). Consideration should also be given to how to best ensure the privately-led social care sector can learn from the challenges of sourcing PPE, and properly prepare itself for a future challenge on this scale. In addition to a cross-government risk management profession, I also recommend better alignment to the Government Analysis Function in respect of data modelling and analytics.

Risk in commercial activity is mitigated by scaling up existing solutions, as is seen from the success of the vaccine programme. The use of existing infrastructure and the potential role of local authorities and other existing delivery bodies needs to be fully explored when considering how to implement any response. Having said this, any new programme needs to be open to innovation in devising solutions. Government needs to be willing to experiment simultaneously with several potential solutions, recognising that this entails cost, but might give rise to an earlier, cheaper and more effective solution to the problem. This approach has been demonstrated to greater effect in some programmes than others.

I make a number of detailed recommendations with regard to resourcing, including planning for the most appropriate structure and governance for commercial teams and ensuring sufficient expertise is in place. Programmes are most successful when the right people can be quickly deployed in the right structures. Greater preparedness in terms of training and resourcing plans should facilitate this. A number of different factors led to a remarkably high turnover of staff within some teams. In addition it proved difficult to redeploy some resources within the civil service, and I also make some specific recommendations to address this.

I have not examined individual appointments, but it is my view that appointing senior leaders from outside to oversee programmes is beneficial and helped the procurement activity. I have recommended further work to ensure there is a fair and transparent route by which ministers can make these appointments quickly in times of crisis and to enable effective decision making in accordance with established lines of accountability and conferred executive powers.

Whilst acknowledging that my review is not a forensic investigation, I have not seen evidence that any contract within the scope of the review was awarded on grounds of favouritism. In my view there are, however, factors which may have encouraged such a suspicion. These are:

- the use, in relation to PPE, of a fast track email address available to members of parliament and others (which was initially referred to as the VIP lane);
- the time taken to publish contracts awarded during the crisis;
- lack of public understanding of the regulation 32 emergency procurement procedure;
- the prices paid for emergency purchases, which were higher than market prices in non-pandemic times;
- the failure (or perceived failure) of some of the purchased stock to be fit for use;
- incomplete record keeping, including in relation to conflicts of interest; and
- certain counterparties being associated with the Governing party.

These points are all addressed in the report, alongside some observations on procedural improvements which may reduce the risk of criticism in these areas in the future. There are also recommendations in my previous report for the Cabinet Office, which are relevant here, in particular to the last two points. In addition, the Government could have expanded its communications strategy at an appropriate point during the pandemic to focus not only on the important public health messages but also to proactively explain to the public what it was doing and why.

In my view, the Green Paper proposals on procurement reform (noted in my previous report) and any future review of the Civil Contingencies Act both provide opportunities to address some of these issues through legislative means, and I would encourage Government to continue to consider the issues raised by the pandemic when progressing both these pieces of work. I have made observations regarding data protection, and the role of regulators, which although not specific recommendations, could be considered as part of this process.

Finally, given the amounts of money spent on these programmes, and the importance of the programmes to the national recovery, it is imperative that there is proper scrutiny of the procurement actions taken by the Government. However, I am conscious in writing this report that the scrutiny must be in the context of decisions made in a crisis. There is a very real risk that the already considerable problem of attracting civil servants and others to support the management of these programmes will be further jeopardised in future crises if individuals who have volunteered for an extremely difficult task and have worked tirelessly and beyond all normal limits to protect the country are then subsequently criticised for the actions they have taken in good faith and under extreme circumstances. It was encouraging to note that the Public Accounts Committee recognises this - for example in the Chair's

thanks to those Involved in the procurement of ventilators at an evidence session in October 2020.

There are many aspects of the response which were excellent: 15,000 new ventilators were built; over 32 billion items of PPE obtained; testing capacity lifted to 750,000 per day; more than 4,700,000 food parcels were delivered to the vulnerable; and, as at 28 February 2021, more than 20 million people have received their first vaccination. The areas where the Government can learn lessons for the future are reflected in the recommendations.

Table of recommendations

1	Improve contingency planning for future pandemics, not restricted to one type of airborne virus.
2	A cross department risk management profession with certification and training should be established.
3	As far as possible, and within the boundaries of international obligations, the UK should explore how best to maintain appropriate levels of resilience in crucial industries.
4	There should be appropriate consideration of the ability to flex contracts to increase volumes in an emergency, consideration of resilience of supply as well as cost and preference for direct contracts with manufacturers.
5	National Health Service procurement teams should complete and maintain supply chain maps and there should be a preference for direct and scalable contracts with manufacturers rather than with distributors.
6	There should be detailed buying manuals kept by the buyers in National Health Service procurement teams covering not only the specification of the item, but also its packaging, length of use, sources of supply and scalability of the contract.
7	Regulators in the health and social care sectors should build in resilience at every level of the supply chain as part of regulatory reviews.
8	The New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG) should review stockpile requirements for a broader range of diseases than influenza, and for non-hospital settings. The stockpile should be actively managed to avoid out of date stock.
9	Government should review the future structure of procurement in the health sector including the position of SCCL and its ability to respond to the purchasing needs of the sector in a crisis.
10	To enable greater resilience there should be a contingency plan in place for the provision of PPE that can be switched on if need be so that there is full coverage across the health and social care sector.
11	There is a need for the Crown Commercial Service to review whether and how best to broaden the scope of its products and services in a crisis situation to maximise the impact of its skilled resources.
12	Crisis mobilisation plans should include a requirement to consider whether existing vehicles and structures are suitable, including local channels, and all organisations with crisis responsibilities should have the ability to scale up if required.

13	Commercial teams mobilised in crisis situations should contain their own separate but embedded administrative functions to allow specialist skills to be focussed where they are most needed.
14	Programme teams should have clarity and understanding of the relevant technical specifications and requirements and that specialist resources should have quick access to the needed technical information.
15	There should be a cadre of retired and current Senior Civil Servants trained for crisis management who can be brought in to head up a crisis team as senior leaders.
16	The Government should create a small central team to keep a register or database of resources from across the civil service that have previous consultancy experience.
17	Commercial accreditation and training should be extended to the health sector including arm's length bodies within the National Health Service.
18	The government should have available online learning modules which could be made available to consultants and to civil servants being asked to take on a new role, which equip them for the roles that could arise in a crisis.
19	Any future call to arms should be managed and streamlined to ensure it is as focussed as possible.
20	Separate teams should be established to consider longer term innovation.
21	The Government should review the effectiveness of its current forecasting and modelling capability in light of the performance of forecasting models through COVID-19. This should include how to best utilise and deploy accredited resources from the Government Analysis Function.
22	Spend controls should still apply in times of crisis, but at the outset of a crisis, Cabinet Office and HM Treasury should look to make adjustments, including an appropriate level of flexibility on thresholds, and tighter timetables for approvals.
23	Contingency planning must include models for appropriate governance structures for teams mobilised quickly to respond to emerging crises.
24	Government should consider further work to identify the most appropriate method for making swift senior public appointments to prominent leadership roles to fulfil certain functions.
25	Government should ensure that when a senior external appointment is made to lead a programme, a Senior Civil Servant is identified in parallel to work alongside them.
26	Regulation in the health sector needs a clear structure and the Government should encourage the National Health Service and regulator community to consider appointing a 'lead regulator' with clear definitions around the roles of regulators to make final decisions regarding products in times of crisis.

27	Regulators should also have a crisis manual which demonstrates how they themselves will speed up their processes in a crisis, without compromising on the quality of their decision-making.
28	The Government should instigate a programme of training for risk managers in Government with certification and formal accreditation, developing common standards and levels of training with a central body that can coordinate assessments of risk.

Main review findings

2. Preparedness and strategy

Whilst the period under review commenced on 1 March 2020 it should be noted that activities from that date were significantly affected by the pre-crisis planning. Although COVID-19 is the first pandemic to affect the UK in 100 years, the profile of the UK as an international hub, as noted in the SPI-M 2018 report[1] means it requires stronger and more targeted resilience planning for a pandemic. The UK is likely to be an early recipient of infection and modelling suggests that transmission across the country will also be fast.

I have found that the Government's preparedness for procurement in a pandemic could be improved by broadening contingency planning beyond influenza, and ensuring that procurement strategy is central to policy making. Strategic stockpiles and assets should be managed responsively, and the information recorded centrally so agencies have immediate access to the data. Our domestic manufacture (including access to raw materials) and supply of such assets needs to be examined to ensure resilience insofar as international obligations allow, especially in the context of an increased likelihood of international export restrictions in future crises. Existing supply chains should be mapped in advance from distributors to factory gates. Market engagement should take place to understand the capabilities and capacity of the private sector. All these activities should be framed within a well-researched and professionally assessed view of risk, so that cross government responses can be designed that are proportionate to the impact of the risk event.

2.1 Learning from previous viral pandemics

Previous contingency work was centred on pandemic influenza, and COVID-19 has has presented different challenges with that approach when it comes to making certain decisions and procuring the necessary supplies. The assumptions made in relation to pandemic flu, for example, did not anticipate the need for measures that restricted economic activity on the scale we have seen. It is clear that, depending upon the government's assessment of risk of a recurring pandemic, which will vary from time to time, there is a need for a more structured approach to preparedness in a procurement context. This would include assessment of supply chain resilience, better options analysis and integrated role for commercial and procurement expertise within strategy formulation.

A key action would be to **improve contingency planning for future pandemics, not restricted to one type of airborne virus (recommendation 1).** Each department should do this and the planning should be coordinated through the civil contingencies team working with departmental risk managers. **A cross department risk management profession with certification and training should be established (recommendation 2).** I note that risk management is currently part of the Government Finance Function, but in my view a separate profession could acknowledge a wider definition of risk and risk management, such as risk related to legal, policy, reputation, procurement, use of resources, supply chain, and

1 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/756738/SPI-M_modelling_summary_final.pdf

working with local agencies and the wider public sector. This could be based on the existing profession models within the Government Finance Function in HMT or that deployed by the Government Commercial Function (GCF). I address the issue of risk in more detail in section 6.6.

This first recommendation encompasses a number of the others contained in this report, related to supply chain resilience, stockpiling, intellectual capital and organisational structures - the need to have a basic framework of resources in place to enable rapid deployment. Some of the difficulties in sourcing essential supplies (in particular PPE) were brought about by a failure of the market due to unprecedented global demand, and I do of course accept that it would not be possible to completely safeguard against this. However, it should be possible to introduce additional (proportionate) measures within existing structures to increase resilience in the future.

2.2 Sovereign manufacturing capability

COVID-19 procurement has highlighted the risks of inadequate sovereign manufacturing capability. There is evidence of over-reliance on a few key vendors located overseas (for example on gloves), and on wholesalers rather than manufacturers, in a system designed to produce the lowest cost results. Many of the observations in this section are based on reflections from the PPE programme, which accounted for the largest single group of purchases; but these observations apply to other essential supplies, for example oxygen. An additional challenge will be sourcing the raw materials for these products from other countries. I acknowledge this is complex and requires further investigation as it goes beyond commercial policy and procurement rules.

There is also evidence that this was compounded by the introduction of export restrictions by other countries from which the UK would ordinarily expect to source supplies. These steps had not been taken in previous pandemics, notably swine flu[2] and so the Government's contingency planning did not allow for them. In addition air-freight capacity was limited as routine passenger air travel significantly reduced. The Government should recognise that in future pandemics, logistics may become even more difficult if international export restrictions of this nature are increased. **As far as possible, and within the boundaries of international obligations, the UK should explore how best to maintain appropriate levels of resilience in crucial industries (recommendation 3).** Government should also consider whether diplomatic initiatives, such as trade deals, should address export embargoes from supplier countries, including the risk of other countries requiring their UK-based production plants to prioritise those overseas countries in a crisis.

Our existing agreements with suppliers of critical products should also recognise that they will be called upon at times of crisis. **There should be appropriate consideration of the ability to flex contracts to increase volumes in an emergency, consideration of resilience of supply as well as cost and preference for direct contracts with manufacturers (recommendation 4).**

[2] https://www.ncbi.nlm.nih.gov/books/NBK52789/

UK-based manufacture is and will remain important for vaccine production, and the government should continue to provide any support required, subject to our international obligations, to ensure they remain fit for purpose, capable of scale up, and capable of adaptation to meet any likely vaccine requirement. Consideration should also be given to developing a manufacturing capability domestically for the industrial manufacture of antibodies. It is important that government continues to engage with industry specialists, including those involved in the first phase of the programme, to ensure all relevant lessons are captured for the future.

I note that steps have been taken to establish some capacity for the manufacture of both PPE and Covid-19 tests, and the potential growth and maintenance of this 'emergency' base should be considered within a longer term strategy for national resilience.

While the Government needs to ensure it learns lessons on resilience and capacity-building, it will also of course need to recognise that sustaining a UK manufacturing base purely in order to allow for surge capacity, and the sourcing of raw materials required will result in high additional cost. A balance needs to be found that gives acceptable resilience for an acceptable cost.

2.3 Supply management and supply chain resilience

The goal of effective supply chain management is to strike a balance between having sufficient inventory levels to meet customer demand without building an unnecessary surplus. A dramatic increase in demand at the onset of the pandemic proved a challenge for the NHS supply chain as increased pressure in the healthcare system led to NHS Trusts around the country ordering higher volumes of most items, not just PPE.

The NHS supply chain consists predominantly of distributor relationships and relies on overseas production. There has been a historical drive by the NHS to transfer the risk for quality, delivery and price to their suppliers. As a result, the NHS knowledge level of the factory locations, supply chains behind distributors, inherent risks and therefore overall resilience was low. As it seemed likely that existing supply routes would be overstretched, a parallel PPE buying organisation was quickly mobilised to find new supply routes and to establish, where possible, direct factory relationships.

It is important that existing supply chains are fully transparent to allow their resilience to be accurately assessed. Furthermore, future sourcing strategies should increase geographical diversity and give careful consideration to UK-based manufacturing and direct contracts with overseas manufacturers, taking into account the increased likelihood of export bans, and other logistical issues in the future. As above, this needs to take into account the full range of assets required, beyond just PPE.

National Health Service procurement teams should complete and maintain supply chain maps and there should be a preference for direct and scalable contracts with manufacturers rather than with distributors (recommendation 5). The interim PPE buy cell should develop the supply chain maps used during the crisis. This will support the objectives of the Modern Slavery Act 2015 and the responsibility for UK organisations to

consider the ethics and propriety of the supply chain. This requirement should not be delegated.

In addition to this, **there should be detailed buying manuals kept by the buyers in National Health Service procurement teams covering not only the specification of the item, but also its packaging, length of use, sources of supply and scalability of the contract (recommendation 6).**

It is expected that any regulated entity, whether it is an NHS Trust, in a social care setting or another health provider (for example dentists), should carry appropriate levels of the equipment (including, but not limited to PPE) that would enable them to continue to operate for a period of time regarded by the regulator as reasonable without further supplies. **Regulators in the health and social care sectors should build in resilience at every level of the supply chain as part of regulatory reviews (recommendation 7).** This would mean that there is sufficient time to scale up a central buying programme to match the demand for equipment in a crisis situation.

2.4 Stockpiling and inventory management

The strategic national stockpile of PPE, owned by Public Health England (PHE) with procurement support from SCCL, was structured and designed for an influenza pandemic and not the different type of illness caused by COVID-19. COVID-19 required more stock and different specifications of equipment. While the nature and size of the stockpile is outside the scope of this review, there are of course direct implications for the procurement of suitable supplies that should be addressed as part of wider contingency planning. Any review of the stockpile should combine scientific and clinical expertise (as provided by the current advisory group) with the professional risk management advice provided by the functional experts described in recommendation 28, who will advise on likelihood and impact.

The New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG) should review stockpile requirements for a broader range of diseases than influenza, and for non-hospital settings. The stockpile should be actively managed to avoid out of date stock (recommendation 8).

Clearly increasing the national stockpile and requiring NHS Trusts and social care outlets to carry more stock would provide greater resilience. Relevant regulators should provide clear guidance on stock levels to be maintained against a crisis situation. The regulator should also assess the additional cost of maintaining higher stock levels. The stockpile should be reviewed frequently to ensure the adequacy of products in the context of changing demands, rotation of stock and improvements in technology.

As a point of detail, it seems that improvements could be made to the current process for labelling stock whose expiry date has passed but where testing has assured its suitability for continued use. The over stamp needs to give a full explanation to reassure the end user of the suitability of the product. It is not sufficient to change the labels and put an explanation in the packaging as end users will only see the over stamped expiry date.

Finally, allowances should be made for additional demand from non-hospital settings (pharmacies, dentists), and the strategic stockpile should be coordinated with the national risk register to enable responsiveness in line with changing perceptions of risk.

3. Organisational structures

This section of the report looks at those barriers to effective crisis procurement that can be attributed to current organisational structures. It discusses how the current framework of health and social care provision in England impacted the effectiveness of procurement, what challenges occurred in cross government working and whether the resources of the commercial function could be deployed more effectively.

At the start of the crisis different parts of government very quickly came together to form new teams tasked with a specific objective. Some aspects of the Government's organisational structures enabled such collaboration, demonstrating the power of collaborative cross-government crisis-response working, as well as highlighting the remarkable resilience of civil servants. I make some observations regarding the challenge of meeting resourcing requirements (section 4), but in general I have found that the different parts of the Government seem to have worked well together - for example the armed forces, local government, and in particular the overseas posts of the Foreign, Commonwealth & Development Office and the Department for International Trade. The valuable contribution of the Ministry of Defence is also notable. However, the crisis has also exposed some structural challenges in the relationship between key government bodies when it comes to procurement, in particular in the health and social care sector where procurement responsibilities are complex and fragmented.

3.1 Buying in the Health and Social Care Sector

It is the responsibility of individual NHS Trusts to buy the goods and services that are needed to deliver care, while a number of central bodies help to make this efficient and effective. DHSC were responsible for policy decisions about the type of stock to hold in the Pandemic Influenza Preparedness Plan (PIPP) stockpile, based on modelling provided by the Scientific Pandemic Influenza Group on Modelling (SPI-M). PHE was responsible for storing the stock and managing the distribution contracts. It is currently unclear which body would be responsible for managing emergency contracts in the case of a future pandemic.

SCCL acts as the management function of the NHS supply chain operating model for the NHS. SCCL was established specifically to address a fragmented NHS procurement landscape which had led to widespread price variation in products and lack of consistency in the range of consumables used in the delivery of patient care. SCCL is a company wholly owned by the Secretary of State for Health and Social Care. While it has NHS representatives on its board, it is a separate body, reporting to DHSC.

PPE is also bought locally by individual NHS Trusts, and they can choose to buy from SCCL; before the pandemic 54% of acute trusts were customers of SCCL for PPE. PHE makes recommendations on what PPE is necessary and how it should be used. The regulatory responsibility for PPE involves the Medicines and Healthcare products Regulatory Agency (MHRA), Office for Product Safety and Standards (OPSS) which is part of the Department for Business, Energy and Industrial Strategy (BEIS) and the Health and Safety Executive (HSE).

This structure was devised to respond to different challenges than those posed by the pandemic; balancing the market independence of NHS Trusts with the desire to save money by aggregating purchasing power. In addition, SCCL provides a management function while subcontractors, some of which are NHS bodies, do the actual buying. This structure saved money during 'normal' times (as evidenced by SCCL's growing market share) but proved difficult to scale due to limited specialist resources, legacy IT and a disrupted supply chain in a crisis situation. Having a central procurement capacity in health seems unarguable; but where it reports to (NHS or DHSC), how much control it has over buying in NHS Trusts, and what procurement strategies it follows (e.g. buying from distributors or manufacturers) should be looked at. **Government should review the future structure of procurement in the health sector including the position of SCCL and its ability to respond to the purchasing needs of the sector in a crisis (recommendation 9).** I understand that it had been the intention before the pandemic struck that SCCL be transferred into NHSE. I recommend that this transfer be effected.

3.2 Focus on Social Care

The Government has been criticised for failure to adequately protect social care in terms of its provision of PPE. However, social care is primarily a private sector activity and is expected to provide for itself. When the market for PPE collapsed, the Government stepped in to protect lives. It is against this background that I have recommended (see para 2.3) regulators of social care and of other regulated bodies, such as dentists, should consider the resilience of the organisations that they regulate and make appropriate requirements for them to be able to weather at least the initial few days of a crisis.

It is clear that the crisis revealed inherent challenges with the provision of PPE to the social care sector and its interaction with health provision; and that the Government had to step in to provide coordination and support. SCCL normally only provides products for hospitals. Extending this scope to include social care has identified some inherent difficulties with the logistics and supply. Existing networks, based around specialist wholesalers, could not fulfil the needs of care providers as they could not obtain all the products that they needed in the overheated global market. **To enable greater resilience there should be a contingency plan in place for the provision of PPE that can be switched on if need be so that there is full coverage across the health and social care sector (recommendation 10).**

As an observation, any review of the future structure of procurement in the health sector should include special consideration of the needs of social care in a crisis. It may be desirable to allow social care entities to buy from a government-controlled entity but alternatively different interventions such as support for the existing wholesaler network could be more effective.

3.3 Central commercial and procurement services

The central commercial teams in the Cabinet Office and the Crown Commercial Service (CCS) were deployed to support a number of the programmes within the scope of this report during the pandemic. In deploying the central commercial teams and CCS to support in times of crisis it is absolutely necessary to be clear at the outset on the level and type of expertise they can bring to the situation and how they can best support. Some interviewees

suggested that they were not clear what these different groups of commercial specialists do (there is common confusion between, for example CCS and the Complex Transactions Team, one of the central commercial teams). More clarity and communication of their respective roles and how these differ is required.

The role of the central commercial teams is to provide commercial advice, dispute resolution expertise, manage the relationship with Government's strategic suppliers and to support commercial negotiation. The role of CCS is to put commercial agreements (such as frameworks and dynamic purchasing systems) in place that enable public sector buyers to procure common goods and services from selected suppliers using standardised contract terms and guidance. CCS also operates an assisted procurement service to central government departments. It should be noted that not all common goods and services are currently within the scope of commercial agreements set up by CCS, and there are a number of other public sector buying organisations operating in similar or overlapping categories such as the different forms of medical, construction or janitorial PPE.

This division of labour was not well understood by those working on COVID-19 programmes. Some were aware that there was a pool of specialist resources in the Cabinet Office, including in CCS but were not sure how to access it for greatest effect. The ability of CCS to propose support was at times limited by a lack of clarity on what was needed in fast-moving and confused situations. There are lessons to be learnt regarding how to maximise support to new programmes, which may include expanding the remit of those commercial teams and organisations best placed to undertake specific activities. Systems and processes should be capable of being ramped up for broader purposes in a crisis. **There is a need for the Crown Commercial Service to review whether and how best to broaden the scope of its products and services in a crisis situation to maximise the impact of its skilled resources (recommendation 11).** This review should be carried out in conjunction with the relevant contract authority or department at the time.

3.4 Build on existing structures where possible

A key finding of this review is that it is easier to scale an existing operation, or to use existing structures, than it is to create something new from first principles. As the NAO states, the NHS was used to delivering 17 different national vaccine programmes, and thus had considerable expertise in vaccine delivery. As a result the NHS used existing regional and local structures and resources to expedite vaccine delivery. By contrast the Test and Trace programme had to establish a large amount of new infrastructure and capacity from scratch, with the consequent challenges.

This principle applies across the board, not just for physical infrastructure, but for organisational structure and delivery, supply chains, and centres of expertise. It is generally better to build on existing structures but they need to be sufficiently robust. Local authorities, for example can be reasonably expected to play an important role in contact tracing and in the provision of food parcels, being well placed both geographically and in terms of their knowledge of local areas and populations and could, in the case of the food parcels, better ensure the supplies were being targeted where they were most needed. These bodies need to have some responsibility for resilience and for this to be incorporated into strategic,

joined-up crisis planning. Similarly local NHS Trusts already had experience in buying PPE and this was eventually integrated successfully into the national effort.

There is a general lesson to be learnt about fragmented services failing under pressure during a crisis. As an example, PPE buying through SCCL was not scalable, for reasons including legacy IT that was in the middle of being updated and the complex 'tower' structure of the buying organisation - and this is not a sustainable position for a body with critical responsibilities in a crisis. Whilst there were a limited number of specialist buyers for PPE which was appropriate for business as usual; the significant increase in the scale of equipment to be purchased required a much larger buying team for PPE.

Using existing structures in this way is only possible where the existing base is sufficiently established and resilient. I understand that this was not possible on some aspects of Test and Trace where, for example, there was only one UK manufacturer with diagnostic technologies and testing methods suitable for the Government's requirements. **Crisis mobilisation plans should include a requirement to consider whether existing vehicles and structures are suitable, including local channels, and all organisations with crisis responsibilities should have the ability to scale up if required (recommendation 12).**

4. Resourcing

This section addresses the resourcing of the different initiatives that were mobilised to respond to COVID-19. Commercial resources needed to be combined with other skills to devise and execute an effective response. This was a huge undertaking, for example 450 people from across government were moved into DHSC to form the team securing PPE - supplementing a team normally only 23 people strong. In addition, many of the needed resources were obtained from the market, which itself is a significant procurement exercise.

It is clear that contingency planning must include guidance and models for how to mobilise teams effectively and quickly to respond to emerging crises, working within an appropriately governed structure (see section 6 on Governance).

4.1 Crisis teams need embedded specialist resources

Where there is a crisis which calls for a specialist skill set in short supply, whether it is commercial, scientific, logistics or technology, the specialists should receive the support they need so that they can focus on the job which only they can do and others can fill-in around them for the other jobs which need doing but do not need that specific specialist skills. **Commercial teams mobilised in crisis situations should contain their own separate but embedded administrative functions to allow specialist skills to be focussed where they are most needed (recommendation 13).** This should be reflected in crisis resourcing models and guidance.

For example, there has been understandable public attention focussed on each of the COVID-19 programmes, and the Government needs to be able to respond to this and provide information quickly and accurately to maintain public confidence. A responsive and agile communications function could assist with this, including communications specialists and staff suitably trained to manage queries from members of the public and suppliers effectively. Communications functions must include sufficient technical knowledge to keep the public properly informed of the work being done. Ideally, the communications team would include some members with a science background to ensure ready comprehension of the issues being discussed. Government may also wish to consider how it can attract more science graduates across all roles, and explore mechanisms for encouraging them to maintain current scientific understanding

Similarly, as I noted in my first review for the Cabinet Office, a separate but dedicated secretariat function would be beneficial to ensure that the procedural aspects of contract formation are completed fully and contract information published in a timely manner to comply with legal obligations. This could include contract publication, and documentation of the conflicts of interest management process, as well other procedural and administrative tasks which ensure the transparency of the process. One of the reasons I've seen for shortcomings in this area is that the teams carrying out the procurements were simply too busy addressing the immediate requirements of the job to manage these processes as quickly as the regulations required.

In every interview I carried out, it was evident that the individuals had discussed these issues a number of times before. Some individuals stated that they were being required to put aside

a day a week in order to provide updates to the various bodies whose role is to scrutinise these processes. In order to manage these expectations it would be advisable for teams to build the need to be 'audit-ready' into their governance. Accurate records of course need to be kept of decisions made throughout the process in any case, but there should be an expectation of scrutiny at the outset, reflected in preparation of documentation throughout the duration of the programme. Good record keeping also assists in dealing with any subsequent litigation, which has required considerable time and resources in relation to COVID-19.

The reason for embedding support within the response teams is so that they can attend team meetings and participate fully in the discussions. This ensures that they are up to speed and able to assist rather than having to be instructed separately thus absorbing the time of the overstretched specialists. This will allow commercial teams to concentrate on the specialisms, for example making sure that the Government does not enter into contracts on disadvantageous terms.

There also needs to be sufficient dedicated resources to conduct due diligence on new suppliers, especially where a political decision has been made to invite offers on a large scale. Resource planning needs to ensure that the capacity to conduct checks on suppliers is not outstripped by the volume of incoming offers. Similar capacity is needed for the technical approvals process. In all of the above it is important that embedding dedicated functions does not result in siloed working, or come at the expense of effective information sharing.

This must include ensuring teams have clarity and understanding of the relevant technical specifications and requirements, which is particularly important when these specifications may change in line with evolving clinical experience. While the published technical specifications for PPE gave the regulatory requirements for the equipment, other details such as packaging requirements and different morphologies were missing. Consequently this caused delays and bottlenecks in technical appraisals. Guidance must be clear and accessible (see also section on regulation below) and teams must provide sufficient guidance on all aspects of the specification and also ensure a base level of understanding for all, including timely access to experts who can advise new or inexperienced members of the team. **Programme teams should have clarity and understanding of the relevant technical specifications and requirements and that specialist resources should have quick access to the needed technical information (recommendation 14).**

4.2 Staff turnover and retention

There has been high staff turnover on some of these programmes, highlighting issues around the recruitment and retention of suitable personnel. Reasons suggested for this include the stressful nature of the work and long hours, lack of clarity about the objectives of the roles, and practical barriers to temporary appointments such as security clearances and concerns about the application of the Business Appointment Rules. These Rules are based in policy, not legislation, and I understand that accounting officers have an element of discretion in the way that they are applied. Some consideration should be given to whether departments fully understand this discretion, and how they might best ensure the principles of the Rules are observed while facilitating rapid deployment of short term expertise in this

sort of crisis response situation. In addition some fixed term appointments have been for as short a period as three months. Where possible, longer term appointments should be made.

The civil service did redeploy a significant number of personnel. However, the severity of the crisis meant that the demand for redeployment exceeded the flexibility within the system, partly because seconding departments could not be sure what demands would be placed upon their own personnel through the crisis and partly because of uncertainty about the appropriate prioritisation of commitments. Departments also need to ensure that their crisis planning prepares them for accommodating large numbers of incoming staff quickly and effectively.

Barriers to flexible deployment include a reluctance of some civil servants to risk their reputations in handling an emergency where their actions will be subjected to intensive scrutiny at the time, as well as with hindsight and, sometimes, without empathy for the required adjustment to risk appetite caused by the crisis. This is fortunately being recognised by scrutinising bodies, for example by the Chair of the PAC in a recent hearing, and the NAO have also acknowledged this in some of their work. Others were concerned about the impact on career development and promotion.

I would suggest that the government continues to consider how best to recognise the contribution made by those who deal with crises compared with business as usual, in terms of both monetary and non-monetary incentives (recognising that there may be some fairness issues with regard to the former). On the latter, there is some broader policy thinking underway in the Cabinet Office into how best to recognise individual contributions to the response to the pandemic, which would of course include but not be limited to public sector workers. However, the Government should also consider how its own non-monetary workforce recognition policies can play a part. In the case of the ventilator programme, for example, individual letters of thanks were sent to members of the team.

While there were resource challenges at all levels of seniority, these challenges were felt most acutely at the most senior level. One solution under discussion is a ‘reservist’ system for recent retirees or leavers with the right experience in the civil service - combined with the energy, leadership drive and imagination to make these challenging programmes a success. I agree **there should be a cadre of retired and current Senior Civil Servants trained for crisis management who can be brought in to head up a crisis team as senior leaders (recommendation 15).** This is so that the existing senior departmental team can keep the rest of the department functioning with a focus on business continuity, although a similar approach could also be considered for back-filling roles left vacant by redeployment. Another option may be to explore in more detail the use of early termination provisions in secondment agreements, with a view to potentially maintaining a list of outward secondees who could be recalled in times of crisis.

In addition, consultancy resources have not been rotated out quickly enough and replaced by resources from the civil service. The resourcing model in the civil service would need to be far more agile and flexible with greater incentives to undertake temporary assignments, reassurance to allay any staff concerns and a guaranteed right of return to permanent positions.

Given its size, it is arguable that the civil service should be able to reduce its reliance on consultants. The use of consultants brings two benefits – added people and added skills. While the civil service cannot be expected to be staffed for peak activity such as this -and some consideration should be given to the way in which it accesses additional contingent workers when required- the skills issue could be addressed by maintaining a small, accessible pool of government 'consultants' - a team of qualified, security-cleared civil servants or contractors who can be deployed to support emergency programmes, together with a clear process to secure IT and other resources rapidly, and this may be a sensible provision to make in future. However, more consideration would need to be given to the need and usefulness of this model, as well as the cost.

The Government should create a small central team to keep a register or database of resources from across the civil service that have previous consultancy experience (recommendation 16). This resource, which could also include recent leavers or retirees, would also provide expertise in managing consultancy contracts to ensure that work which can be done within the civil service is done by the civil service including if necessary skills transfer. Having a pool of resources with certain skill sets, recognising they are on standby, to be drawn in to lead these situations would be invaluable and could be supported by consultancy brought in on the ground as needed.

This means that where this short term expertise is required, some resource is in place to identify and manage this requirement effectively, including the use of framework agreements to control pricing, security clearances, and consideration of how to manage any real or perceived conflicts of interest. This would improve knowledge management of capabilities and these resources could be called upon and released when required. This contingency arrangement could be put in place until these programmes are in a position to backfill with civil servants.

4.3 Accreditation and training

The GCF is a cross-government network procuring or supporting the procurement of goods and services for the Government. The GCF is one of the Civil Service Functions. It contains commercial experts who support departments in managing important commercial contracts and planning for future commercial needs. It is made up of commercial professionals supported by colleagues from a variety of disciplines.

The GCF is managed as one unit which enables professional accreditation at more senior grades, career progression, succession planning and the ability to further develop the community of commercial expertise. It is positive that the most senior commercial specialists are all accredited and part of one function and that meant they were able to rapidly deploy substantial resources to support these programmes.

There has been good progress made by the function on the delivery of commercial accreditation and training to the main departments within central government and there is evidence that aspects of the wider public sector are adopting this good practice. **Commercial accreditation and training should be extended to the health sector including arm's length bodies within the National Health Service (recommendation 17).** In order for this to be successful this does need to be effectively enforced and

resourced. This recommendation is consistent with Lord Agnew's plans for cross functional reform, with which I agree.

There are some wider points on learning which are relevant. **The government should have available online learning modules which could be made available to consultants and to civil servants being asked to take on a new role, which equip them for the roles that could arise in a crisis (recommendation 18).** For example serving in the secretariat of a crisis team; explaining the role of the accounting officer, value for money, and other civil service procedures and protocols with which they might otherwise be unfamiliar. One of these modules should include an explanation of the issue of conflicts of interest and how it is managed in the civil service, and another should be training on what is considered to be the right governance for a crisis team. Responsibility for these modules ought to sit with the civil contingencies team. Some existing resources may be available from Civil Service Learning.

4.4 System compatibility

A repeated theme in the evidence is limited interoperability of data and systems. To note, this is not 'back office' finance or HR functional systems, but the operational office and procurement programmes being used by these teams. As an example, the firewalls used by the Ministry of Defence were a barrier to full participation in Microsoft Teams (used by many other departments for collaboration) and the Google Office suite was only used by the Cabinet Office. There should be further exploration of the interoperability of government IT systems and greater focus on the review of legacy IT, and its effect on ability to mobilise smoothly in times of crisis, in particular when the nature of the crisis requires remote working as standard. Some consideration should also be given to non-IT system standardisation such as templates and process documents to facilitate cross-departmental working.

The health system has limited interoperability of data and systems, and no central structure or control around data. There did not appear to be a central database to provide information around product volumes and requirements. NHS Trusts did not have a common way of recording the ventilators that they possessed, and there was no central recordkeeping of where ventilators were across the NHS. For critical equipment it would be desirable that there was a common form of recordkeeping throughout the NHS and that there is a central database which holds that information. As an observation, the NHS should consider whether it could improve these aspects of its data management.

There was a lack of cloud-based digital systems to support good procurement and logistics. The systems and data weaknesses led to negative press and undermined public trust. There was a lot of manual uploading which led to delays and further assumptions around the reason for delays and the lack of transparency of the data. It would be helpful if the Government had access to a common system to support procurement in a crisis, including purchase to pay. This capability could be based on scaling up a pre-existing departmental system or enhancing the functionality of CCS systems.

Any review of the interoperability of IT systems should also focus on the use of data and records management. It should look at the protocols required to enable information to be shared across organisational boundaries where relevant and assess contingency planning and the need for an emergency system across the relevant parts of government in a time of

crisis. While DCMS provided specialist support on data protection, consideration should be given in the future to extending the exemptions and processing conditions in the current framework with a view to facilitating smoother sharing of crucial data in times of crisis. Some thought could also be given to whether, within the boundaries of international obligations, Ministers could, or should be granted the power to suspend elements of data protection legislation in certain circumstances, for example where they demonstrably impede the proper response to the crisis. This would of course, require further exploration with the relevant department.

5. Purchasing

This section discusses the approach taken to purchasing activity during this time, including mobilising the private sector to respond in a crisis, flexibility and responsiveness of functions and departments to adapt to crisis management, the availability and use of forecasting and modelling data and pricing, sustainability and waste.

5.1 Mobilising the private sector to help crisis response

Some of these programmes have undertaken effective market engagement and set expectations so that suppliers and markets can prepare themselves to respond to immediate requirements. As an example Defra had existing knowledge of food supply arrangements and access to nutritionists. For the shielding programme this meant that they were able to deploy quickly, identify the appropriate food to include in food parcels (which received ~80% percent approval rating in surveys[3]). Defra was able to identify wholesalers who normally supply the restaurant trade, and therefore had surplus capacity as restaurants were closed.

However, and as I have identified in section 3.4 it is better to build on existing infrastructure where possible as it offers the opportunity to scale up at pace. There are lessons to be learnt on the quality of data available to segment defined groups of individuals to inform effective decision making. With appropriate pre-planning, if there are future pandemics, utilisation of local authorities and community volunteers may prove an attractive option.

Precise and coordinated market engagement at the outset of the pandemic was difficult to achieve given the urgency of the issues facing the government. Market engagement serves two purposes - it allows the Government to reveal its vision to suppliers, and it allows suppliers to inform the Government of their capabilities, perhaps allowing novel ways of responding to particular requirements. In addition, the Government can have in place appropriate commercial frameworks to allow quick engagement with suppliers as a crisis develops.

One key way of engaging the market was the ‘call to arms’ approach for the sourcing of PPE and ventilators. Although the second call to arms for ventilators was focused through industry groups, the first call and the call for PPE were open requests. Whilst a broader request for PPE was necessary to a certain extent and was admirable in its ambition, it seems that the scale and complexity of managing the huge public response to this appeal was underestimated. Too many enthusiastic offers cause a bottleneck and slow down the process of finding the most promising offers.

The PPE programme chose to use a ‘high priority’ list as a triaging mechanism to manage the volume of suppliers who were referred by those within Government, health professionals and others, whereas other suppliers were sourced via parallel routes. The offers that progressed from the high priority list went into the same common process in technical assurance and financial due diligence (followed by closing) and those teams dealt with offers in the queue in the same way regardless of where they originated. The perceptions created

[3] https://www.nao.org.uk/wp-content/uploads/2021/02/Protecting-and-supporting-the-clinically-extremely-vulnerable-during-lockdown.pdf

by this separate route are in my view one of the key reasons the programme has been subject to allegations of apparent bias. It is clear that, while the intention was sound, the use of a 'priority list' should not be necessary in future if my other recommendations relating to this are adopted, for example, embedding communications and secretariat functions within commercial teams.

The public call to arms had some significant benefits in alerting potential suppliers to the urgent need to support government initiatives. However, a number of organisations and individuals who were well-meaning but lacking the necessary competence responded to this call to arms, and made the task of identifying the best likely sources of PPE more difficult to identify. Targeting the call to arms to appropriate and likely sources of supply may in the future provide a more manageable response. The same checks, including in particular basic financial due diligence and technical assurance, should be (and were) applied to all offers irrespective of their origin. However, it will be necessary to find a more effective way to ensure a call to arms does not result in the team being swamped by unsuitable offers. **Any future call to arms should be managed and streamlined to ensure it is as focussed as possible (recommendation 19).** It is recognised that this may not always be possible or appropriate.

This links to my recommendations on both resilience and resourcing - teams need to be properly staffed to ensure that their capacity to conduct the appropriate checks is not outstripped by the volume of incoming offers. The recommendations of my earlier report with regard to record keeping and the management of conflicts are relevant here, as are my observations on transparency.

5.2 Innovation

Innovation is crucial in times of crisis, and guidance, regulation and governance should allow for this. Government should encourage crisis teams to be willing to test the viability of a number of possible solutions. Whilst value for money would suggest that options are examined sequentially, in a crisis the cost of delay would produce a worse outcome. This parallel approach to development was well managed by the vaccine task force that supported the development of different vaccine types at the same time, and by the ventilator challenge which supported different ventilator solutions, in each case closing down any development where it became clear it would not produce the solution to the pressing problems. The MHRA regulators adapted their approach to support the fast track approval of new products in both situations, and the role of the regulators in supporting and facilitating innovation is addressed in section 6 below. Ministers engaged with the programmes to enable fast decision making; for example on vaccines meeting as a 'college' to enable joint rather than sequential approvals. The vaccines taskforce model is an example of good practice in innovation, and I would suggest that in the future, the government considers the same approach in parallel for the sourcing and development of therapeutics relevant to the pandemic.

There are other good examples of innovation across these programmes, for example in the testing programme, with the development and manufacturing of lateral flow tests, and in the technologies used for end point PCR and LamPORE tests. Consideration should also be given to innovation through longer term strategies, as part of the planning to move out of

crisis mode and the transition to a steady state. This should include monitoring the continued use of direct awards and undertaking competitive tendering as and when this is possible and appropriate. **Separate teams should be established to consider longer term innovation (recommendation 20),** rather than relying on the teams managing the immediate crisis.

5.3 Forecasting and modelling

The Government should review the effectiveness of its current forecasting and modelling capability in light of the performance of forecasting models through COVID-19. This should include how to best utilise and deploy accredited resources from the Government Analysis Function (recommendation 21).

Pandemic influenza has been high on the Government risk register for some time and plans were in place to respond in the event of an outbreak. Contingency planning concentrated on influenza rather than different airborne respiratory virus pandemics, so unfortunately very limited data modelling was available to provide a forecast of what might happen as the COVID-19 pandemic developed. Some modelling teams were also reluctant to provide or share figures with operational teams due to concerns regarding the accuracy of the data.

In the first phase of the pandemic response, it was an agreed Government position to plan on a Reasonable Worst Case Scenario which informed the risk appetite of the departments. Although this was prudent, it has led to volumes being purchased that turned out to be higher than needed. In the future more dynamic modelling should be used to adjust estimates when actual demand data becomes available.

There is a perception that the Government has been risk averse in how it has contracted for certain products and services, for example the call centre for the Trace system which has had low utilisation levels and limited ability to scale back in the event of low demand. More dynamic modelling could have informed a more flexible contracting approach that reflected the uncertainty in demand, particularly where there was the potential need to scale up resources quickly to respond to this changing demand. The additional cost to provide flexibility should have been measured against the cost of the contracts.

There is a need for data modelling to be current to ensure decisions are based on current data. It is also important to determine the level of aggregation required as this can enhance efficiency, as decisions are often taken at a level of aggregation that can inform the desired outcomes. There is an opportunity to bring together the wider community of business and data analysts from across the civil service to learn from and adopt the good practice already in place across other functional teams, including professional accreditation and training. The Government Analysis Function provides a network, career framework and learning curriculum for the generation and dissemination of analysis, and the Government should consider whether this group is currently being used in the most effective way.

An example of effective modelling was seen from the ventilator challenge which had an initial target of 90,000 ventilators, that was revised to 30,000 and subsequently lowered as the requirements became clear. The revised target on ventilators was based on data and modelling and this did eventually inform the decisions taken to reduce the scale of production.

A similar level of agility was less feasible in the case of PPE, where buying decisions had to be made several weeks in advance of supply coming into the UK. Early modelling based on the Reasonable Worst Case Scenario indicated a high level of demand for PPE throughout 2020, not least to cater for an anticipated second wave of infections in late summer. When demand for PPE turned out to be lower (thanks to fewer hospitalisations) attention turned to rebuilding a stockpile against the winter peak. It may be that the reduction in demand could have been reflected more quickly in modelling, and in some cases orders have been cancelled even after suppliers have signed contracts, while other suppliers have been asked to delay orders to regulate the shipping of PPE into the country.

In some cases modelling has been used effectively to ensure that procurement does not continue after the point where it is needed. In others the success in large-scale procurement and reductions in demand mean there is a risk of over-buying, particularly for PPE and testing capacity.

5.4 Pricing, sustainability and waste

All five programmes have had to balance economy and efficiency with effectiveness, as sometimes the cost of failure or delay justifies extra expenditure on equipment and services. In the situation of the pandemic where the failure leads directly to extra deaths, and delay leads to economic and social damage through an extended lockdown, maintaining this balance has rightly changed the risk appetite of accounting officers. All programmes experienced a level of nugatory expenditure which can be justified in this extreme context.

As an example, DHSC chose to order more PPE than the forecasts suggested because it was not certain which contracts would not deliver, or be blocked by export restrictions. In addition, it anticipated that a proportion of the PPE ordered would arrive and be found to be not suitable for deployment within the health and social care system. In practice, the proportion of incoming stock deemed unsuitable has been lower than anticipated and of this stock a far smaller proportion has been deemed unsuitable for any use; the remainder will be repurposed or sold by DHSC.

An appropriate level of such losses should be seen more as an insurance payment or a sensible spreading of risk. Mitigating these losses by closing down or renegotiating those unwanted contracts was generally well handled. The effort to reduce these losses by, for example, process improvements in testing labs and redeployment of unsuitable PPE should be commended. Equally, the attempt of the ventilator task force to redeploy surplus ventilators through the FCDO to those countries which might need them would have been a desirable use of the surplus, had this been possible to implement.

5.5 Spend controls

DHSC Finance and HMT both proved flexible in their ability to make funds available to support the emergency and adapted their approval processes to meet the need for urgency. HMT in particular reacted well and quickly to increase spending limits where needed, and spend controls applied by the Cabinet Office were also adjusted - for example, a controls team manager was embedded in the Investment Board for Test and Trace. It is clear that a

flexible spend control system can be very important in fast-tracking approvals at the rate required in an emergency. However it is equally important, in my view, that this controls process is still applied at all times, and suspending or waiving this should not be encouraged. To do otherwise will reduce public confidence that spending has received appropriate scrutiny, including from outside the spending Department. It is noted that the Cabinet Office and HM Treasury were willing to adjust the existing service level agreement and agreed to operate reduced timescales for approvals during the pandemic, and this good practice should be followed in the future.

Spend controls should still apply in times of crisis, but at the outset of a crisis, Cabinet Office and HM Treasury should look to make adjustments, including an appropriate level of flexibility on thresholds, and tighter timetables for approvals (recommendation 22).

6. Governance and Regulation

This section addresses the governance and regulation of the procurement activity, including the role of oversight bodies, provision of leadership and accountability and the regulation both of procurements (under public procurement legislation) and of product quality and suitability.

6.1 Governance of COVID-19 response programmes

The governance of each of these programmes has been slightly different. The ventilator challenge was run as a programme inside the Cabinet Office. The food parcel programme was managed by the Ministry of Housing, Communities and Local Government (MHCLG) although the procurement activity was undertaken by staff from the Department for Environment, Food & Rural Affairs (DEFRA). The vaccine task force was organised by BEIS and, once purchased, the vaccines were delivered by an organisation under NHS management. The PPE and Test and Trace programmes have been undertaken by DHSC, although externals have been recruited from outside the civil service to lead this work and many of the team members have been seconded from other Government departments or hired through management consultancies.

What seems to have worked best in all these programmes is where a combined team of experts and civil servants has come together under leadership with good commercial and industry knowledge, with close relevant ministerial oversight. Broad consultation and communication but tight decision making has also worked well.

Government should consider having emergency models that can quickly be stood up at short notice. These should be structured to get the best of the civil service and make use of external experts. They should outline programme targets and deliverables, define clear roles and responsibilities, and establish governance processes that enable swift decision-making. The availability of an ‘off-the-shelf’ governance structure for emergency situations would be very useful to have for the future, and should include stipulations for leadership and accountability. This could be incorporated into a crisis management training programme for senior civil servants, as part of the ‘reservist’ model previously suggested.

Contingency planning must include models for appropriate governance structures for teams mobilised quickly to respond to emerging crises (recommendation 23).

6.2 Leadership and accountability

Each of the five programmes has been led by someone with substantial business experience, although in the case of Food Parcels and Ventilators the leaders also had a recent track record inside the civil service. For PPE, Test and Trace and the Vaccines programme leaders were hired from outside the Civil Service. In my view, the Government's response to the COVID-19 crisis was strengthened by the addition of senior executives, and there is a clear role here, bringing focus, skills and business expertise at a time of crisis. Industry knowledge and existing networks are of particular importance in these influencing roles.

It is arguable that the profile of some of the appointments made directly by ministers to lead these programmes has at times risked overshadowing the work they have been appointed to do, and may arguably reduce the likelihood of candidates stepping forward for similar roles in the future. However, it is clear to me that strong and visible leadership in such programmes is essential in terms of uniting different organisations, and driving through a high profile programme of urgent work, and ministers must be able appoint individuals with the expertise and capability to do so. It is equally clear that there needs to be a swift and transparent path for achieving this quickly in times of crisis, and that those holding such positions need to have the authority to make decisions, and/or have clear lines of reporting to those who do.

Government should consider further work to identify the most appropriate method for making swift senior public appointments to prominent leadership roles to fulfil certain functions (recommendation 24). Consideration should be given to whether the current process of making direct appointments could be made more formal and transparent in order to command public confidence. The specified method, while needing to be swift and light touch, should include robust assurances of fairness and consideration of getting the right experience and skills, as well as appropriate management of any conflicts of interest. Appointment should be sufficiently transparent. Published letters of appointment should set out the line of governance via the accounting officer, and the remit and role of the appointee, including restrictions on their ability to act. There should be guidance on how best to maintain oversight of the role and its lines of accountability throughout the duration of the appointment. This should be the case whether the role is paid or unpaid. The above should be clearly set out in crisis planning guidance.

Published letters of appointment should also set out how the individual will be supported in their role in terms of civil service resources, including how the department's communications functions will support their programme. This should also make clear whether the appointee will be required or able to speak directly to parliament, the media or other interest groups as part of their role.

This work should also explore how best to **ensure that when a senior external appointment is made to lead a programme, a Senior Civil Servant is always identified in parallel to work alongside them (recommendation 25)**. There are examples of this being done very well in these programmes, and in future this should be set out in guidance. The external appointee can bring specialist knowledge, private sector entrepreneurship, business expertise and important contacts, and can provide visible leadership as the figurehead of a particular programme. A civil servant as SRO, working in partnership with the external appointee, can ensure that these skills are utilised to their full potential by providing a line to the accounting officer and taking responsibility for ensuring the necessary processes of Government are adhered to. This appointment could be made from the deployable cadre as per recommendation 15. This recommendation should be read in conjunction with a number of observations around governance I make in this review.

6.3 Ministerial oversight

It is also evident that programmes are stronger when there is greater ministerial engagement at the outset, and where decisions can be taken quickly due to clear and robust governance

and reporting, with speedy and transparent escalation processes to flag and resolve key issues. This was demonstrated in the ventilator programme where decisions were made quickly by ministers who were closely involved in the programme and therefore had the information to be able to make rapid and effective decisions. Similarly, the vaccines task force set up a ministerial panel to take decisions, which provided an efficient forum for effective discussions and informed decisions.

Ministers should not of course, be involved in individual contractual processes. Acknowledging again that this is not a detailed forensic examination, I have seen no evidence that this was the case.

6.4 Role of the regulators

Several regulators are involved in making sure that products used in the NHS are safe and meet the needed standards to protect patients and staff. For ventilators, MHRA were closely involved in the development programme. For PPE, PHE published guidance for its use in healthcare situations, while HSE, MHRA and OPSS all had statutory responsibilities for the compliance of offered products with the appropriate standards. The input and advice received from the regulators during the crisis period was invaluable in ensuring that only approved and compliant PPE products were supplied to front-line NHS staff, and generally all the regulators 'leaned in' and worked well together. However, the decision making process, when presenting potential PPE products or alternative products, could be lengthy and in a volatile fast-moving market, this caused delays to securing certain PPE products.

What seems to have worked well is where regulators formed a 'college' and nominated a lead. This may have reduced decision making timescales and improved resource efficiency when in crisis mode.

Regulation in the health sector needs a clear structure and the Government should encourage the National Health Service and regulator community to consider appointing a 'lead regulator' with clear definitions around the roles of regulators to make final decisions regarding products in times of crisis (recommendation 26). This model should be invoked at times of crisis, and guidance provided for the process including on how to adapt to evolving information about required product specifications.

While not sacrificing standards, regulators should be involved in supporting innovation where possible. It seems to have been helpful when regulators are included at an early stage as part of discussions, enabling them to be part of crafting the solution to a problem. In addition**, regulators should have a crisis manual which demonstrates how they themselves will speed up their processes in a crisis, without compromising on the quality of their decision-making (recommendation 27).** This, again, should include how they can review whether product standards are appropriate as new information emerges.

Government may also wish to consider whether the powers of regulators are appropriate in a crisis situation. Any consideration in this area must of course be carefully considered in order to ensure that confidence in high product standards is maintained.

6.5 Use of emergency procurement

Each programme made extensive use of the provisions in the Public Contracts Regulations 2015 designed to enable quick contract awards in circumstances of extreme urgency. Some goods (for example, some PPE) were procured through pre-existing framework arrangements, but running new, compliant competitive procurements would not have been possible in most circumstances. There is evidence from the Official Journal of the European Union that, outside the UK, some public authorities did attempt to run competitions with mixed results; as an example the European Commission's own first collaborative tender on 12 March 2020 was abandoned because "No tenders or requests to participate were received or all were rejected". It must be recognised, however, that emergency provisions should not be used indefinitely or inappropriately, and I note that the use of Regulation 32 of Public Contracts Regulations 2015 has decreased markedly as the pandemic has progressed. Direct awards have a place in crisis response, but appropriate longer term arrangements should be competitively tendered as soon as possible. The reforms proposed in the Green Paper: Transforming Public Procurement will have a positive impact on these rules. The Government's proposals for reform to the procurement rules will help clarify the circumstances in which emergency procurements can be used.

The Government must ensure that emergency procurement freedoms are only used in the most constrained and exceptional circumstances. In addition to this and in an emergency situation there should be active monitoring of markets and buyer behaviours.

6.6 Risk Management

I have already highlighted the importance of a focus on risk management through a separate profession in recommendation 2. Risk management in this context should include planning for and undertaking mitigating actions prior to the pandemic. Such work should properly be scrutinised by departmental Risk and Audit Committees. While progress has been made in this area in the last two years there is some evidence that the Government's risk analysis and management could learn from best practice in the private sector.

Risk management within Government still needs to be more coordinated between departments, with a sharing of intelligence and the creation of a common appreciation of different risks (although accountability for responding to that common assessment should remain a departmental matter). Risk assessments, undertaken by accredited professionals should be used when drawing up commercial strategies to implement crisis response. Risk management should be treated as a coordinated profession, with dedicated horizon-scanning management teams set aside from the main policy functions.

The Government should instigate a programme of training for risk managers in Government with certification and formal accreditation, developing common standards and levels of training with a central body that can coordinate assessments of risk (recommendation 28). However, the response in each department will be a matter for the accounting officer in alignment with the current process. Crisis management should be a standard part of a civil servant's training and more advanced modules should be available, updated at the start of any crisis. It is noted that career pathways and the

associated learning and development for risk practitioners is being reviewed to better embed risk management within the wider civil service.

Conclusions

The commission from the Cabinet Secretary asked for a brief assessment of procurement activity supporting five major COVID-19 programmes. These are very large programmes that placed thousands of contracts and had a major impact on the Government's management of the pandemic. The intention of this brief review was to identify whether there were immediate lessons to be learned from the conduct of this activity. The response to the pandemic is still underway, and it is possible that future Governments will wish to build on the successes of these programmes while avoiding some of the issues that made these programmes more challenging than they might otherwise have been.

Commercial activity has been at the heart of the Government's response to COVID-19. Whether acquiring PPE, designing and making ventilators, building testing labs, commissioning new vaccines or distributing food to the vulnerable, the civil service has found suppliers and placed contracts to meet a huge variety of unanticipated needs. The people that I have talked to have described the enormity of these challenges and their pride at contributing to the response. I am grateful to all of them for their time and insights. The recommendations in this paper are not a criticism of them or their efforts, but reflect their wishes that they and their colleagues might benefit from understanding what went well during the crisis and what could have been improved.

Glossary

Term	Description
BEIS	Department for Business, Energy and Industrial Strategy
CCS	Crown Commercial Service
DEFRA	Department for Environment, Food & Rural Affairs
DHSC	Department of Health and Social Care
GCF	Government Commercial Function
GIAA	Government Internal Audit Agency
HSE	Health and Safety Executive
MHCLG	Ministry of Housing, Communities & Local Government
MHRA	Medicines and Healthcare products Regulatory Agency
NAO	National Audit Office
NERVTAG	New and Emerging Respiratory Virus Threats Advisory Group
NHS	National Health Service
OPSS	Office for Product Safety and Standards
PHE	Public Health England
PIPP	Pandemic Influenza Preparedness Plan
PPE	Personal Protective Equipment
SCCL	Supply Chain Coordination Limited
SPI-M	Scientific Pandemic Influenza Group on Modelling